“The Guide”

A (Very) Comprehensive Manual for Success and Happiness in the MIT Economics PhD

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Contents

1 Introduction **5**

2 Life in Cambridge **6**
2.1 Settling into the U.S. (for international students) . . . 6
2.1.1 Visas and Spousal Support . . . 6
2.1.2 SSNs and ITINs . . . 6
2.1.3 Tax Requirements . . . 6
2.1.4 Phone Plans and SIM Cards . . . 7
2.1.5 Establishing a Bank Account . . . 7
2.1.6 Credit Cards . . . 7
2.1.7 Tipping . . . 8
2.1.8 State IDs and Liquor Licenses . . . 8
2.1.9 Getting a Driver’s License . . . 9
2.2 Housing . . . 10
2.2.1 On-Campus Housing . . . 10
2.2.2 Off-Campus Housing . . . 13
2.2.3 Getting Furniture . . . 14
2.3 Transportation . . . 16
2.3.1 General Overview . . . 16
2.3.2 Bike Ownership in Cambridge . . . 17
2.3.3 Car Ownership in Cambridge . . . 19
2.3.3.1 Buying a Car . . . 19
2.3.3.2 Owning a Car . . . 19
2.4 Consumption (Literal) . . . 21
2.4.1 Groceries . . . 21
2.4.2 Eating Out (and In!) . . . 22

3 The First Year **24**
3.1 The Core . . . 24

3.1.1 Overview of Requirements . . . 24
3.1.2 Resources for Coursework . . . 24
3.1.3 A Word on Grades... . . . 27
3.1.4 To Waive or Not to Waive? . . . 27
3.2 (Hourly) Research Assistantships (RAing) . . . 29
3.2.1 Work-Study Balance . . . 29
3.2.2 Deciding Whom to RA For . . . 30
3.2.3 Approaching Faculty . . . 30
3.2.4 Getting Paid . . . 31
3.3 Reading (and Accessing) Papers . . . 32
3.4 The Spring: First Year Skit (Advance Warning) . . . 33
3.5 The Summer . . . 33
3.6 Staying Happy (in the First Year and Beyond) . . . 34

4 Life in the MIT Economics Department **35**
4.1 Presentations: Lunches, Teas, and Seminars . . . 35
4.1.1 Field Lunches . . . 35
4.1.2 Field Teas . . . 35
4.1.3 Seminars . . . 35
4.1.4 Job Market Presentations . . . 36
4.1.5 Subscribing to Email Listservs . . . 36
4.2 The Second Year . . . 37
4.2.1 Second-Year Paper (14.192) . . . 37
4.2.2 Field Requirements . . . 38
4.3 Appointments and Funding in Years Beyond . . . 39
4.3.1 Teaching Assistantships (TAships) . . . 39
4.3.2 Research Assistantships (RAships) . . . 42
4.3.3 Fellowship Opportunities (Internal and External) . . . 43
4.4 Department Social Life & Fun . . . 44
4.4.1 EconSibs . . . 44
4.4.2 GEA Events . . . 44
4.4.3 Skit Party & Awards Night . . . 45
4.5 E52, the Building . . . 46
4.5.1 Floor Plans (2022-23) . . . 46
4.5.2 Room Reservations . . . 47
4.5.3 Offices and Desks . . . 47
4.5.4 Lounges . . . 47
4.5.5 Lockers . . . 48
4.5.6 Mailboxes . . . 48
4.6 MIT Graduate Student Union (GSU) . . . 48
4.7 Miscellaneous Grad School Advice . . . 48

5 Life as an MIT Graduate Student **49**
5.1 Labor . . . 49
5.1.1 Navigating Campus . . . 49
5.1.2 Academic Calendar . . . 49
5.1.3 Libraries . . . 49
5.1.4 Taking Classes in other MIT Departments . . . 50

5.1.5 Taking Classes at Harvard . . . 50
5.1.6 Spaces to Study . . . 51
5.2 Leisure . . . 51
5.2.1 Official Intramural (IM) Teams . . . 51
5.2.2 Self-Organized Activities . . . 52
5.2.3 Gyms and Recreational Facilities . . . 53
5.2.4 Discounted Activities through MIT . . . 53

6 Getting Data **54**
6.1 Collecting Your Own Data . . . 54
6.1.1 Shultz Funding . . . 54
6.1.2 Institutional Review Boards (IRBs) . . . 55
6.1.3 Data Use Agreements (DUAs) . . . 55
6.2 Existing Datasets to Know About! . . . 55

7 Guide to Software and Computing **56**
7.1 Set Up Your Computer . . . 56
7.1.1 Economics Department's IT Team (Econ IT) . . . 56
7.1.2 Printers . . . 57
7.1.2.1 Department printers . . . 57
7.1.2.2 MIT printers . . . 57
7.1.3 Servers . . . 57
7.1.4 Departmental Computers . . . 57
7.2 Free software at MIT: stop paying rents to computer magnates . . . 57
7.3 Unsolicited advice: What to invest in? . . . 58
7.3.1 Statistical and Computational Software . . . 58
7.3.2 PDFs and Paper/Bibliography management . . . 59
7.3.3 Some great editors . . . 60
7.4 On TeXStudio and TeX in general: pro advice . . . 60
7.5 Useful Websites . . . 61
7.5.1 Software-related . . . 61
7.5.2 General Interest, Tech-Adjacent . . . 61

8 Mental Health and Your Community **62**
8.1 Resources at MIT . . . 62
8.2 Recognizing a Problem . . . 63
8.3 Physiological Inputs to Mental Health . . . 64
8.4 Therapy . . . 65
8.4.1 Problems Therapy Can Help With . . . 65
8.4.2 When to Look . . . 66
8.4.3 Types of Therapeutic Approaches . . . 66
8.4.4 Outline of Process to Find Therapist . . . 66
8.5 Community Care . . . 68

A Glossary of Acronyms **69**

B Discussion of On-Campus Housing Options **69**

C The Desk Allocation **71**

D Acknowledgments **72**

E List of Past GEA Committees (with Contact Info) **74**

1 Introduction

Dear MIT Economists,

This guide is an eclectic assemblage of information, presented to you with the hope of making your life as MIT economics graduate students just a little bit easier. At times, this guide enumerates "things we wish someone had told us," and at others, "things someone told us which we wish we internalized." You don't need to reinvent the wheel! There are generations of people who have done this before you, sat where you sat, and felt how you felt. An economics PhD is many things, but one thing it needn't be is solitary.

Two disclaimers: (i) It is possible that pieces of information in this guide are outdated. For anything logistical or administrative, be sure to double-check with relevant websites and/or administrators. If you spot anything potentially anachronistic (or simply have a contribution to add), please report it here! (ii) All opinions expressed are those of the authors, and are not necessarily endorsed by everyone in the department, nor MIT as an institution.

Yours Truly,
Reca Sarfati & many others

2 Life in Cambridge

2.1 Settling into the U.S. (for international students)

Resources for International Students at MIT:

- MIT International Student Office (ISO)
- *ISO Officer for Economics (2022-23):* Dana Riechman

Quick Links:

- ISO resources on **visas and travel**
- ISO overview of relevant forms for **spouses and dependents**
- U.S. work & training opportunities, maintaining visa status, tax issues, etc.
- Navigating SEVIS process

2.1.1 Visas and Spousal Support

The standard visa for international students is the F-1. It has the *major* disadvantage that any family members coming with you will be unable to work or study. To avoid this problem, one should apply for the ***J-1 visa***, instead. The process for applying for the J-1 is similar, and will allow your partner to request a work permit without needing a sponsor (a *huge* issue if you are a foreign resident wanting to work in the U.S.), and study without needing additional authorization. Be aware that work permits usually take around 3 months to be approved, so it is important your spouse files for it as soon as they arrive in the U.S.!

2.1.2 SSNs and ITINs

Generally, foreign students and scholars entering the U.S. (with an immigration status allowing them to be employed in the U.S.) are eligible to apply for a Social Security Number (SSN) or Individual Taxpayer Identification Number (ITIN) from the Social Security Administration. An SSN (or official denial letter) will be necessary for getting a driver's license (see 2.1.9). More information follows, below:

- Guidance on SSNs by the MIT ISO
- Overview on International Students Applying for SSNs by the U.S. Department of Homeland Security (DHS)
- Instructions on Applying for an SSN from the Social Security Administration (SSA)
- Discussion of ITIN's for International Students by the IRS

2.1.3 Tax Requirements

Many temporary residents and visitors in the U.S. are subject to special rules with respect to the taxation of their income. For details, you can review the MIT ISO guidance on taxes, as well as the following page on the U.S. Internal Revenue Service (IRS) website for information on international student tax requirements.

2.1.4 Phone Plans and SIM Cards

You can use an internationally-purchased cell phone in the U.S., so long as it is unlocked. To smooth your initial transition, the ISO office carries temporary SIM cards for pick-up. If you want to ensure you have a SIM card immediately upon arrival in the U.S., you can also fill out this form 2-5 weeks in advance of your departure to be mailed a SIM card free of charge!

2.1.5 Establishing a Bank Account

Both for your daily transactions and to get paid by MIT, having an American bank account will make your life much easier. Opening a bank account in the U.S. is quite simple, conditional on having a Social Security Number – it requires a 30-minute visit to a bank branch near you, and making an appointment is usually not necessary. To open an account, you'll need to bring your passport for identification. As a general rule, commercial banks will be preferable to savings banks, as these will offer a greater variety of international services.

Since drawing cash from an ATM associated with a different bank than your account incurs a fee per transaction, opening an account in a bank with numerous branches in the areas you frequent is most practical. For this reason, **Bank of America** is the common choice among graduate students in Cambridge.

- **Bank of America (BoA)** is a popular choice due to its proximity to the department and large network throughout the U.S. There is a free account available (e-checking). It's possible to get a credit card account as well, for international students too (which can be useful to build a credit history). Note, however, that ATM withdrawals abroad face a hefty $7 fee from BoA, and there are fees if you use their credit card abroad (which you won't have with other credit cards).
- **MIT Federal Credit Union** is another good option, and also has a branch near the department.
- If you travel abroad a lot/are not from the US, the **Charles Schwab High Interest Checking Account** is definitely worth considering! It has no monthly fee, and it can be used to withdraw money without ATM Fees (they get reimbursed monthly) and without foreign transaction fees (no surcharge on top of the exchange rate) at most ATMs around the world. It sounds too good to be true, but it was warmly certified by a current Econ grad, who ensures he has gotten all has ATM rebates in at least 4 countries. The downside is that it doesn't have any physical branches: you can't deposit cash with them (but you can take pictures of checks with your phone to deposit them). It thus still makes sense to have a second bank account with a physical presence in Cambridge.

Other banks in the area include **Cambridge Trust**, **TD Bank**, and **Santander**.

2.1.6 Credit Cards

Unlike in many other countries, the American representative agent is endowed with a credit card rather than a debit card. This is a smart move for the representative agent, as credit cards in the U.S. give you perks, such as a discount on all of your purchases in the form of things like "cashback rewards," or airline miles. Furthermore, having a credit card means that you build a "credit history" by contracting some debt, and then paying it off in a timely fashion. This allows financial institutions to construct a credit score for you. A good score allows you to contract more debt if you need it at some point (e.g., to buy a car or a home). Remember that there is a positive probability that you will stay in the U.S. longer than initially planned!

For this credit score to be good (or "exceptional," as they say) and to avoid paying extra fees, you need to regularly (i.e. each month) pay your credit card balance. Don't forget to do this! Missing these credit card deadlines can be very costly. You should also be wary of opening too many new accounts at once – part of the input to your credit score is the average age of accounts, as well as the size of available credit to debit ratio.[1] (Pursuant to this, it is generally good not to cancel credit cards if you can help it, even if you're not using them, as this will *also* lower the average age of your accounts in the long run. Those with excellent credit usually have an average account length of 11 years! Consider this when choosing between a card with an annual fee versus a free alternative.)

The best credit card for your needs will depend on what comprises the largest share of your annual expenditures (e.g. travel, groceries, eating out, gas, online shopping, etc.), as well as the most suitable form of rewards redemption. For direct comparisons between credit cards and useful articles on personal finance, check out Nerdwallet!

Unfortunately, most newcomers to the U.S. will lack a credit history, which will restrict the set of cards you will be eligible for. It is thus best to open an "unexciting" starter card with a small credit limit,[2] pay for most all expenses with said card, then pay the full balance each month. Most credit cards let you check your estimated credit score each month, which will give you idea when you're in range for applying for a card with more generous rewards!

2.1.7 Tipping

U.S. tipping culture can be confusing, even for Americans. It is more than a simple point of etiquette to tip service workers; the expectation that customers tip is often built into workers' pay structure. For guidance on how much to tip whom, you can read more here. Note that tipping culture is constantly evolving and sometimes in dispute, so it does not hurt to check in with your American peers on their tipping decisions.[3]

2.1.8 State IDs and Liquor Licenses

The legal drinking age in the U.S. is 21 years old. If you didn't know it already, you will *quickly learn* that this limit is strictly enforced. Often, you don't only need to prove your age to *drink* alcohol, but also to *enter* an establishment selling it. For instance, to enter an arcade that happens to have a bar, you may need to prove your age, even if you don't plan to buy a drink. Many places only accept American IDs and international passports.

[1] With that said, opening new cards can *boost* your score in some cases if the new credit lines lower your overall credit utilization ratio.

[2] BofA carries two such good options, this author recommends "Cash Rewards."

[3] For instance, many coffee shops have introduced payment screens which automatically prompt you to tip after paying. It had not been standard custom to regularly tip on coffee prior to this technology taking hold. There is continued disagreement over whether it is sensible to tip a dollar on a 2-4 dollar drink.

(Even the Muddy, MIT's graduate student bar, demands all international students show their passports, just to enter.)

If you don't have an American driver's license and don't want to carry your passport around everywhere you go, one practical option is to get a "liquor license," which very much resembles a driving license, with the single difference that it authorizes you to drink, not drive (two things which should never occur in tandem, anyways). You can get a liquor card for a small fee at the Massachusetts Registry of Motor Vehicles (RMV). There are several branches in the Boston area, and you can make an appointment online.

2.1.9 Getting a Driver's License

Quick links:

- The MIT page on obtaining a driver's license is here.
- The Massachusetts RMV page on driving with a foreign license is here.

Some comments:

- For most countries (all except Canada, France, Mexico, and South Korea), if you want to obtain a Massachusetts driver's license, you need to pass a theory test and a road test, *even* if you already have a foreign driver's license. The exact requirements for converting an existing license will vary, depending on the issuing country.
- One will need a social security number (SSN) or an official denial letter for the application. For help, see 2.1.2, or speak with a member of the ISO staff.
- One can fill out all of the RMV paperwork via an online form, at the end of which the RMV offers to schedule an appointment at a specified time. (So you don't need to queue for hours!)
- Upon arriving at the RMV, you will provide your proof of identification, take a photo, and then be given a link to *take your theory exam online*! (This was a procedure instituted during Covid which the RMV has decided to stick with.)
- After passing the theory exam, you will schedule a road test through the same portal. Note that there is huge variation across RMV locations of the soonest available appointment date for a road test, largely dependent on how far out from Boston/Cambridge you are – locations in the immediate vicinity may be completely booked for the next two months, while some locations 30 minutes out of the city may have appointments within the week. Search around!

2.2 Housing

2.2.1 On-Campus Housing

Quick links:

- MIT Graduate & Family Housing Launch Point (from this, relevant links follow)
- MIT Grad Housing "makes their pitch"
- List of Grad Residences
- Comparison Chart of Unit Types and Pricing
- MIT Grad Housing FAQ

There are pros and cons to living in MIT graduate housing. Below we have included a (non-exhaustive) list of the major points to consider. For more specific discussions of particular on-campus residences (namely, the residences which contributors to this guide have lived in), see Appendix B!

Pros:

- *Logistical convenience:* Administrative and financial hurdles for first-time U.S. renters are substantial.[4] Having MIT as your landlord streamlines the process of (i) "house-hunting," (ii) locating housemates, (iii) paying rent, and (iv) submitting maintenance requests.[5] To secure housing, you enter the Graduate Student Housing Self-Selection process (once a lottery, now no longer), and rank preferences over residences.

- *Proximity to the department/MIT facilities:* Unless you are willing to shell out a *lot* of money in rent for a swanky Kendall high-rise, MIT on-campus housing is going to be your primary option for reasonably-priced housing within a 15 minute walk of the department (a notable exception is 100 Memorial Drive, located directly beside E51). Note that some graduate residences are *much* closer to the Econ Dept. than others. You will also have the advantage of being close to MIT gym facilities, dining halls, libraries, and EZ-ride shuttle stops (see MIT mobie app or Apple maps).

- *Built-in community:* Many graduate residences hold occasional communal events through which residents can mingle and get to know peers in other departments. Note, however, that there is great variability across residences in both (i) the demographic composition of occupants (e.g. Site 4 houses a lot of families with little kids), and (ii) reputation for social events. So, if this point is important to you, it's good research whether the residences you're considering are a good fit!

[4]As an example, the housing search generally starts a month or so before your intended move-in date. While it is not difficult for those already living in the U.S. to swing by the area for a housing tour, this can be a large ask for students coming from another country. Some landlords run a credit check, which is not available if one doesn't have a U.S. credit history. Many landlords also require a letter from one's previous landlord, indicating one was a good tenant. With relatively low graduate stipends, some landlords will also demand a guarantor (usually a family member, who commits to paying your rent if you can't). If you do not have a guarantor, you may be expected to pay additional up-front deposits. (Challenging if one has yet to receive one's first paycheck.)

[5]With that being said, while it is easy to *submit* maintenance requests, MIT can be hit-or-miss about fulfilling said requests in a timely fashion. Unlike with standard landlords, there is little you can do when this happens.

- *Finding suitemates:* Many of the campus housing options will put you in a suite. While you can certainly go into the housing allocation process with a group in mind, if you do not have a housing group, you can use the housing portal to specify preferences over who you might want to live with, and MIT will try to find you a good match. This is helpful if actively searching for compatible housemates is daunting/logistically infeasible.

- *Individual furnishing and shared resources:* Many of the residences come with furnishing, such as a bedframe, mattress, desk, seating, wardrobe, fridge, and stove. (Note that there is usually no toaster nor microwave in-unit.) Whatever is not provided individually within units is often available communally (such as kitchens with shared microwaves). There are also small gyms within the residences. Communal facilities (like bathrooms, when applicable) are regularly cleaned. Mail services are also provided, making the secure receipt and return of packages very convenient. There are also items which can be checked out from the front desk of many dorms, such as irons, space heaters, tennis gear, etc.

- *Minimal up-front deposits/fees:* When you are renting local, a common (and annoying) feature are up-front payments. This includes (i) the security deposit, (ii) first/last month's rent, and (iii) depending on the unit, a "brokerage/broker's fee," which can also be another month's rent. While (i-ii) will be ostensibly returned to you/used for a future rental payment, these costs can be prohibitive if one does not have a pool of savings to draw from.

- *Mid-year transfer:* If you are living in a particular residence on-campus, and do not like it, you are given an option to transfer to a different residence at the end of the semester (subject to availability constraints).

- *Become a Graduate Residential Advisor (GRA):* Life hack! You can apply to be a GRA (live-in mentors for students in MIT housing) and will be compensated in **free rent**! Click the link above for details on the application process, and what the job entails. Some members of our department are current GRAs. Ask around if you'd like to hear more specifics on their experience.

Cons:

- *Cost:* MIT charges a hefty premium for the logistical convenience it affords. Absent having somewhat specific and extreme preferences that make MIT Housing a particularly great match (e.g. you enjoy the communal feel of dorm-style living (ex. Ashdown,[6] 70 Amherst) or demand proximity to the department above literally anything else (ex. Site 4, 70 Amherst), should you find yourself with the means and wherewithal to search for alternate housing options, you will indubitably find a better bang for your buck.[7]

- *Quality:* For what you're paying, MIT dorms are quite small, and somewhat depressing. An "efficiency unit" (a.k.a. a "studio," where the kitchen, bedroom, and living

[6] Ashdown House places comparatively higher emphasis than other dorms on community events!

[7] *Some background...* MIT has been extremely slow to expand affordable grad housing options. Most recently, the administration came under fire for tearing down the comparatively-affordable Eastgate apartment complex to build Site 4, a luxury high-rise hosting a disappointing number of additional units, at a 59% hike in rent. Read here for a bit more on the history of housing development in Kendall.

room are all one room) in Site 4 (regarded as the nicest grad residence) goes for $2,337/m (in 2022), and buys you an average of 325 square feet. For the same price, if you're willing to move two or three stops down the T, you can get a one-bedroom more than twice the size, with nicer appliances, in the heart of Harvard or Porter Squares (both way more fun neighborhoods than Kendall, see below).

- *Location:* While the ability to roll out of bed and walk 10 minutes to the department in the morning is nice, Kendall is not a particularly exciting place to spend one's time outside work hours. Most of the area surrounding MIT is comprised of obnoxiously large lab spaces, tech companies, and luxury condominiums. The "local grocer" is Brothers Marketplace (see 2.4.1), and anything less expensive/with wider selection will require you to hop on public transit or take an MIT shuttle. The dining options are limited, with many places closing early, as their target demographic is 9-5 workers. Compared to the lively alternative neighborhoods of Central, Harvard, Inman, Porter, and Davis, it is no surprise almost all students in the department ultimately choose to live elsewhere. (Pursuant to this, you will find yourself commuting out of Kendall whenever you wish to meet up with other members of the department.)

- *Restrictions:* MIT residences impose additional rules one must abide by, such as hosting parties and providing access to short- and long-term guests.[8] The MIT Guest Policy remains a subject of great frustration among those living on campus.

- *Lease renewal:* You can only renew your housing license for one year. Afterwards, you are re-entered into the housing allocation process, and, if you fail to win "continuing status," will need to move to a new unit. (Policy may be subject to change year to year, so do check this for yourself!) By contrast, if you find an apartment you like and get along with the landlord, you can basically plop yourself there for the rest of the PhD, saving the labor/thousands of dollars in moving costs every other year.

- *Furnishing:* Pre-furnishing means that one cannot replace provided items with ones you might already own/would prefer to use (and will be liable for any damages). This is especially relevant for anyone who is not coming directly from undergrad. You will either need to sell or store existing furniture you own. Further, note that unless you intend to live in grad housing for the full duration of your PhD, you will *eventually* need to buy furniture for yourself. It bears noting that there is one unfurnished MIT dorm, which is Edgerton.

- *Shared facilities:* Depending on your unit type, you may have to share some communal facilities like showers, bathrooms, and kitchens. Depending on your preferences, this might be a downer. It is a common report that those with communal kitchens will run out of refrigerator space, necessitating one stores all food in a personal mini-fridge. Not ideal if you like to cook for yourself/meal-prep.

[8] During COVID, these restrictions were taken to an extreme, and residents were even restricted from interaction with one another. Fortunately, these days are (hopefully) behind us.

2.2.2 Off-Campus Housing

About 70% of MIT graduate students live off-campus. They will tend to live somewhere along the Red line, as the Kendall/MIT stop is less than a 5 minute walk to the Economics Department.

- **Neighborhoods:** The most common areas to live off-campus are in the cities of Cambridge and Somerville: Central, Harvard, Porter, Davis, Inman, Kendall, and East Cambridge. It is less common for Economics PhDs to live in Boston, as it is both more expensive and can be an annoying commute. This aside, those who do live in Boston tend to locate in Beacon Hill (very close, very pricey), Back Bay (more expensive than an equivalent unit in Cambridge/Somerville, with a commute of similar length), Fenway-Kenmore (reasonably priced, but out of the way), and Allston (reasonably priced, extremely out of the way).

  If you're open to a longer commute (or own a car), there are many "commuting suburbs" in the vicinity of Cambridge (check out Medford, Brookline, Jamaica Plains, Belmont, Newton, Watertown, Lexington, Framingham, Winchester, Quincy, Braintree, etc.). As it can be more isolating, it is generally uncommon for students to live in the suburbs, unless they have a significant other working outside Boston/Cambridge, or children and need more space.

- **Finding Apartments/Housemates:** While not monotonic, individual monthly rent will tend to vary inversely with the ratio of occupants to shared resources (e.g. rooms:bathrooms, or rooms:kitchen space). It is thus common for graduate students to seek housemates! There are many channels one can use to find available rental units and others to live with. Some options include:

  1. *Department Networks:* As early as you can, reach out to current/incoming students in the department to see if either they or someone they know happens to be looking for a person to step into an existing lease. If you don't know anyone to reach out to, you can email the current Graduate Administrator (presently the wonderful Julia Martyn-Shah) to circulate your request (e.g. for other students looking for housemates, any openings in existing leases, etc.) within the wider graduate economics student body. There are some lovely apartments which are handed down within the department as people come and go through the program!
  2. *Facebook:* Facebook groups are also a great place to look. Boston and Cambridge are flush with graduate students in similar preferences and financial constraints as you. It is extremely common for housing groups to look for individuals to take over a housemate's portion of rent year-to-year. Some groups to check include Harvard MIT Housing (38.5k members, as of 2022/09/18), Harvard Grad Market (30.3k members – has a mix of furniture and apartment listings), Harvard Housing (25.2k members), and MIT Incoming Grads 20XX (search for your year!).
  3. *Online Listings:* If you have a housing group secured and want to search for an apartment together, there are several websites with useful filters (price, # rooms, # bathrooms, no broker's fee,[9] central air, washer/dryer in unit, etc.) to search for apartments currently on the market for rent. Such websites include Zillow,

[9] This author recommends you pay close attention to whether or not a unit has a brokerage fee. This can be a massive hidden cost, generally coming to 1 month's rent. On Zillow, you can just filter out apartments

Redfin, Apartments.com, and Rent.com. Once you're in communication with a real-estate agent, it is common for them to share additional soon-to-be listed units in your price range; it is therefore useful to be communicative about your preferences, and let them know you'd be interested in future updates on listings!

2.2.3 Getting Furniture

- **The sidewalk.** Not kidding, there is a *lot* of furniture that gets left on the side of the road (particularly in the summer around the end of each month, when lease cycles renew). If you get to Cambridge a bit early, you should *strongly* consider getting a rental car/van and weaving through residential streets of Cambridge and Somerville for an hour. This author has acquired near-new dressers, shelving units, desks, tables, office/dining-room chairs, lamps, and even a functional 50-inch flat-screen TV. Do not underestimate the wealth of your neighbors and allure of free disposal.

- **Facebook Marketplace:** A somewhat more formalized variation of the above, there is a thriving furniture resale market on Facebook. Intuitively, supply surges and prices plummet near the end of lease cycles. Many items one might be considering for purchase at IKEA are available on Facebook lightly used (and pre-assembled!). One can either search public listings on Facebook Marketplace, or join private buy/sell groups such as Harvard Grad Market, MIT Free and For Sale, Buy Nothing, and Curb Alert Cambridge.

- **IKEA** *Transportation:*
  - IKEA Stoughton is a 45 minute drive south of Cambridge. If you have a driver's license, it is convenient and relatively inexpensive to rent a van for the day from the Central Square U-Haul (see: Transportation).
  - Though IKEA is *technically* accessible via public transit, it will entail two gnarly transfers, causing your journey to triple in length. With that said, if you do ultimately elect to use public transit to get there, you will be met by a row of taxis and (sometimes off-the-clock) ride-sharing vehicles upon exiting the building, making the trip home with furniture feasible.
  - IKEA also delivers to your home, with delivery fees ranging between \$25 (for simple home goods) to \$100.[10] Once ordering large furniture in bulk, the fee (as of 2022) stays fixed as more items are added, making it pay to coordinate with your housemates to have all furniture delivered in one go. Try to be far-sighted, if possible; scheduled delivery takes 2-3 weeks, and sometimes longer if one of the items is in high demand.

  Pro Tips:

  - Upon entering the store, you should first take a look through the "As-Is" section.[11] The "As-Is" section sports (1) retired floor models, (2) items assembled by buyers and then subsequently returned (IKEA has a very generous return pol-

charging brokers' fees.

[10] Note that one can pay a premium to have the IKEA delivery personnel bring the boxes up the stairs and into a specific room, and also to assemble things for you.

[11] Located near the registers on the warehouse floor – ask a store clerk for directions if you have trouble finding it.

icy), and (3) Frankenstein-type pieces assembled by IKEA personnel using parts from sets returned with components missing (often to amusing aesthetic effect). As-is items are sold at impressive discounts, and can save you assembly costs. If you're not too particular about model and color, it is a great resource that many aren't aware of.

  - The "hidden cost" behind IKEA furniture has historically been that you must assemble it yourself. In recent years, however, IKEA has partnered with the company TaskRabbit to streamline the contracting of this service to a "tasker." These contract workers are usually able to come by within a day of request! For reference, as of 2022, the price to assemble a full bed frame was around $30.
  - IKEA gives realtime reports of stock at a given location on their site. Check the availability of the item you want before hauling yourself to Stoughton, as items frequently go in and out of stock over the summer. Further, be skeptical about an item's true availability when the reported stock dips below 5: there is a lag in updating the reported stock level, and oftentimes, an item shown as available is already pulled and in someone's cart, crusing toward check-out.
  - You can reserve most furniture on the website for pickup in the IKEA parking lot to save time and avoid needing to enter the actual building.
  - Going to IKEA in August or September (the start of the school year, as well as the start of many lease cycles) is unpleasant. It isn't unusual to see people queuing to enter half an hour before the opening of the store (sometimes literally fighting in the warehouse over high-demand furniture). It is advisable to do one's furniture shopping in the earlier months of summer.
  - Don't sleep on IKEA's frozen meatballs.[12]

- **Bob's Discount Furniture** is a New England retailer great for inexpensive and comfortable sofas/couches/sectionals. Even throwing in added expenses for delivery and assembly, items are still eminently affordable.

- **MIT Furniture Exchange** sells used and new furniture (including new beds) at OK prices: they can also arrange transport. Usual open hours are Tuesday and Thursday 10am-4pm.

- **Wayfair** is an online-only[13] furniture retailer. Items purchased with Wayfair are very cheap, but can be hit-or-miss in quality (with a comedically unreliable return policy/customer service hotline). If you want to roll the dice, many people at the department have had success with finds on Wayfair.[14] However, it pays to be meticulous in reading through customer reviews.

[12] Oxymoronic vegetarian meatballs are also available.

[13] Historically, this was to exploit state tax loopholes, but the Supreme Court has since put an axe in that.

[14] Great place for difficult-to-damage items, like rugs.

2.3 Transportation

2.3.1 General Overview

For more detailed information, you can check the Access MIT page, but here is a summary.

- **Massachusetts Bay Transit Authority (MBTA):** (a.k.a. public transit/"The T") MIT subsidizes monthly and semester passes for public transit, which can be purchased through your Atlas account (see the MIT website for instructions). Your physical MIT ID can also be used as a CharlieCard,[15] (Charlie is truly inside) meaning you can use it as a transit card either by subscribing to a pass or by adding value to it. Adding value can be done either at a T stop or online (in the latter case it seems one must wait 24 hours for value to be added).
  - The **MBTA Commuter Rail** is made up of 12 train routes connecting communities in eastern Massachusetts and Rhode Island to downtown Boston. Some wonderful destinations easily accessible via the commuter rail are downtown Providence, Rhode Island (home to some great restaurants and even a vegan food hall), Salem (of the Salem Witch Trials), Plymouth (where the pilgrims on the Mayflower shipped in), Gillette Stadium (home to major sporting events and music concerts), and the North Shore.
  - The **Silver Line** is a free bus service which runs consistently between South Station and Boston Logan Airport Terminal A.
- **Biking:** The best way to get around Cambridge is probably biking. Cambridge has a large number of bike lanes, and you can bike in any season and almost any weather – one author certifies it – you will just need some good equipment (gloves, scarves, training pants, a balaclava, etc.) and a bit of New Englandish resilience. You can either buy your own (see Bike Ownership in Cambridge below), or get a bike sharing membership.
  - **Bluebikes:** As an MIT student, you can get a discounted pass with **Bluebikes** (formerly Hubway) for $35 instead of the usual $99 (here are the application instructions). Three caveats: (1) During busy periods (e.g. commute hours), Bluebikes can not only run out at stations, but they can also *fill up*. One of the biggest headaches is biking to the station outside the department and finding that there are no spots to return your bike. You must then check the app for another location to park it, which can end up being a nontrivial walk back to your original intended destination. Students thus tend to rely on Bluebikes for more ad hoc usage, and less for commuting. (2) While Bluebikes will get you where you need to go, there is noticeable variation in quality between bicycles. (3) While most Bluebikes stations remain active all winter, it is common for some to be removed during the winter-riding season (see example closures from 2021). Always check the app before planning a trip!
- **Uber/Lyft:** For shorter drives, ridesharing apps can be a reasonably-priced and convenient way of getting around (especially when traveling in a group during off-hours). They are particularly helpful when going between locations awkwardly connected by public transit but physically proximate. Do be mindful that Boston is *not New York*:

[15] For a horrifying account of how the MBTA came to name their transit card after "Charlie," see here.

in the late hours, the supply of drivers on the road can grow extremely sparse, with long waits and frequent cancellations. It is important to have a back-up plan for getting home safely after the T has shut down.[16]

- **Taxis/Cab Services:** They still exist! They don't price gouge during inclement weather! Sometimes, they have an app! For more info and some really horrific examples of web-design, see: Green and Yellow Cab of Somerville, Cabbie's Cab, and Cambridge Taxi Cabs. Note: it is not uncommon for cab drivers to quote a price upfront to keep their meter shut off. They cannot coerce you into this, and if you are being taken advantage of by a driver, there will be phone numbers posted by legal requirement inside the taxi which one can call. With that said, if you *want* to strike an off-meter deal with your driver, go off bestie.

- **ZipCar**: ZipCar is a convenient car-rental service which charges by the half-hour,[17] making it ideal for accomplishing short errands. Once one has a valid driver's license (see Getting a Driver's License) and approved membership (can take two weeks to process), using ZipCar is as simple as downloading the app, choosing a nearby vehicle, hopping in, and hitting the road. When finished, simply return the car to the lot whence it came! As an MIT student, the registration fee is free and the annual pass is $25 instead of $85. There are many ZipCar parking lots in Cambridge and around the MIT campus. More info here.

- **Car Rentals:** MIT students get discounts on car rentals with Avis and Budget (note that you will need to bring your physical MIT ID – they are strict about this). The more convenient locations from campus are near Central Square, but the discount applies everywhere. Be wary that unless you book sufficiently far in advance, the only location with available cars might be Logan airport.

- **U-Haul:** U-Haul offers trucks, vans, and trailers for rent, and is particularly helpful during moves. They accept international driver's licenses, though you should confirm your license is authorized for short-term use in Massachusetts (see also: Getting a Driver's License).

  - **A note on rental insurance:** Many credit cards *already include* damage/collision insurance for rental vehicles (paid for on said card), making the damage insurance offered by rental companies redundant/meaningless. Check the fine print of your credit cards' terms and conditions before renting a vehicle to see whether you have coverage. Note that terms can vary widely between credit cards (sometimes excluding trucks or vans). For more information, see this article from NerdWallet.

- **MIT Shuttle Buses:** MIT operates various shuttle buses around the Kendall/Central area, including shuttles to pick up groceries (free) and go to the airport (fee to reserve)!

2.3.2 Bike Ownership in Cambridge

Cambridge has bike lanes on most streets, making it a preferred mode of commuting for many students! Just be sure to dress properly for biking on the street: wear a helmet, don reflective gear, and attach lights to your bike for riding at night.

[16] It is not unheard of to see someone hop on a Bluebike out of desperation when leaving the club.
[17] With a flat fee for the full day.

- **Buying used:** Cambridge Antique Market is a great resource for buying used bikes. High quality used bikes are also frequently found on Craigslist and Facebook Marketplace. These are good places to buy, but you want to make sure you're not being sold a lemon! Some tips:
  - First, do your research to know what kind of bike you're interested in (road, mountain, hybrid, touring). Some important features to consider might include the material of the frame (which affects weight, shock absorption, durability, stability in motion, and proclivity to rust), and wheel type (affecting speed, grip on the road, maneuverability, shock absorption, balance, ability to roll over obstacles, etc.).
  - Figure out your bike size and make sure you look exclusively for frames that will fit you well. This is mainly a factor of your height.
  - If you're not sure if the asking price is fair, you can check its value in the Bicycle Blue Book.
  - Always go to see a bike in person and give it a test ride before buying.
  - Focus on potential problems that are difficult or costly to repair. This includes testing the breaks, checking for rust, damage, cracks or bends on the frame and the wheels, looking for damage on the tires, making sure the drivetrain and all the gears are functional.
  - Don't worry too much about minor things that can be changed or repaired easily, like a little bit of rust on the chain, bar tape or seats that you don't like, bike wheel slightly out of true, etc. Also don't worry too much about small chips and scrapes on the frame, unless they are very pervasive.
  - Ask the seller how long they have had the bike for, and what they do for maintenance. Don't buy a bike that hasn't been tuned up regularly! Also ask if any part of the bike has had to be repaired or replaced.
  - When in doubt (and if you're really interested), it's appropriate to ask the seller to take the bike to a shop for an evaluation.
- **Buying new:** Buying new can be a good idea if you want to be absolutely certain of quality, but keep in mind that you will pay a large premium for this. Good bike shops close to MIT include Broadway Bicycle School, Crimson Bikes (good prices, and will deliver the bike to your house), and Cambridge Bicycle (has wide selection, but is also significantly more expensive and gets polarized reviews).
- **Maintenance and Repairs:** After purchasing, tune up your bike regularly, and get your brakes checked at least once a year! In Boston, it's important to buy bike lube and clean your chain often, especially during the winter when there is salt on the roads. Avoid storing your bike where it can get wet (consider investing in a bike cover). For repairs, Quad Bikes in Harvard Square has great service and affordable prices compared to alternatives.
- **Storage at the department:** By a tremendous stroke of cosmic luck, one of MIT's two locked bike cages is in the parking lot of E53, directly beneath the economics department! Your bicycle must be registered with the MIT Parking & Transportation

Office[18] in order to gain access. Once registered, cards to access the bike cage in the garage can be requested by sending an email to commuting@mit.edu.

- **Short-term bicycle parking:** Bike theft in Cambridge is rampant and systematic. When you can't park your bike in a secure location, take necessary precautions:
  - Always lock your bike to a rack when not in use. Do not lock it to things easily mutilated (like fences or thin trees) or simply to itself. Invest in a lock that cannot be easily cut. These take the form of heavy-duty U-locks. Spiral cord locks can be snipped with bolt cutters in a matter of seconds. All locks can eventually be cut, so your goal is to (1) make your bike look like more of a hassle to steal than the one next to it, (2) take so much time to cut that the thief might fear being seen (relevant during the daytime).
  - Register your bike with the National Bike Registry (recently joined with Project 529), so you can report theft and establish identifying proof of ownership to the police once located.
  - Consider attaching a GPS tracker in an inconspicuous location. See discussion of products here.

2.3.3 Car Ownership in Cambridge

2.3.3.1 Buying a Car For various reasons, you may be interested in purchasing a car during your time at MIT. If this will be your first time buying a vehicle, the internet has many great resources that can help. See for instance these articles from US News and Consumer Reports on buying a used car. Autotrader is also a good place to look for cars in the area and get a sense for what is a fair price. One important thing to remember is that you'll have to pay sales tax on top of whatever your purchase price is – as of 2022, sales tax in MA is 6.25%. There are also a number of additional fees, with the largest typically being registration fees, titling fees, and document fees. All told, taxes and fees will often add at least $1,000 to your purchase price. Massachusetts also requires that all vehicle owners have car insurance, which will run you around $500/year for the minimum coverage level and more typically around $1,000-1,500/year.

2.3.3.2 Owning a Car The most important thing to know about owning a car in the Boston area is that parking is a very scarce resource. If you're not lucky enough to be renting an apartment with parking included, an off-street spot will cost at least $150/month and closer to $300/month for spots near(ish) the department. If this is the route you choose to go, Spothero can be a good place to look. If you're living in MIT housing, you can also get a spot at an MIT lot for $174/month. A more affordable option is to get a resident parking permit so that you can park on the street, which costs only $40/year in Somerville, $25/year in Cambridge, and is free in Boston. Note that due to this scarcity, parking regulations are aggressively enforced; parking on the street without a permit is a near-certain ticket, running between $30-$40. With all meters now digital, you can get ticked minutes after your meter expires. This author once received a ticket *within the minute* that the meter expired.

Since it is much more affordable, and since most areas in and around Boston have rel-

[18] Accessing this page requires working MIT certificates; see Set Up Your Computer.

atively low rates of car theft, residents typically opt for on-street parking. One caveat is that getting a resident parking permit requires the car be registered in Massachusetts and garaged in the relevant city, so you'll have to visit the RMV to change your registration if you're bringing a car from elsewhere. Also, most streets are subject to "street cleaning" a few times a month. During street cleaning hours, parking is restricted to one side of the street. Forgetting to move your car will result in around a $50 ticket, depending on the area.

A final caveat with on-street parking is that you will have to shovel out your own space in the winter, which can be a surprising amount of work when there's a foot or two of snow on the ground. Different areas of Boston (and Cambridge and Somerville) also have their own local ethics and regulations with regard to "spacer savers" (placing an item in a spot you've shoveled out to reserve it). Cambridge and Somerville both explicitly ban them, while they're common practice in much of Boston.

A few more miscellaneous items. Massachusetts requires a yearly vehicle inspection, which you can have done at most service stations for $35 and typically no appointment required. MIT also has a commuting program that will assign you a lot where you can park for $11/day. Unfortunately, you are likely to be assigned a lot relatively far from the department, so even students who own a car and are cost-insensitive usually use public transit to commute to the department. Finally, if you own a car and don't happen to be extremely handy, you will likely need a mechanic at some point. If you're not sure where or how to find one, AAA maintains a list of mechanics they recommend.

2.4 Consumption (Literal)

2.4.1 Groceries

MIT operates a Grocery Shuttle Bus service. There are two routes; the first does a Costco-Target loop. The second MIT Grocery Shuttle will take you to Whole Foods, and Trader Joe's, and Daily Table. Grocers in the Cambridge area include...

- **Market Basket** is probably the cheapest option for groceries, boasting loads of European/Latin American imported products. It is located up in Somerville, and can get quite busy on weekends.

- **Whole Foods** has the widest selection of quality produce and organic products, and is generally more expensive. With that said, it will rotate sales on items (with an extra discount for Prime members thanks to Bezos), and if you are flexible in what you want to buy, pricing on core groceries can be competitive with counterparts. The closest Whole Foods is on Memorial Drive (the MIT shuttle goes to this location - see above); other locations include Prospect St. (near Central) and Beacon St. (Inman Square).

- **Trader Joe's** is many a graduate student's favorite grocer. It clocks in as one of the more affordable grocers, with a wide variety of staple foods at low price points. Agnostic on Trader Joe's absolute advantage, its comparative advantage is indisputably in its creative snacks, pre-made frozen meals, and inventive baking mixes! Like Whole Foods, they also have many options for vegetarians. Just time your visit wisely; it can get quite busy during weekends and on weekdays in the evenings, and can run out of items between cycles of updating stock.

- **Star Market** is a solid grocery store, with locations in East Cambridge, Porter Square and Beacon Street (Somerville). It is cheaper than Whole Foods but more expensive than Market Basket; it has some European and limited East/South Asian imported products.

- **Target** can be found in Central Square and in Porter Square (Somerville). Prices are average, not the cheapest. Produce isn't great, but it is decently stocked in pantry foods.

- **Costco** is a bit further away, but offers some of the best deals on bulk food purchases. It can pay to get a Costco membership and pool grocery purchases with housemates/neighbors/friends.

- **H-Mart**, directly outside the Central T Stop, is a Korean grocer flush with East Asian ingredients, spices, alcohol, and snacks, with an impressive range of seafood and cuts of meat. Prices are a bit too high for this to be a person's primary and exclusive grocer. There is also a Japanese/Korean food court (with ramen, curry, sushi, and a Korean bakery) accessible upon entry.

- **C-Mart** is a large Chinese grocer in Boston's China Town, about 30 minutes from the department on public transit. (If you live north of the department, it is more convenient to get there via car.) It has some extremely cheap produce, stocking many items that are otherwise impossible to find in the U.S. It is worth a visit![19]

- **Daily Table** is a non-profit grocer in Central which sustains lower prices by receiving donated/discounted products from suppliers due to short codes (close-to-expiration)/excess inventory/labeling changes. It is accessible via the MIT Grocery Shuttle.
- **Brothers Marketplace** is directly across the street from the department. Prices err on the expensive side, but it boasts high quality and a wide selection of premium grocery and pantry items. They have a little-known sandwich bar and some hit-or-miss pre-made meals in coolers. (The hits are a hit, however.)

2.4.2 Eating Out (and In!)

- **Free food/beverages:** One of GEA's primary directives is providing members of the department free food! Check you email for upcoming events. You can also add the GEA Events Calendar to your Google Calendar!

  You should also be on top of your email – there are many events which happen around the department (faculty meetings, student lunches, etc.) which will have leftover food. The protocol is someone blasts the `econ-grad` listserv that they've dumped food in one of the kitchens, and those in the vicinity swarm to scoop things up.

  If you're craving espresso, economics students have tap access to the Sloan Lounge (located on the fifth floor, going up Sloan elevators), which features a great view of the Charles River, and a sometimes-operational espresso machine! Try your luck today! Sometimes Sloan also hosts catered/professional development/educational events, for which students in the Economics Department can register in advance.

  If you're craving... bananas, you can stop by the MIT Banana Lounge, in 26-110. Open 24 hours.

- **Eating around the department:** There are many cafés and fast-casual dining options for lunch and around the department. The closest options (in rough order of proximity) are listed below. The symbol 🌿 implies robust vegetarian options, and ☕ indicates they have a full espresso bar (most all establishments sell some sort of basic brewed coffee, so this is left unmarked).
  - The Sloan cafeteria (weekly menu here) 🌿
  - Microsoft cafeteria 🌿
  - Brother's Marketplace (sandwiches, hot food by weight, pre-prepared meals in coolers, etc.) 🌿
  - Shy Bird (cafe + sit-down restaurant) ☕
  - Dunkin' (Donuts) (no serious food) ☕
  - Tatte (Main St) (bakery/cafe with Israeli-fusion dishes) 🌿 ☕

[19]Note: for vegetarians and those with serious allergies, be a little careful of the packaged snacks and frozen foods section, as the ingredient labels are at times only partially or imperfectly translated, and may unintuitively contain meat or be cross-contaminated with nuts/shellfish/soy/sesame/etc.

- Dig (seasonal health bowls) 🌿
- Chipotle (Mexican) 🌿
- Clover Food Lab (Mediterranean vegetarian) 🌿
- Cava (Mediterranean bowls) 🌿
- Blue Bottle Coffee (no serious food) ☕
- Dumpling Daughter (Chinese dumplings, buns, and noodles)
- B.GOOD (health-conscious fast food) 🌿
- MIT Stata Center cafeteria (daily menu, sushi, sandwiches, soup, & salad) 🌿
- sweetgreen (customizable salads) 🌿
- Aceituna Grill (Mediterranean-fusion) 🌿
- Bon Me Test Kitchen (Vietnamese-fusion street food)
- Area Four (great pizza, attached to a cafe) 🌿 ☕

- **Delivery services:** If you'd like to order in, there are many delivery services who service the greater Boston area, as well as run promotions (e.g. \$5 off at lunch, 20% off first order, \$10 off order of >\$50 etc.). Check out UberEats, GrubHub, DoorDash, Postmates, Caviar, and Toast (this is specifically for pick-up, but allows you to accrue points). This author is not certain, as of 2022, which of these services have merged/been acquired by another. IO economists, take note.

- **Restaurant reviews/recommendations:** For general information on eating-out, Yelp is a great resource (not to mention great research topic) that has user ratings for a variety of restaurants and other businesses. If you're looking for a top-tier culinary experience (maybe for when relatives are in town), while the Michelin Guide doesn't cover Boston, searching "Michelin-worthy restaurants in {Cambridge, Boston, ...}" is a good sorting mechanism!

- **Co-op/meal-sharing:** An MIT student group called Pika offers a food coop dining option. You pay \$75 per semester and help out with cooking once a week.

3 The First Year

3.1 The Core

3.1.1 Overview of Requirements

- The "core" is comprised of three subjects – micro, macro, and econometrics – each of which is covered by four quarter-long or semester-long courses. (For updated course descriptions and which faculty are serving as instructors in a given term, check the MIT Registrar's Course Catalogue.)
  - For micro, these courses are: 14.121, 14.122, 14.123, and 14.124.
  - For econometrics, these courses are: 14.380, 14.381, 14.382, and 14.384/14.385. *(Note: 14.382, 14.384, and 14.385 are semester-long courses, with 14.384 and 14.385 typically taken in the second-year.)*
  - Finally, for macro, these courses are 14.451, 14.452, 14.453, and 14.454.
- Students pass the core by satisfying requirements for 12 of the 14 quarters of core courses. (For this purpose, 14.382, 14.384, and 14.385 all count for 2 quarters, and is thus why you might hear students in the department calling this the "10 of 12 rule.")
- A course requirement can be satisfied by:
  - Earning a grade of B or higher in the class.[20]
  - Passing waiver exams for the courses. Waiver exams for all these courses will be offered, and if you are confident in the material and / or have taken an equivalent course before, you should consider taking the waiver! You can always email the professor to discuss how your background aligns with material to be covered, and there are no consequences to failing the waiver exam. If you pass the waiver exams, you can then drop the corresponding course(s) without penalty. See To Waive or Not to Waive? for a more detailed discussion.

Note on failing: Failing classes happens and it's OK. Most years, a few people fail one or more of the first-year courses. You'll feel bad and embarrassed, then you'll study on your own and retake the exam, or you'll retake the class the next year, then you'll pass it and learn the material better than many of your classmates did the first time around, then you'll move on, and it won't matter in the grand scheme of things. Failing a class will **not** get you kicked out!

3.1.2 Resources for Coursework

The First Year Core consists of a lot of condensed information hurled at you in rapid succession. For those seeing material for the first time, it is (understandably!) challenging to keep up with everything at once. (On top of the core, MIT is unique among peer institutions in that first years usually take a field course on the side, demanding even more time and mental bandwidth.) Fortunately, you are not alone: in moments you feel particularly overwhelmed, know that there are a variety of resources you can turn to.

[20] Students who receive a grade of B- or below and wish to receive core credit should consult the faculty member in charge to determine whether to take the waiver exam or re-take the course the following year. If this happens to you, *do not stress out*: MIT is not in the business of failing people out of the program.

1. **Within-class resources:**

   - *Sections/recitations:* While few things are strictly "mandatory" in grad school (in the sense of being enforced), core professors expect students to be attending every recitation. It is not unusual for a professor to casually split off critical material for coverage in recitation, as if it were no different from lecture. (Not every professor is like this: some will give the TA massive leeway to simply "cover interesting extensions," some treat recitations as a simple opportunity to go over the problem sets, some are effectively just office hours, etc.) In any event, one hour per core class, per week, sums to over 40 hours of material in a semester, and once you get into the habit of skipping, it's hard to discipline yourself to resume attendance. Go to recitations!

   - *Office Hours (Professors' and TAs'):* Not going to lie – some professors are much better than others about answering "basic" questions in office hours. (You might be able to get a feel for this through how they answer questions in class.) If their style of communication works for you–great! If not, try attending the office hours of the TA. Pro tip: for TA office hours, it can be useful to let them know ahead of time that you plan to drop by and what your areas of confusion are, so they can prepare in advance. TAs do not necessarily have the whole syllabus memorized – they might need to refresh themselves on particularly niche questions, and giving them time to do so in advance will make your meetings far more efficient!

   - *Tutoring:* If you need greater personalized assistance than what recitations and office hours can offer, speak to the course instructor[21] about the possibility of hiring a tutor. This is a paid position which the instructor creates, open to those in the department who have taken the course in the past.[22] If you're proactive about reaching out early in the quarter, it is more likely the professor can set something up for you. Arrangements for tutoring are discreet (no one is informed you requested tutoring unless you tell people), so avail yourself of the resource if it will help you learn.

2. **Your cohort:**

   - While samples of ∼20 people will vary year to year, MIT maintains a general reputation for nice cohorts.[23] Chances are, if you reach out, your peers will be happy share their understanding of a topic. And if they're just as lost as you, at worst, you've found a new problem set partner!

   - If directly reaching out feels awkward/daunting (or you aren't sure who else is looking for a problem set partner), MIT operates a wonderful website, https://psetpartners.mit.edu/, to bridge the gap. (GEA recognizes that Econ PhDs make up an infinitesimal share of users on this platform. However, if all first years reading this guide use the above site when searching for problem set partners in their Econ PhD-only classes, you will find one another!)

[21](Or TA, but they will likely redirect you to the instructor.)

[22]It is separate from the TA's role, as they are usually too stretched for time to take on an additional gig for one-on-one guidance.

[23]In the words of one MIT admissions chair, "Every year, we pray the assholes self-select to Harvard."

3. **Textbooks:**

   - *An encouragement to read widely:* Many core textbooks have overlapping content, but are written in extremely different styles–think Kreps vs. Mas-Collel, Whinston, and Green, vs. Rubinstein for micro; or Mostly Harmless vs. Hayashi for econometrics. Some textbooks do a better job at thoroughly explaining certain concepts better than others. (And some styles of presenting content will simply "click" with you better!) If you've been re-reading a chapter of a textbook for 30 minutes and it still isn't clicking, turn to a different textbook's chapter on the subject and see if your confusion is resolved.[24]
   - *Where to acquire for free:*
     - **GEA has made a Drive folder of every textbook we could think might be relevant to you.** Feel free to add to it!
     - Ask older classmates (or professors) if they have a copy you could borrow.[25]
     - MIT Libraries has an extensive collection of both physical and digitized textbooks. If you only need several chapters at a time, you can also request someone photocopy the book for you!
   - *Where to purchase (affordably and/or expediently):*
     - *Expediently:* The official MIT bookstore (the Coop) is just a couple minutes from the department, and is tasked with keeping stock of textbooks required for courses.
     - *Affordably:* In Harvard Square, Raven Used Books and Harvard Book Store both have a wide collection of scholarly works, including core PhD textbooks.
     - *(Sometimes) affordably and (sometimes) expediently:* Amazon allows you to both buy (used or new) and rent textbooks. Life-hack: if you're *purchasing*, try to find the "International Edition" of a textbook. (Example here.) These textbooks will tend to be much cheaper; refer to the IO sequence for 5+ models as to why.

4. **Lectures and materials from past or similar courses**

   - Material from select years of MIT courses are available on **OpenCourseWare**. This generally consists of slides, readings, and problem sets, and *occasionally* features exams and solutions. It can be helpful to find a year taught by the same professor.
   - Distinct from OCW, MIT also operates **Stellar**, a course management system which archives old Canvas pages. This can have more specific resources for any given year, including problem set solutions and exams.
   - You should also check out **resources from equivalent or similar courses at peer institutions**. You can look at syllabi for recommended reading and notes, or search other core professors' personal websites for slides!

[24] Be careful to keep notation straight! Some textbooks will switch things around, which gets confusing when the same variable is used to mean different things.

[25] Many PhD students are loathe to reopen *Stokey, Lucas, and Prescott* after 14.451 comes to a close. But it's a canonical textbook, so they don't want to *get rid* of it... and thus, for years to come, it occupies space on people's bookshelves. Help ease their burden and take it off their hands for a year.

3.1.3 A Word on Grades...

Let it be emphasized that the above section has *not* compiled the above resources for you to wrangle with your grades, but rather to assist you in achieving a stronger foundational understanding of core concepts! Grades ***do not matter*** in the way they did during your previous schooling. No one looks at your transcript on the job market.[26] Eventually you will recognize this, and the sooner you let go of chasing A's, the better your life will be. Throughout the core, you should prioritize (1) passing requirements, and (2) learning economics.

Pursuant to this, your problem sets *do not need to be perfect*. When you begin to feel diminishing returns to completing a problem set (perhaps amidst toiling away at your 14th partial derivative of the night), consider letting go of the impulse to perfect your answers, and ask whether you might gain more from reading a paper on the syllabus, revisiting slides to contemplate something that confused you in class, turning focus to a different course, or... taking your mind off work, getting some fresh air, connecting with a friend or relative, or even just *going to sleep*!

3.1.4 To Waive or Not to Waive?

Many students entering MIT have already taken some portion of their undergraduate/predoctoral institution's PhD core, or completed a Master's program in equivalent material. As there can be imperfect overlap in content, students are sometimes uncertain as to whether or not to waive a course.

As it is ritual for entering students to feel conflicted over what to do,[27] GEA has taken the liberty to list out all common arguments for either side, to expedite your thought process. (These arguments will generically apply to the question of taking any course whose material you feel comparatively familiar with.) Note that since it seems to empirically be the case that students feel pressure from peers/themselves to waive, and not the other way around, we've fleshed out the arguments *against* a bit more than the arguments *for*.

- *Things which tilt in favor of waiving:*
  - There is always an opportunity cost to enrolling in a course (whether you've seen the material before or not): in that time, you can take a field course, pursue a personal research project, or simply devote greater mental energy to the other classes one is taking (in turn, learning the material more thoroughly). If it isn't strictly necessary for one's Life Plan™ to master the gaps of material one hasn't yet seen, sitting through partially redundant lectures may not have the highest returns to your time.
  - Courses which are relatively more standardized across institutions (e.g. 14.121 and 14.380) are better candidates for waiving. Courses with a bit more "personality," where there is greater influence by the instructor on material covered, are less obvious cases. (For instance, the first quarter of macro at MIT, Yale, and NYU have *extremely* distinct topics of emphasis.)

[26] This author received the following exact quote from a MIT faculty in an email: "No one looks at grades EVER!"

[27] Or at least, loudly declare themselves to be conflicted so as to not-so-subtly flex their prior coursework

- You might be near-certain that some core classes are simply not going to be relevant to your future research. The logic then follows that even if you're a bit hazy on the material you may have technically seen before, you might still want to waive something that won't be useful to you, if you can get away with it. With that said, *be cautious* of constraining your future self by writing off entire subjects. If this is the reason you're thinking of waiving, definitely first consult upper years/potential advisors in your fields about whether you're *correct* in your assessment of a course's relevance.

- *Points against waiving:*
  - You do not know what you do not know. Syllabi can be vague.[28] You won't remember what you've forgotten. You do not know how much more there is to a topic if your initial course didn't alert you of it.
  - Almost all PhDs will change research agendas. Many *many* PhDs change fields. Keep this in mind.
  - *Some* faculty (certainly not all) can be very irritated by waive requests, and in *particular* can be irritated by justifications of flavor "this subject will never be relevant to my research." This varies by professor and how "standardized" that core class tends to be.
  - Do not feel rushed to blaze through coursework. **You are not "behind,"** no matter how many PhD classes members of your cohort have taken. MIT's program is constructed with the assumption you take the core, and virtually no upper-year you speak with will say they feel at a present disadvantage due to their needing to have taken a few more quarters of core classes.
  - It can *really* help to see material twice. If you're shaky in your understanding of concepts right now, it really doesn't matter that you managed to land a good grade in some equivalent course two years ago. In the long-run, it pays in this profession to be honest with yourself about what you don't completely understand.

    If you think you'd learn the material more deeply, and you think learning said material more deeply would be valuable, take the class again! Look – you've already been admitted to a fantastic PhD program: this stage of your education is no longer a game of checking boxes and accumulating signals of intelligence for eventual external review. You are trying to *learn*, and *build* intelligence.[29] If you do not understand a foundational concept, that ignorance will follow you through later coursework and impose a constraint on future research, until addressed. You can revise your understanding now or later, but the best, most efficient way to learn core econometrics is... taking core econometrics.
  - If you're basing whether or not to waive on the content of the waiver exam, you should be skeptical of the capacity of a waiver exam to span all content covered. Waiver exams are frequently based on (or verbatim) past final exams, which will often only test random, narrow slivers of material. While this is a fine ex

to new classmates flushed-face (chill out fam, you're all shining stars.)

[28] *Both* the syllabus of the MIT course you're considering waiving, *as well as* that of the course you previously took, and present to a core professor.

[29] ...for eventual external review. But years from now, and not through your transcript!

ante testing strategy on for students in the class (they will generally respond by studying all the course material), it will have insufficient information to let you gauge your mastery of the full course material. Supplement performance on the waiver with other research on the course.

  – Check the syllabus for a course, paying special attention to the papers covered and textbook chapters assigned. If a course is assigning readings you haven't seen, it is likely that the course will be taking a different approach from what you're familiar.
  – Even in standardized curricula, the instructor makes a big difference. Idiosyncratic asides and insights imparted by faculty in the marginalia of common material can be extremely valuable, and often of greatest use when one already has a strong understanding of the topic being addressed!
  – If one intends to pursue research in a particular core subject, it is helpful to study "fundamental" topics under those instructors who will one day be offering you advice and guidance. You will learn a fair amount about them as researchers and people in hearing their thoughts on canonical topics.

3.2 (Hourly) Research Assistantships (RAing)

The typical expectation is that first-years are focused on their coursework! Working as an RA during your first-year isn't typical, and many professors will advise against it.

3.2.1 Work-Study Balance

As with most suggestions to "do less," a good number students will *ignore* this advice, and go off to RA, anyways. Some points on this:

- *Prioritize core coursework.* Almost any upper-year you poll will tell you it's not smart to RA during the fall/spring semesters while taking the core. Some have said, verbatim, "I am honestly not sure what I got out of that." If, for whatever reason, you find yourself with extra time on your hands, go beyond problem sets and read assigned papers on the syllabus. Prioritize thoroughly learning material.

- *Target working in IAP and then the summer.* If you do wish to RA, it is advisable you try to schedule it during IAP, with an expectation to take a break during the spring and resume during the summer. Note that professors tend to use IAP as a way of training and on-boarding you for hitting the ground running in the summer; there aren't many projects requiring a mere month of labor. Take this into consideration when approaching professors.

- *Ask for a break when you need it.* There are occasions where students continue RAing as part of an earlier arrangement/existing relationship (e.g. as part of undergraduate work or a predoctoral program). Faculty are extremely sympathetic to requests to take a break during the academic term. (In some cases, faculty will even *demand* you take a break to focus on coursework!)

3.2.2 Deciding Whom to RA For

- *Consider management/communication styles.* Different faculty offer different styles of RAships. Some professors will hand you extremely open-ended modeling/literature review tasks, while others manage highly regimented labs that operate like well-oiled machines. Different faculty also have different personalities! Another critical input to your experience will be whether you find them easy to communicate with. The best resource for knowing what it is like to RA for someone is to ask people who have RAed for them. Reach out to members in the class above you to ask if they know someone who has worked with the faculty before!

- *Explore fields.* While it may initially seem intuitive to RA for someone you might want to advise you one day, first year RAships – being low-stakes – are also a great time to explore and confirm you might not also be interested in other fields! For instance, some theorists might seek out an applied RAship, to get a feeling of whether they might enjoy more applied work.

- *Focus on skills acquisition.* You might be inclined to RA on a project for which you have a "comparative advantage" (perhaps to leave the best impression on who you're working for). Consider instead doing something outside your comfort zone, with the explicit intention of improving research skills you've yet to hone. Professors are more forgiving of first and second years not knowing things, and will be comparatively open to holding your hand through the process. Leverage being cute while you can![30] *With that said,* consider whether it might be more efficient to *wait* and pick up certain skills in a course. For instance, 14.385 provides a great introduction to nonparametric estimation, while the IO sequence (especially 14.273) covers structural estimation in great depth. Both of these courses are most commonly taken in the 2nd year, and will leave you with a far deeper understanding of the topic.

3.2.3 Approaching Faculty

- *Give the faculty time to plan.* If you want to work for someone during the summer/IAP, the further in advance you reach out, the better. Often, professors will conjure a bespoke project for you from the arsenal of tasks they need done. This requires some forewarning, and the odds they find something for you are higher when you give them time to think on it.

- *Don't be shy.* While it can be easier to approach faculty with whom you've taken a course, you needn't feel limited to doing this. While some faculty may ultimately ask you to take their course before working for them, you won't know until you ask! If you want to impress your identity upon them before sending an email, consider regularly attending the lunches and seminars they frequent (see 4.1), or arranging a meeting to discuss your research ideas, first.

- *Follow up.* Some faculty, much like their younger graduate student counterparts, are better than others at replying to emails. Do not read into someone not replying to your initial email, and feel free to send a follow-up asking if they saw your initial message. You can also swing by their office when the door is open/a "Come in!" sign is displayed. Similarly, even when the faculty agreed to supervise you, if your expected

[30] Third years and up: decidedly less cute.

start date is approaching and you have not heard any updates, it might be useful to send them an email to jog their memory.

- *Be specific in what you're looking for from the experience!* The types of projects you can be assigned will vary quite a bit depending on the professor and the need, but you can and should express preferences over what types of topics and work you're hoping to do. If you want to familiarize yourself with a particular dataset or methodology, tell the faculty directly! At best, they will craft a more appropriate project for you. At worst, they can refer you to someone that might be a better fit.

One additional note: the department will often use "incentives" during admissions of $5,000-ish tagged to an "RAship" during IAP. These can vary widely in form, but should be understood as a way for the Department to give you money and an excuse to begin discussions with a potential advisor. The emphasis of the position is usually for guided exploration of something that interests you. Note, however, that you will want to reach out and remind the professor that you indeed intend to work with them during IAP. (But do not stress out: you will be paid the $5,000 whether you speak with them or not.)

3.2.4 Getting Paid

Unless you are a coauthor on the project, you should only be RAing for pay.[31] Do not be shy speaking up if something is awry with your compensation.

Payment rates and filing deadlines:

- The typical rate (as of 2022) for RAing is $25 per hour in the Economics Department and $35 per hour at Sloan. The posted hourly rate for an RAship can be higher when the faculty is under a time crunch and wants the work done expediently or if a project is particularly technical and requires enticing an upper year with other things on their plate.
- An important thing to keep track of: MIT posts annual standard stipend rates here.[32] The 'High Range' of + 15% is the maximum pay a student should receive per year (September-August), and this includes all stipends and hourly wages earned from any source at MIT (department, residences, labs, centers). You must be mindful of these rates when arranging hourly grad work through the school year and/or summer, so as not to exceed the upper limit of pay.
- To be paid promptly, be sure to let your year's graduate administrator know at or before the start of each term (fall semester, spring semester, IAP, summer) that you will be RAing, so they can set up your payment profile. This will usually entail having your faculty advisor sign a form confirming the details of your job, and bringing it to the administrators on the 3rd floor. If you do not tell the admin in time, the Department will at best only be able to pay you in the subsequent term, and this may cause issues for your limits on filing hours in the new term (see bullet above).
- Once your position has been created, you will log your hours each week in Atlas. It is very important to report hours as they happen.

[31] Honestly, even if you *do* get added as a coauthor, you should probably still be getting paid...
[32] Note: in this website's lingo, RA rates = Fellowship rates.

International Students:

For international students, employment on-campus is limited to 20 hours per week (max) while school is in session; sadly, if you are a 3 unit TA/RA (relevant come third year), you are earning full time TA/RA stipend rates and register in payroll at 100% (20 hours/week). [33] One can only work more than 20 hours during official Institute vacation periods (IAP & Summer). More information from ISO can be found here.

RAing on the NSF:

The NSF expects Fellows to devote most of their time to scientific study during the Fellowship Period. As such, during NSF-tenure academic years, students will be restricted to working 10 hours/week. Be aware that working hourly through the semester may restrict your summer opportunities if you hit the Institute's maximum annual rate. For more info on NSF tenure status, see points 80-87, here.

3.3 Reading (and Accessing) Papers

The core can be... a bit outdated, and more than a bit dry. A great way to stay motivated is to read things that incite your passion for research, and remind you why you're here!

First, a logistical point: MIT Libraries gives you the ability to access any journal articles freely via Touchstone authentication. Once you are authenticated, you can proceed via a proxy to access anything and everything! (That's right, no more fishing around on professors' websites for working paper versions.) Quick hack: you can always trigger Touchstone authentication by pasting:

`https://libproxy.mit.edu/login?url=`

at the start of your URL. For example, if you were trying to access the following URL, `https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1538-4616.2008.00160.x`, you can **instead** paste into your browser `https://libproxy.mit.edu/login?url=https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1538-4616.2008.00160.x`. To read more on setting this up, see here.

- ***Why** is reading papers so valuable?*
  - *Breadth:* Especially in the early stages of your PhD, you might have a sense of the general areas of interest to you, but might not have a sense of the "landscape" of current questions. During this early stage, there is great value to reading *broadly*, so you can get a sense of open questions, questions of great interest/importance, and questions no one is asking! Once you understand the geography of a topic.

    A professor in this department advises that a PhD student should go into this process with heightened self-awareness of what is making you *excited* and *curious* to read more. And, critically, what questions *call to you as important*? It becomes *very* difficult to motivate yourself to throw yourself into your work each day when you aren't personally convinced that what you're working on matters.

[33] Note that in years where you're only teaching one unit in a semester, and 2 in another, your will still be listed as having a full-time appointment, and will not be able to work for additional hourly pay (grading, RA work, etc.).

- *Depth:* In the thesis-writing stage, it becomes necessary to stay on top of the papers (older and most recent) pertaining your subject of interest. This is a different type of reading from that of the above.

- ***What** should I be reading?* Professors are often your *best* resource for this. Unlike you, who is just getting acquainted with a subject, they will often have a panoramic understanding of where the literature is. For a given topic, they can tell you:

  1. Which papers are most foundational/seminal?
  2. Which will give you the clearest explanation of a concept?
  3. Does a paper contain any components which have been either discredited, not relevant given state of literature, strictly dominated by another method, or are "suspect" in some way (e.g. hidden assumptions, bizarre implications, etc.).
  4. In the swamp of jargon, models, assumptions, and cryptic proofs, which pieces are *contributions*? How significant of an addition were they to the preceding literature?
  5. What should you read next?

- ***How** should I read a paper?* Nikhil Agarwal has written up a great set of questions to ask oneself while reading empirical papers, which he shares with members of his classes. Check this out!

- ***Where** can I keep track of new papers?* Beyond asking professors, you can subscribe to working paper mailing lists. Some examples include:

  - The NBER website, where you can sign up for working paper alerts on all the topics you like.
  - AEAeToc will send you notification from the AEA journals as they get published.
  - RePEc has something similar.
  - Field journals will occasionally host similar services!

3.4 The Spring: First Year Skit (Advance Warning)

In the spring (specifically, the last Friday in April), your cohort will be **required** to either produce (e.g. film + edit) or perform (DO IT LIVE) a skit, for communal viewing at the annual Econ Department Skit Party. Unleash your inner artist/angst for the world (≈80 people) to behold! Never fear, yours will not be the exclusive act–you will be joined by skits from the second years, thesis writers, and *faculty*! For more details and examples from past years, refer to the section on the Skit Party & Awards Night. :)

3.5 The Summer

Let's be honest, you will most likely not write your job marker paper during the summer after your first year, and nobody expects you to do so! So, feel free to use this time to rest and discover. You can certainly stay in Cambridge, getting more into a field by working as an RA (see (Hourly) Research Assistantships (RAing)), perhaps attending some NBER summer institute sessions as time permits. You can also attend an economics "summer school." (Often hosted in exciting locations! Be sure to check your email!) *Or* you can travel, read broadly, spend time with friends, decompress, and energize yourself for the years to come. Regardless of what you choose to do, however, most everyone will advise you to consistently push yourself to **read papers**! (See Reading (and Accessing) Papers.)

3.6 Staying Happy (in the First Year and Beyond)

Please (please) read the section on Mental Health and Your Community.

Take care of yourself. Don't work all the time. Carve out space for family, friends, sleep, exercise, and fun. Try to participate in at least one extracurricular outside of the department. It might feel like you can't afford to devote time to these things, but this view is short-sighted – taking breaks can rejuvenate you, meaning your total productivity is almost certainly maximized at an interior point. Maintaining work-life balance will become even more important after you finish classes and start doing research full-time. This will also help you make and maintain friends outside the department. Beyond simply being happier, you'll be a better economist if you spend time engaging with those living in the "real world."

Resist defining yourself by your academic (or career) success. As high achievers, many of us have spent a lot of our lives doing this already. Remember: your worth as a person is not your worth as a student/researcher/academic. This is even more important to keep in mind now that you're among the narrowest and most self-selected group of high achievers in your life so far. Maintaining a life outside of economics is a good way to keep your perspectives broad.

Take advantage of mental health resources. Grad school is hard, and it's hard in ways you might not have experienced before, nor be well-equipped to handle. Most people would benefit from sitting down and talking with an experienced mental health professional. (If you're wondering whether this might include you, it probably does.) Fortunately, MIT makes this reasonably easy, as explained in Resources at MIT.

4 Life in the MIT Economics Department

4.1 Presentations: Lunches, Teas, and Seminars

A great way to stay motivated for all that lies at the end of your coursework is to attend field lunches and seminars. While attendance is eventually required in whichever field one seeks advising in, attendance in the first year is very much **not** mandatory. This means you are free to decide each week whether or not to attend, depending on the presenter/topic. However, you are welcome and encouraged to attend whatever you can!

4.1.1 Field Lunches

The field lunches are 1-hour seminars where graduate students present their research. Majors in a field are expected to present once a The lunches are a great way to learn about different topics and recent developments in your field, as well as draw inspiration from the hard work of your peers! It is also very helpful to hear the comments and critiques given by faculty and other students. There are field lunches in (i) Development and Political Economy (held jointly), (ii) Industrial Organization, (iii) Public Economics, (iv) Macroeconomics, (v) Theory, (vi) Labor Economics and (vii) Econometrics.

The lunches take place from 12-1 PM on:

- *Mondays:* Dev/PE, IO, Macro, and PF
- *Tuesdays:* Enviro, Labor, and Theory
- *Thursdays:* Behavioral, Econometrics, and Trade

The schedule has been quite static across years, though there has been precedent of slight changes when some contingent of PhDs working at the intersection of two fields petition for the two lunches to take place on different days.

As of 2023, the department offers **2 free lunches**! At the beginning of the year, you will receive an email from the organizers of each of these lunches explaining how to sign up to the relevant mailing list. You *need* to subscribe to the mailing list of *each* field lunch you are interested in to receive the weekly emails with the name of the presenter and abstract of the presentation. Even if you don't plan to attend many of them, don't hesitate to subscribe to mailing lists, lest you miss something you would have loved to attend.

4.1.2 Field Teas

The field teas take place in the afternoon and are more informal than field lunches, with students and faculty discussing very early-stage ideas. They have been introduced recently, and exist for Development, Environmental, IO, and Trade (with Development being the most established). They are also advertised through specific mailing lists to which you must separately subscribe (see Subscribing to Email Listservs).

4.1.3 Seminars

The field seminars are standard one and a half hour presentations by either invited speakers, faculty, or job market candidates. There are seminars in Applied Microeconomics, Industrial

Organization, Development, Theory, International, Macroeconomics, Finance, etc. You will get an email from the department every Friday with the list of seminars for the following week. You can also check the online calendar. Some seminars are joint with Harvard, and will be physically held there for part of the year.

4.1.4 Job Market Presentations

In the fall, you can watch presentations of MIT's current job market candidates! Later in the job market season, you can also attend presentations given by candidates who have been flown into MIT for hiring consideration by the department.

4.1.5 Subscribing to Email Listservs

All seminars are publicly listed on the department website, and will be sent to the `econ-all@mit.edu` listserv[34] at the start of each week. To receive detailed reminder emails on the day-of (with the abstract, paper attached, etc.), you must opt into that field's seminar listserv. One must similarly opt into the listservs for each field lunch and tea to receive notifications of who is presenting each week.

To add yourself, append the listserv name (shown below) to the end of the corresponding URL hosting it (there are two, Mailman and Moira – yes, it's confusing), and follow the directions on the page.

Mailman listservs (URL beginning: `https://mailman.mit.edu/mailman/listinfo/`)

- Finance Lunch: `finlunch`
- IO Lunch/Tea:[35] `io_lunch2013`
- IO Workshop/Seminar: `ioworkshop`
- Political Economy Lunch (has merged with Dev lunch): `pe-lunch`
- Trade Lunch and Tea (use the same listserv): `tradetea`

Moira listservs (URL beginning: `https://groups.mit.edu/webmoira/list/`)

- Caffeinated Beverages:
  - Dev Tea: `dev-lab`
  - Labor Coffee: `labor-lab`
- Lunches:
  - Development Lunch (has merged with PE lunch): `dev-lunch`
  - Econometrics Lunch: `econometrics_lunch`
  - Environmental Lunch: `enviro-lunch`
  - Labor Lunch: `labor_lunch`
  - Macro Lunch: `macro-lunch`
  - Public Lunch/Tea:[36] `pf-lunch`

[34] For those unfamiliar with this jargon, a listserv is a portmanteau of "List Server," which is an automated mailing list management system that allows one to subscribe to emails for a specific purpose, as well as send emails to a single address (e.g. `tradetea@mit.edu`) which then forwards to all its members.
[35] As of 2022, alternates lunch/tea slot with PF.
[36] As of 2022, alternates lunch/tea slot with IO.

- Theory Lunch: theory-lunch

- Seminars:
  - Applied Micro Seminar:[37] applied_micro
  - Development Seminar: dev-seminar
  - Environmental and Energy Economics Seminar: eeeseminar
  - International Seminar: international-seminar
  - Labor/PF Seminar:[38] laborpfseminar
  - Macro Seminar: macro_seminar
  - Theory Workshop/Seminar: theory-seminar

Other listserv groups:

- Organizational Economics Seminar: oesemmit on Moira, but you must email Sam (eisman@mit.edu) to be added (as of 2022-23).
- Organizational Economics Lunch: organizational_economic_lunch on Moira, but you must email Naomi (nstephen@mit.edu) to be added (as of 2022-23).
- *Structural Reading Group* (struct-mit@googlegroups.com) is a reading group directed by some of the IO faculty. It meets in the evening once a week, with free catered dinner! It is uncommon for first years to attend, as one will want to have taken the IO sequence first (in particular, 14.273). Those interested in joining should speak with Nikhil Agarwal or Tobias Salz (as of 2022-23).
- *Ad-hoc reading groups:* Periodically, faculty/students will initiate a reading group (often during IAP, or over the summer). Look out for announcements with instructions for joining such groups.

4.2 The Second Year

4.2.1 Second-Year Paper (14.192)

One of the defining experiences of the second year at MIT is 14.192, the "second-year paper class," introduced to the curriculum two years ago. The idea of the course is to get us started doing research early, before we officially become thesis-writers in our third year.

In the fall, we hear lectures from various faculty members about their research processes, brainstorm our own ideas in small groups, and give full presentations of our ideas to the class. The course is usually led by two faculty occupying separate fields – in 2022-23, this was Amy Finkelstein and Stephen Morris. While you will be formally "assigned" to whichever of the two is more proximate to your research project, you can seek guidance from either!

At the end of the fall semester, you will be matched with a faculty mentor whose research is a more tailored match to your project.[39] In the spring, this faculty member will help guide you through the paper-writing process, and then write a referee report on your first draft. By the end of the year, you will have written and revised a full research paper

[37] This happens in the Spring, trading off with the Labor/PF Seminar in the Fall.
[38] This happens in the Fall, trading off with the Applied Micro Seminar in the Spring.
[39] Though, do not read too hard into who you're matched with. The course organizers prioritize no faculty

that will, hopefully, jump-start your dissertation research for the next several years. You *can* coauthor your second-year paper (and many do!), but you must turn in as many papers as there are coauthors in the class.[40]

You should *not* stress about handing in a dissertation-worthy second year paper. For most fields, the timeline is too short to even fully explore an idea, anyways, and the faculty are aware of this. On the other hand, you also shouldn't artificially restrict your question to something super narrow just because it seems easy to wrap it up within the year. This author instead suggests you start by trying to bite off something big, which will continue interest you beyond the second year paper course, and then work to find a sub-question under that larger project which will feed into a longer-term research agenda. Many upper years have described their second year papers as evolving to fit into some smaller subsection of their dissertation!

With that said, many students will completely abandon their second year papers once the course is finished. That's okay! The value of the class is getting you going on *anything*, and demystifying the arc of taking a project from start to finish. And, as you will frequently be told, a critical skill in research is knowing when to drop projects which aren't headed anywhere/have ceased to excite you.

4.2.2 Field Requirements

Beyond 14.192, the other objective in your second year is to complete your field requirements. These evolve year to year, so be sure to consult with the First/Second Year Advisor on whether your course plan will satisfy field requirements, *early*. Older students might have been subject to an outdated policy, so take word-of-mouth with a grain of salt. The requirements are usually up-to-date on the Economics Department website.

As of 2022 (likely to be revampd soon), the policy is that by the end of the second year, PhD students must complete requirements for *two* major fields and *two* minor fields to be in good standing for matriculating into thesis-writing stage. This entails earning a B or better in the designated courses for each field. Some fields overlap so substantially that both cannot be taken by a student, and the same subject cannot be counted towards more than a single field. Some fields also recommend additional coursework or papers for students intending to pursue research in the field, which you should strongly heed.

Major fields must be declared by the Monday following the spring break of your second year. Your graduate registration officer must approve your field selections. Note that you are able to defer completion of *one* minor field's requirements to the end of your third year, but must receive advance permission to do so. The list of fields are as follows:

- Behavioral
- Development
- Econometrics

member being assigned to two students, and some faculty will decline participating some years.

[40]E.g. If you and your other 2nd year friend choose to coauthor, you will need to submit two papers for the course. Speak with the faculty leading the class if you want to coauthor with someone outside the course (for reasons other than getting data).

- Finance
- Industrial organization
- International
- Labor
- Macroeconomics
- Organizational
- Political economy
- Public finance
- Theory
- Computation and statistics (minor only, from interdisciplinary PhD in Economics and Statistics)

Students who wish to satisfy one of the minor field requirements by combining two courses from different fields – for example, environmental economics and industrial organization II – can petition the second-year graduate registration officer for permission. At least one minor field should be from the department's standard field list.

The list of which courses satisfy which major and minor requirements can be found ***here***!

4.3 Appointments and Funding in Years Beyond

There are three ways to get funding: TA, RA, or win a fellowship (can be internally or externally awarded). As of 2022, the Department introduced a policy of awarding each student two "free" semesters, available for use in their 5th or 6th years. Keep this in mind! For a sense of what the structure and corresponding pay of graduate appointments are, you can refer to the Department's official graduate appointment policy for 2022-23. Numbers are subject to change from year to year, but the structure is roughly static.

4.3.1 Teaching Assistantships (TAships)

For full funding, you will need to TA for three credits. With a couple exceptions, this corresponds to TAing 3 semester-long courses. Note that you will be paid an even salary through the year, even though you will usually be TAing two courses in one semester, and only one course in the other.

TA Responsibilities:

- As a TA, your job is primarily composed of (relative weights vary): (1) grading and providing feedback on student work/exams, (2) holding office hours, (3) delivering recitations, (4) writing/designing recitations, (5) writing problem set and exam questions, (6) editing slides, (7) corresponding with students over email about logistics/confusion with content, and (8) setting up and maintaining the Canvas page.
- For some courses, the professor will require the TA to sit in on lectures.
- As mentioned, the relative weights of the above tasks will vary greatly between courses. Some professors will never have you touch their slides, and will write all problem set

and exam questions themselves. Some courses will have relatively few students (e.g. PhD field courses and advanced undergraduate topics courses), so correspondence will be minimal.

- Some courses will have multiple TAs, so the tasks above will be divided up, and you might not need to preside over certain tasks, creating the opportunity for specialization.
- No matter what your role is, a single credit is meant to correspond to 10 hours a week. If you find yourself exceeding that, you should speak to your professor to troubleshoot. It is sometimes possible to hire hourly graders, which can alleviate some of the grading burden.
- ***Keep a log of your weekly hours.*** I repeat: ***keep a log of your weekly hours***. At the end of the semester, if you find yourself frustrated with how demanding of your time the TA position ended up being, *you should report this* to the TA Coordinator. This is *the only way* the department can rectify the work distribution for future TAs. Many PhD students are so burned out from these TA experiences that they (in what is sometimes anger) never bother to report their hours in the end-of-year survey, and the problem perpetuates through the years.

Timeline of the TA assignment process:

- In May, the TA coordinator will lead a TA info session where he will explain how TA assignments are made and other details.
- Julia will then email out a TA survey that asks for: name, year, fields, whether or not you are on the market, whether you will TA full-time or combine it with RA work or external funding, preference for elementary economics, preference for undergraduate courses, subjects you have previously taught, subjects you would like to avoid, whether you would be interested in a communication component, and a ranking from a drop-down list of top 10 courses. You are encouraged to rank beyond the 10, as there can be shortages for widely unranked courses, which the TA Coordinator will then need to pull randomly for.
- In early September of the following academic year, there will be a first-time TA workshop that is mandatory and led by the TA Coordinator. The workshop lasts about an hour and a half, and you will receive multiple reminders from Julia.

Determining which courses you'd like to TA:

- There is great heterogeneity in TAing gigs. If you prefer rote, mechanical tasks, you can TA one of the introductory undergraduate courses. These will tend to be massive and highly structured. If you want to have greater agency over crafting problem sets and recitations, you might be better served TAing undergraduate or (select) graduate field courses. Meanwhile, some courses will exist as "writing" credits for the undergrads (and thus involve primarily grading and providing guidance on written work), while others will be problem set-oriented.
- The best way to learn what TAing for a course will be like is to speak with past TAs for that course.
- Some TAing jobs take place over the summer. These are often for hourly pay, but some will correspond to a credit.

- Certain TA positions are recognized as being way more intense than others, and are awarded double credit. These courses are usually the "Head TA" positions for the intro courses, and the PhD core. Note that PhD core courses are almost all quarter-long, so the "double credit" means you will get a full credit for TAing just a quarter, as opposed to a full semester.

- When the department receives notice that TAing for a course (usually, whatever is *not* one of the above) is way too much work for one person, in the place of double credit, the department will instead opt to assign multiple TAs to the position. Having multiple TAs can make for a much better experience, workload held constant, as you can assign tasks based on comparative advantage/preference, as well as cover for one another when something comes up.

- You may also wish to use the TAing experience to grow closer with the faculty teaching it. Be sure to verify with said faculty ahead of time that they will, in fact, be teaching the course next year. It is common for faculty to rotate between years.

TA Assignments:

- As of 2023-24, Muhamet Yildiz took over and began to automate the TA assignment mechanism, so any conventional wisdom you might hear from upper years is likely now moot. We might hear further details on the specifics of the algorithm in the future.

- With that said, priority is still given to filling all slots with willing and qualified applicants. Pursuant to this, steel yourself for the possibility that you may not get your top choices.

- There was discussion that the algorithm might put priority on those who did a good job TAing the same course in the past.

- *Likely to become an outdated recommendation:* Some courses have high demand among graduate students to TA.[41] If you catch wind that a course will be highly sought after, it can be optimal, sometimes even necessary, to discuss your interest in TAing a professor's course with them, directly.

Advice for TAing:

- *Pace yourself.* It can be tempting to try to teach every detail and bring all students to "full understanding." If you can do that in under 10 hours/week, great! But, most likely, this will be impossible, and you should not start the semester shooting for it. The semester is *long*, and TAing takes stamina.

- *Don't get discouraged.* Recitation and office hour attendance is highly variable, and you shouldn't get down on yourself if attendance is low. Students have a lot of work, and the week is long. With that said, it can be helpful to solicit feedback on what to cover! (See below.) In addition, give yourself some grace when you don't know the answer to a student's question. You can always tell them you'll circle back in a Canvas announcement/email.

[41]Sometimes this is because of the nature/volume of the workload, other times because of the faculty teaching it, other times because... I don't know, people talk themselves into it being a "badge of honor" within their field, then construe the endeavor as an explicit competition with peers. To each their own.

- *Learn from the past.*
  - Meet with your faculty well in advance of the start of the semester. Ask them what their thoughts are on supplementing each week's lecture. (Some professors will have precise requests, others will give you looser suggestions.) Ask for access to past course materials. Ask for the *LaTeX* of past course materials.
  - Then meet with past TAs for the course. Do they have recitation materials/problem sets/answer keys? (Do they have the *LaTeX* for said materials?) Ask what past students tended to struggle with. (TAs often hear more than the professors.) Which recitations did/didn't go well? Build from where they left off!
  - If you took the class, try to remember your experience in the course. What did you and your peers find most interesting? Confusing?
- *Advice for Recitations:*
  - Start with an interactive activity, and keep the momentum of engagement going.
  - Check in frequently with students: create space for questions and comments during recitation. After a lecture, survey students on which topics they'd like to hear more about. After recitation, consider soliciting immediate feedback on what worked/didn't, as well as what they're still confused about (e.g. with notecards/post-its).
  - If you are embarking on explaining a complicated model or theorem, try to lead with a toy example and then complicate it. It also helps to provide a clear motivating question/contextualization that you can carry throughout your explanation.
  - If you are full-out of ideas, just talk about the problem set. It can be useful to use past problem sets here, as it will enable you to solve a question in full, while still enabling them to attempt problems on their own.
- *Advice for Grading:*
  - Gradescope will save you *a lot* of time. Build an outline of the problem set in advance, and request (demand) students match their answers to questions. This allows you to grade one problem entirely in a block, without needing to fish through each PDF. Gradescope will also let you flag common mistakes across submissions, as well as re-use comments.
  - If a course is particularly massive, consult the professor on the possibility of students forming problem set groups.
  - After the first problem set, show students examples of solutions which were easy to grade, and examples of which are tough. In recitation, you can expand on this and show how to structure an answer to a long, challenging problem.
  - If you're under time pressure, consider assembling/refining your answer key based off student submissions.

4.3.2 Research Assistantships (RAships)

You can RA anywhere from 1-3 credits in place of TAing in a given year. RA work expectations are 10 hours/week for 1 credit, but unlike summer RAing, there is no need to log your hours in a weekly timesheet. (This can be both good and bad, in the sense that hours worked in a week can be quite variable.) For specifics on the RA pay structure, see the Department's official graduate appointment policy for 2022-23.

In order to secure a term-time RAship, you should speak to the faculty member of interest well in advance of the start of the semester(s) you'll be RAing, to sort out details of the project you'll be working on. For RAships starting in the fall, try to sort things out with your faculty member by June or July at the latest - the deadline for RA forms is usually late July.

RA buyouts are fairly expensive from the faculty's perspective, and faculty often have project-specific budget constraints, so the more lead time you give them to figure out the right project, the better. Once you have gotten agreement from your faculty member that they can hire you as an RA, all you need to do is fill out the semesterly RA form that Julia and/or Shannon will circulate about 1 month prior to the start of the semester, and ask your faculty member to sign it and fill it out with the appropriate account information. For advice on choosing who to work for and approaching faculty, consult Section 3.2. Happy RAing!

4.3.3 Fellowship Opportunities (Internal and External)

You should keep an eye out for emails from the Graduate Administrator (i.e. Julia) about fellowships and funding opportunities during the year. Some are field- or year-specific, but many are quite broad. The applications typically require a CV, some reference letters, and a writing sample or proposed dissertation topic. Many will require you to be nominated by the Department; in this case, it is standard to receive an email calling for applications and submit your materials to the Graduate Administrator (i.e. Julia), who then forwards it on to be reviewed by the Department before moving forward.

An important detail about fellowships: MIT charges all PhDs tuition out of their fellowships, whether they are enrolled in classes or not. Within the university, this is funny money: tuition is "paid" (waived) by any full RA/TA load or university fellowship. However, once you look outside the university, to buy-out your TA/RA obligations for a term, an external fellowship must cover *not only* your stipend, but *also* tuition.[42] If your fellowship is not able to cover tuition, the Economics Department is still on the hook for it, meaning you may still be required to TA/RA. If you find yourself in this situation, be sure to reach out to staff/the Department Head.

Below is a (non-exhaustive) list of fellowships which PhD candidates in the department often apply for. Note that there are *many* more beyond what we have listed – for instance, there is a slew of internal MIT awards with extremely specific eligibility criteria, which you can search through here. MIT Student Financial Services also gives good advice on finding fellowships here!

- Hausman Dissertation Fellowship for econometrics, IO, applied micro (within Economics Department, for third years and up)
- Pye Dissertation Fellowship for any field of research (within Economics Department,

[42]This is a way for universities to milk external agencies (the National Science Foundation, Department of Defense, foreign government agencies, etc.) for more money.

for third years and up)

- Microsoft Research Fellowship (for **specifically** third years!)
- Google PhD Fellowship
- Apple PhD Fellowship
- NBER Aging Fellowship (third years and up)
- Hugh Hamptom Young Memorial Fund Fellowship (across MIT, for students exhibiting "leadership and initiative")
- Two Sigma PhD Fellowship (for those studying econometrics, statistics, finance, computer science – for third and fourth years)
- Collamore-Rogers Fellowship (across MIT, for women)
- Fulbright Scholarships (Many people don't know the Fulbright program also has many doctoral fellowships in foreign countries! Especially if you are intending to do fieldwork, this can be a great program to consider.)
- Equitable Growth Doctoral Grants (all years)

4.4 Department Social Life & Fun

4.4.1 EconSibs

A somewhat recent (but widely beloved!) innovation in the department has been the "EconSibs" program. EconSibs is a mentorship program pairing junior graduate students with those more senior in the PhD. (In recent years, pursuit of Match Quality™ has led to the occasional formation of triplets.) These Sibs belong to bigger Families, who may elect to meet as often as the constituent Sibs prefer, though are strongly encouraged to gather at least once a semester! Students may join the program in any year of the PhD, and can specify whether they'd like to be a "Little Sib" or a "Big Sib." (There are many 3rd years who sign up to be Little Sibs!) Unless explicitly requested otherwise, GEA intentionally scrambles Sib pairings each academic year, to facilitate meeting more of the department!

To incentivize Sibs to meet at least monthly, GEA pays for some number of shared meals! All participants will be reimbursed $12 (pre-tax, pre-tip, no alcohol)[43] per person, per meal. The exact number of meals reimbursed depends on the number of participants in the program. In 2022-23, it was 3-4 per semester.

4.4.2 GEA Events

Your dedicated GEA hosts events throughout the year to enliven the sense of department community! Some past events have included a "HomECONing" formal dance, board game night, ski trip, trivia, Harvard/MIT mixer, hikes, student/faculty tennis, karaoke, and ping-pong tournament! Sprinkled in, GEA will also try to host regular low-key catered social dinners and study breaks. If you have suggestions for a fun event, let your current GEA know! *Add the GEA Events Calendar to your Google Calendar to stay up-to-date on future happenings!*

[43] Number as of 2022-23. Let us hope this gets adjusted for inflation next year.

4.4.3 Skit Party & Awards Night

Usually held on the *last Friday in April*, the annual Skit Party + Awards Night is considered to be the highlight of the year by many in the department! Following dinner and drinks, skits are usually performed by cohort, starting with the 1st years, followed by 2nd years, thesis writers, and concluding with the faculty skit! After skits are performed, GEA presents the awards for (1) Best TA, (2) Best Teacher, and (3) Best Advisor. In the month of April, members of the department will be asked to submit nominations for each award, after which the top 4 nominees in each category will be put up for a final vote.

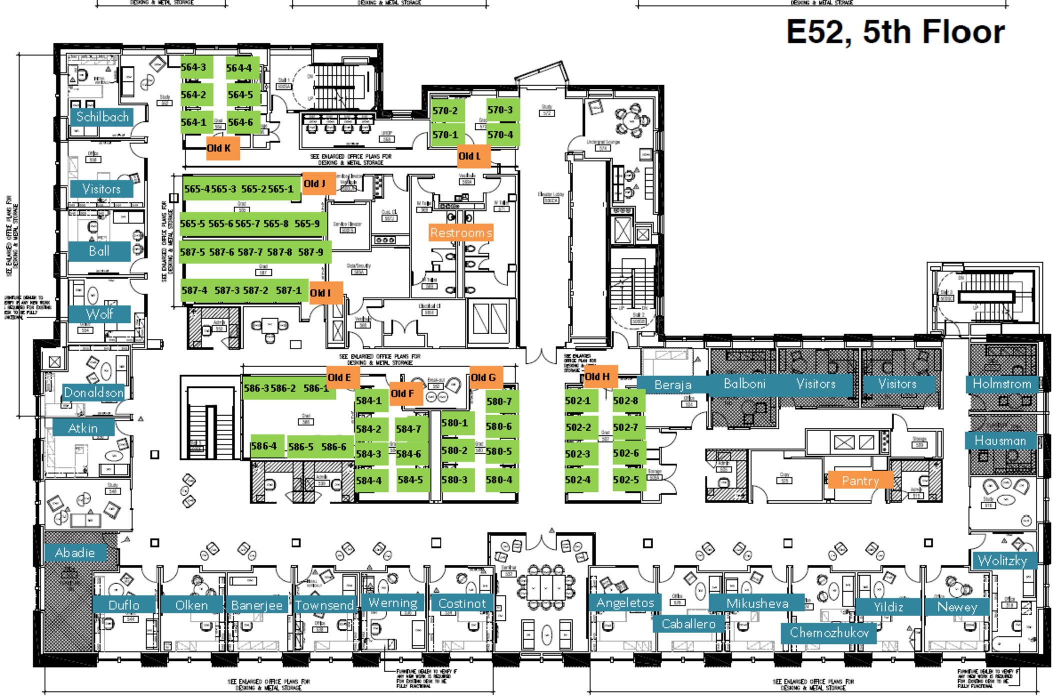
Skits may be filmed in advance or performed live – up to you! Your cohort should (ideally) target a skit duration of under 10 minutes. (If it becomes clear you will go over 10 minutes, please contact GEA, so we can schedule accordingly.) Finally, note that while it is not uncommon for skits to feature satire/parody/roasts of the profession and its prominent figures... be respectful. If you're on the fence about including a joke/taking a particular impersonation strategy, try to get a second opinion.

See past years' skits here!

4.5 E52, the Building

The Economics Department building is located at 50 Memorial Dr, Cambridge, MA 02139.

4.5.1 Floor Plans (2022-23)



4.5.2 Room Reservations

If you would like to reserve a room, you may do so with the following scheduling tool! Be respectful in your scheduling decisions – common-sense etiquette applies.

4.5.3 Offices and Desks

- **First years**: The department tragically does not have space for first years to be given dedicated desks. Instead, we encourage first years to make use of the Graduate Lounge E52-464. While not exclusively reserved for first years, it is empirically where first years congregate to socialize and work on problem sets. See also: Lounges.

- **Second years**: Almost all[44] second years are housed in office E52-487 (shared with a smattering of pre-doctoral RAs). As of 2022, there are not enough desks for each student to have a dedicated seat/monitor, so at the end of the summer/start of the fall semester, GEA will take a survey of expected usage, and assign seating to minimize overlapping demand of monitors. Though unideal, for what it is worth, second years have empirically found this setup to work fine for their needs.

- **Thesis Writers**: 3rd years and up get dedicated desks in one of the many PhD offices. Assignment of PhD candidates to desks is decided by

  The Desk Allocation

  which takes place right before everyone returns to campus in the fall. You will have the opportunity to express preferences for location, officemates, proximity to a whiteboard, etc. Broadly speaking, priority is in decreasing order of seniority. When it comes time for the details of this to interest you, the precise allocation procedure is outlined in the appendix (see: The Desk Allocation).

- **Summer desk assignments**: In the summer, as many graduate students are away, GEA facilitates a temporary "summer assignment" of those in the area to desks. First and second years are encouraged to request desks if they would like them! Many unexpected friendships are catalyzed by summer desk assignments. Look out for the summer desk assignment email at the end of every spring semester!

4.5.4 Lounges

There are two dedicated graduate lounges in E52: E52-464 (windowed, against side of building) and E52-486. While all students are welcome to use either, the former lounge usually drifts toward an equilibrium of heavy first year usage, while the latter tends to serve the rest. These are the only two rooms in the department which cannot be "reserved," and are meant for communal usage! Whispers also have it that Sara (Fisher Ellison) will be updating the... *eclectic* assemblage of furniture with something more modern/cohesive. The promise of better days ahead.∼

Finally, there are open spots around the department to sit and chat around a whiteboard. Feel free to set up shop wherever you'd like, though be mindful that noise carries very easily, and your discussion is likely to be broadcast with sharp clarity into nearby offices.

[44] On years where there are leftover desks in offices, any second years serving (1) on GEA, or (2) as

4.5.5 Lockers

You will notice lockers in the PhD lounges. To request one, email Gary John King!

4.5.6 Mailboxes

Everyone has an assigned mail box, located on the third floor, in the hallway outside the Avanessians Room (E52-324). You may address things to yourself at the department, via:

Your Name
77 Massachusetts Ave.
MIT Dept. of Economics
E52-300
Cambridge, MA 02139

There will generally be an additional 1-2 day lag for mail to arrive, as it must be picked up or received by MIT Admin staff. For the same reason, you should try to avoid mailing large items to the department; they will both not fit in your mailbox, and also put work on admin staff to lug up to the 3rd floor.

4.6 MIT Graduate Student Union (GSU)

The MIT Graduate Student Union (GSU) won recognition with the National Labor Relations Board in the spring of 2022, and secured their first contract with the MIT administration in 2023. Examples of issues the GSU is focused on includes higher stipends; expansions to health insurance; workplace protections for discrimination, bullying, and harassment; clear stipulation (and enforced adherence) of employers on terms of work; intellectual property rights; improved aid for families, as well as hardship assistance; logistical support and offsets of immigration-related costs for international students; affordable housing availability; and more!

If you are interested in getting involved, you should consider joining the Contract Action Team (CAT). As it is a volunteer role, you can take on as much or as little works for your schedule. Contributions can be as simple as disseminating updates and information to people in your immediate network, or a bit more involved, such as research on the issues affecting graduate workers, potential policy responses, membership priorities, effective contract language, and negotiation strategies. There are also roles in social organizing/event planning and communications. You can talk to the current department representative for economics to hear more.

4.7 Miscellaneous Grad School Advice

- Check out Masayuki Kudamatsu's website for a compilation of links giving advice on everything from applying to graduate school to being a dean.
- Alex Eble's website contains general advice on grad school, and includes a PhD Guidebook. *This was found on Twitter (which is a good source of news and info in the field, a potential source of research ideas, and a great guilt-free procrastination tool).*

coffee/pantry managers will be compensated with a desk of their own in a standard office. The email for coffee/pantry management goes out near the start of each semester, and is first-come-first-serve.

5 Life as an MIT Graduate Student

5.1 Labor

5.1.1 Navigating Campus

MIT labels its buildings with numbers. Rooms are then located by writing {Building Number}-{Room Number}, where the first digit in the room number indicates floor. (For instance, E52-483 is located in building E52, on the fourth floor.) Sometimes, however, rooms are referred to by non-numeric names (presumably at the insistence of donors), and this is confusing.[45] Should you ever find yourself confused, MIT maintains an interactive map which students can use to locate any building or room on campus. And, as of very recently, you should now be able to enter MIT {Building Number} into Google!

5.1.2 Academic Calendar

The official calendar can be found here.

- **Fall term dates**
  Registration Day is September 7th, and the first day of classes is September 8th. Many of you may sample some classes in the first week without being officially registered. If you then want to add the class, you need the permission of the instructor and the GRO, and even after they approve you have to click once on a link the registrar sends via email to officially add. It is very easy to miss this last step, which has cost (at least one of) the GEA members a very unnecessary $50.

- **Holidays + breaks**
  "Independent Activities Period" (or, IAP) are 4 weeks in January dedicated to unstructured scholarly pursuits. In your first year, it can be thought of as an opportunity to RA, or a very long winter break. In your second year, you will be expected to be on campus for part of it to work on your 2nd Year Paper. The summer break ranges from May 23rd to September 2nd. Remaining holidays can be found here.

- **Final Exam Periods** are December 18th-22nd (fall) and May 17th-22nd (spring). Your professors might opt to have the final exam occur during the last class period (so everyone can go on vacation earlier).

5.1.3 Libraries

- **MIT libraries:** Next to the department is the Dewey library but there are many other libraries on campus (the Hayden library, the Barker library - under the MIT dome, ...) which are nice study spaces and good places to find... books (but not only)!

  The libraries have many economics books and journals (that you can access both physically and remotely). For help, you can consult their online help or ask an expert librarian to assist you in your searches. They also offer help to find data and can even buy data for us if it is within budget (contact Jennie Murack).

[45] Don't even get me started on how almost every number has a "West" equivalent, which is a **different** (and usually distant) building...

Never hesitate to use the facilities to access resources not available in MIT libraries. Journals not accessed by MIT are freely provided (within a day typically) when requested via interlibrary borrowing (ILB). Books can be requested for free, via World Cat/Borrow Direct when available with the partner libraries (they typically arrive within 3-4 days) or via interlibrary borrowing (ILB) when not available with the partner libraries (this can take a bit longer than World Cat/Borrow Direct but not too much probably). You can mention the library of your pick-up preference. Electronic requests of this type can be used even for MIT library books - e.g. you can ask a book at Barker Library to be brought for pickup to Dewey even for books in the Dewey library when you don't want to take the effort of searching the book stacks.

- **Harvard libraries:** MIT students can get a Harvard Library Card by going to the main Harvard library with their MIT ID. This adds nice options to the existing MIT Spaces to Study (Harvard Libraries are all quite pleasant).

5.1.4 Taking Classes in other MIT Departments

Taking classes in other departments at MIT is very straightforward; you simply register for them as you would any other class. Consider checking out classes in Course 11 (Urban Studies and Planning), Course 15 (Management), and Course 9 (Electrical Engineering and Computer Science). Some specific courses which are most commonly taken outside the department (usually by those pursuing a joint degree in Economics and Statistics) include:

- 18.675: Theory of Probability (or 6.770: Fundamentals of Probability)
- 18.655: Mathematical Statistics (or 18.6501: Fundamentals of Statistics)
- IDS.160: Mathematical Statistics – a Non-Asymptotic Approach
- 6.7900 / 6.867: Machine Learning
- 9.520 / 6.7910: Statistical Learning Theory and Applications

5.1.5 Taking Classes at Harvard

Important*: you cannot use classes at Harvard to complete any major field requirements. (Only minor requirements.)*

Taking classes at Harvard is quite simple, and one can register for Harvard courses directly through MIT's Add/Drop Application procedure. However, it is recommended one speak with faculty and upper-years about whether one should take a particular course there, or at MIT. Logistics:

1. Unlike MIT, Harvard's pre-registration period does not happen until a few weeks before classes start. See Harvard's academic calendar for the exact dates. You cannot pre-register until then.

2. To take classes at Harvard, you will need to go through MIT's Add/Drop application procedure. See the Registrar's page here for detailed instructions.

3. You'll get an email from Harvard to set up an account with them, which you'll need to access Canvas or use their Wi-Fi.

4. The Harvard instructor also needs to approve your cross registration, after which you'll have access to the Harvard Canvas website.

5. Make sure to build into your schedule the requisite 15-20 minutes it will take you to get to class on a different campus!

5.1.6 Spaces to Study

In addition to the two graduate lounges on the 4th floor of E52 (Econ Department), Economics PhD students are given access to the 5th floor lounge (and coffee machine!) in E62 (Sloan). You will all be given access in early September. Please do not contact anyone at Sloan directly.

It is important to remember that this lounge belongs to the Sloan school, and is there for conversation and relaxation among the entirety of the faculty, staff, and PhD students of the Sloan community. It is not intended as a quiet study space. Sloan has been happy to share their coffee with us, but has asked that we do not treat this as a private space for extended study.

Instead, we recommend the E52 lounges, 4th and 5th floor breakout rooms, the Hayden Library, the Barker library - under the MIT dome - or the Dewey Library. You may also use the Sloan study rooms on the 1st and 2nd floors of Sloan. They all have a window, TV, and white boards – and some rooms are quite large. You will need to compete with Sloan students for their use (they are easier to get before 10am, after 5pm, and on weekends). The rooms cannot be booked; it is a first come first served system, but groups have priority over single individuals (another good reason to work with your classmates!).

You can also get a Harvard library card and study in one of the many Harvard libraries (see 5.1.5 for taking classes at Harvard!).

5.2 Leisure

5.2.1 Official Intramural (IM) Teams

MIT offers a wide range of intramural sports at a wide variety of levels! The list of sports being offered in Fall 2022 is:

- Basketball (Leagues: A, B, C, C-League Co-Rec)
- Air Pistol
- Singles Badminton (A, B, C leagues)
- Cricket
- Dodgeball (A, B, C leagues)
- League of Legends
- Mario Kart
- Super Smash Bros
- Flag Football (A, B, C leagues)

- Ice Hockey (B, C, D-Advance, D-Novice)
- 11 v. 11 Outdoor Soccer
- 7 v. 7 Outdoor Soccer (A, B, C league)
- Team Tennis (A, B, C league)
- Teqball (Singles and Doubles)

You can learn more by creating an account on the IM Leagues Website. The GEA will send out an email at the start of every year to gauge interest and help coordinate team formation and sign-up for intramural sports! In addition to those listed above, some additional teams have existed in the past, and are actively recruiting. If you're interested at all in these specific activities or sports, regardless of level, you should contact:

- **Ice Hockey**: David Autor
- **Basketball**: Ahmet Gulek
- **Soccer**: Tomás Caravello (formed in Spring '21, may continue if there is interest!)
- **Ultimate Frisbee**: Jenny Wang (trying to get off the ground)

You're encouraged to captain and start your own teams! If there is already a league, all you have to do is sign up through the IM website. If no league yet exists, you can ask the IM committee to start one.[46]

5.2.2 Self-Organized Activities

Many students in our department also enjoy self-organized activities outside of MIT. If you're interested in getting involved, want tips, and/or would like to be added to relevant Department group chats, the following students have happily volunteered as contacts!

Athletic:

- **Climbing**: Nate Hickok
- **Cycling**: Rebekah Dix
- **Hiking**: Eitan Sapiro-Gheiler & Ian Sapollnik
- **Squash**: Ian Sapollnik
- **Tango**: Ahmet Gulek
- **Tennis**: Dean Li

Less Athletic:

- **Acappella**: Paolo Adajar
- **Board Games**: Arthur Wickard & Ian Sapollnik

[46] Popular leagues have different competition levels, and there is often something for everyone at some level. As a team captain, you need to create the team on the IM website every season, invite people, and attend at least one "captains meeting" per season. There is sometimes an entry fee ($125 if there are refs), which you will need to collect the money to pay for. If this is prohibitive, reach out to the GEA, and either we or the Department can try to support you! Finally, know that the people working at MIT IMs are very responsive. You can expect a prompt reply if you contact them with questions or concerns related to games.

- **Chess**: Nate Hickok
- **Karaoke**: Emma van Inwegen
- **Movie Group**: Reca Sarfati
- **Trivia**: Aaron Berman & Kartik Vira

5.2.3 Gyms and Recreational Facilities

MIT recreation is the official title of all sports related activities. As an MIT member, you have free access to MIT gym facilities and boathouses! MIT has three gyms, the Z-center, the Dupont Gym and the Alumni Wang center (the Z-Center and the Dupont Gym share a location), and both a sailing boathouse and a rowing boathouse. You have free access to sport courts, treadmills, rowing machines, weights, squash and tennis courts, a swimming pool, and more.

You must create a gym online account if you want to book courts (free) and/or private sport lessons (not free). The student time for (free) booking of tennis courts is 2-6 PM; outside this window, you must pay a fee. You can get a permanent locker in the Z-center for 60 dollars a year. Note, however, that the number of lockers is limited, so it is thus advisable to get it at the beginning of the year. This is especially true if you intend to use Men's locker room... (The MIT gender ratio is playing against you.)

In order to use the sailing boats, you need to get a certification. The MIT boat club (just outside E52!) offers certification sessions and beginner sailing classes in the early fall that can be attended for free (it is just a matter of clicking at the fastest possible the moment after they release the spots), more information on their website. For rowing, you can join the MIT recreational rowing club, which has been very popular among present and former Econ Graduate students.

5.2.4 Discounted Activities through MIT

You can find more detailed information about discounts on cultural events on the the MIT council of Art Website but here is a list to whet your adventurous spirit:

- **Museums**: With your MIT ID, you have free access to the Museum of Fine Arts (MFA) and the Gardener's Museum. Both are definitely worth visiting more than once! You also have free access to the Institute of Contemporary Art (Gorgeous view on Boston harbour) and the Harvard Art Museums.
- **Concerts**: If you like classic music, MIT offers a discount pass to the Boston Symphonic Orchestra (BSO) aka the BSO college card. It is 7$ and you can attend any concert of the season for free! Get your card at the MIT Copytech in Building 11-004 and go withdraw your tickets at the BSO a couple of days before the performance. You can also get discounted tickets for the Boston Chamber Music Society.
- **Ballets**: MIT sponsors tickets for a couple of ballets each year.
- **Movies**: Not an MIT privilege but worth knowing, you can get an unlimited movie pass for 10 dollars a month. It works in most theaters of Boston and Cambridge/Somerville (the Kendal movie Theater and the Somerville theater for instance). Otherwise, you

can buy movie tickets through the MIT activities committee for Landmark and AMC theaters (Kendall Theater is a Landmark theater), they are 30% cheaper than regular adult tickets.

- **TV, music, series and movies on demand**: If you leave on campus, MIT offers free TV and entertainment through Xfinity. You can find how to access it on the IST website. Apparently, you can also access some TV everywhere apps if you live off-campus. As an MIT student, you can also get a Spotify Premium account for students, which is now bundled with **Hulu**, a service providing online shows and movies, all for 5 dollars a month!
- **Outdoor**: If you are an outdoorsman/woman, you might be interested in the MIT Outing Club which offers outdoor activities around Boston all-year (hikes, rock-climbing, ski trips etc.) and discounted rental of gears. The yearly membership is 15$. Sign up to their mailing list to stay up-to-date on the activities they organize!
- **Student groups**.
- **The Boston Calendar** is useful for looking up events going on in the Boston area.

6 Getting Data

6.1 Collecting Your Own Data

6.1.1 Shultz Funding

The George and Obie Shultz fund is an MIT economics department fund for graduate students' expenses related to data collection. This can include experiments, surveys, data purchases, and other original data collection, as well as travel expenses for field work that's required for data collection. There are four funding rounds a year, in March, June, September and December. Each student can apply for up to $8,000 per funding round and up to $15,000 per academic year.

To apply, you need to send in a short (one-page) description of the research idea, a project title, and your proposed budget for the Shultz funding. You also need a faculty member to confirm they approve the project. Approval is not guaranteed, but the award is not competitive and most projects are approved for at least some funding; if there is excess demand for funds, preference is given to thesis writers and to people who have not received earlier awards. Once you submit the application, you should receive a decision within a few weeks, though it can take longer.

After your project is approved, you can spend on whatever your expenses are, and then submit receipts for reimbursement. You cannot be reimbursed for any spending that occurred before your Shultz proposal was approved. As a result, if you have very time-sensitive expenses around a deadline for the Shultz fund application, you may not be able to use the funding if your proposal is not approved in time. Reimbursements can be sent directly to your bank account – you can set your reimbursement preferences in Atlas.

6.1.2 Institutional Review Boards (IRBs)

Don't forget to apply for and/or see if you need an IRB. Almost any projects that involve data collection or interventions will need an IRB, regardless of how small. You also might need an IRB for many projects using secondary data.

Many "small" projects (surveys on non-sensitive topics, low-touch interventions, etc) may qualify for IRB exemption, but you still need to formally apply for the exemption. This is a quick process, but don't forget to do it and don't leave it too late.

The technicalities of what does and doesn't qualify for exemption can be a little complicated. Ask a faculty with experience early on whether you think your project will be exempt, because if they think it won't be then you should budget time for the full IRB review.

Even for IRB exempt projects, you'll need to have completed IRB training. You can do this on the COUHES website, but READ CAREFULLY their information page on training. They share a system with IRBs from other universities, and there are only a few trainings that are relevant/necessary for us, so read the instructions carefully to make sure you don't do irrelevant trainings. Also, it can take up to a day for a completed training to register in the system, so don't panic if the system says you can't get an IRB because you haven't done training. Again, don't leave this to the last minute.

You need a faculty sponsor, so make sure you speak with a faculty in advance of this.

6.1.3 Data Use Agreements (DUAs)

If you are accessing sensitive data (e.g. data from some state governments or companies), you may be required to do a background check. The process involves emailing Andrea Finnin who will arrange for a background check on a reimbursement basis. If you have Shultz funding, that is one way to cover the cost. In that case you would need to loop in Megan Miller. A domestic only background check will take around 2 weeks.

Some forms, such as NDAs and other data use agreements, will need to be notarized. You can arrange this with Deborah Jamiol who sits on the 5th floor and she can notarize your document. Some forms may require in-person subject verification, in which case you would go to the Atlas Service Center (E17-106). If a company sends you a DUA or NDA template, be sure to check in with MIT's legal team before you sign them. This is mostly to ensure that you as a researcher will retain the right to publish findings even if they are not favorable for the company. Rob Grann or Susan Watts will be the people to email.

6.2 Existing Datasets to Know About!

Below is a (non-exhaustive!) list of some common datasets that are either publicly available for free, available upon application through an MIT faculty member, or otherwise available for purchase.

- Orange Book data can be found on the US FDA website, and also cleaned on Heidi William's website

- Google Patent Data
- MIT Library – Finance has data on mergers and acquisitions
- Census data
- Compustat
- Orbis (through Sloan)
- Nielsen
- SafeGraph (Tobias, David Atkin)
- Burning Glass
- LEHD – Census Data
- Medicare Data (Restricted)
- National Longitudinal Survey of Youth
- National Health Interview Survey (NHIS)
- Public NBER
- CPS Data
  - You can directly download this off website
  - IPUMS
- Harvard Dataverse
- National Directory of New Hires
- DataAxle (through MIT Libraries)
- Infutor
- PACER
- National Housing Preservation Database
- American Hospital Association (AHA) data through NBER (restricted)
- Opportunity Insights data
- FRED data from St. Louis

7 Guide to Software and Computing

7.1 Set Up Your Computer

7.1.1 Economics Department's IT Team (Econ IT)

The department has its own IT team (Econ IT) which provides hardware support and manages the server. This is who they are. They are amazing! Always very helpful and responsive! All the basic information about the Econ IT resources can be found in their website (go check it, it is quite clear). Specifically, most of the information in this section comes from https://econ-help.mit.edu/categories.

7.1.2 Printers

7.1.2.1 Department printers The Economics department has plenty of printers, basically ≥ 1 in each room, from which students can print **infinitely** for free. Use the following links to install the printers on your laptop (Do it now! It is very quick and extremely convenient):

- From Windows
- From Mac

The printers ending in "C" are the quickest and can also print in colors.

7.1.2.2 MIT printers Outside the department (e.g. at Sloan, in the libraries, etc.), there are MIT printers that we can use, also for free and also infinitely. You may find the map of where they are located and the instructions to install the software needed here.

7.1.3 Servers

The Economics department makes several research systems available to PhD students. The public servers are called Supply, Demand and Blackmarket *(What else did you expect..?)*. Some professors and research groups also have their own systems that you might use when working for/with them. Here is the list of Available Research Computing Systems and here are the instructions to Connect to Research Servers. Additional useful information is on the website indicated at the top of this section.

On the servers, students can store files and use software such as Stata or Matlab (the server is particularly useful to run heavy codes). In order to connect to the server, you will need to get an ECON account (usually an ECON account is automatically created for each student, so you will only need to retrieve the password). Once you have an ECON account, you will need to install an MIT VPN if you want to access the server off-campus (explanations on how to do it can be found here in the IST website). After that, you will need to install a remote computing program or use the one already in your computer (I use MobaXterm on Windows) to access the server. WinSCP is useful to transfer data from you laptop to the server and vice-versa (if you use confidential data, e.g. when working for a professor, make sure **not** to transfer it to your laptop).

7.1.4 Departmental Computers

Students can login to the lab image with a zero client from the computers in the graduate lounge on the 4th floor (also from their desk, but first years don't get desks unfortunately). You can also login remotely from a laptop using the VMWare View Client (VPN will be useful if you are outside campus). Transferring data from departmental computer to your laptop can be done well with WinSCP.

7.2 Free software at MIT: stop paying rents to computer magnates

For more computer-related information, and for an exhaustive list of software MIT gives you free access to, check the IST website. Here are some things you might want to know (for all of this you need to have installed your MIT certificate):

- **MatLab**: You can get a free license from the IST following the instructions here.
- **Stata**: The Department now **does** have a Stata license for personal use. But you can also use Stata through the Economics department server for higher processing power. (NB: if you want to open Stata in a separate interface when working on the server, use the command "xstata", it is slower but it can be useful. If you use the command "stata", you will not get the Stata interface).
- **Wolfram Alpha Pro**: You can get a free license from the IST following the instructions here.
- **Matematica**: You can get a free license from the IST following the instructions here.
- **Dropbox** (200 GB): you can get a free 200 GB dropbox account using your MIT email adress, just follow the instructions here.
- **Microsoft Office**: You can get a free office license in the IST website. You need to uninstall your current office version before installing the MIT professional one.
- **Overleaf**: The google doc for LaTeX. You can get a premium account using your MIT address when signing in.
- **Crashplan**: MIT offers Crashplan, a cloud-based backup plan, for free. More information on the IST website.
- **Qualtrics**: You can register on Qualtrics, an online platform for developing surveys, through the IST website for free.
- **Hardware assistance**: The IST provides repairs and diagnostics on Apple, Dell, and Lenovo Think-branded computers (for more information, check the IST webpage). You can also go to the IT team of the Economics department in case of problems.
- **Hardware purchase discount**: As an MIT student, you get student discounts when purchasing a computer trough some brands (Apple, Dell and Lenovo) student stores (you can check this link if interested).

7.3 Unsolicited advice: What to invest in?

For useful links, see the Software-related section in Useful Websites below. In general, people love sharing their knowledge and tell you about that cool command they discovered. If all that follows is not enough or you have general doubts and curiosities, chances are that at least one/all of your classmates are even geekier than the others (a paradox? most likely). Don't hesitate to ask us at the GEA too... We will be happy to share any knowledge we have!

7.3.1 Statistical and Computational Software

Most people use an optimal mix of software to do things. Everyone has their favorites and deciding which ones are the best can raise passionate debates! Note, however, that if you do RA work for a professor, they usually prefer for you to use a language they are familiar with, and that usually means Stata, MATLAB or R. It is also worth knowing that Stata, MATLAB, R and Python can all be run on the department's unix servers.

If you are really interested in computer programming and want to learn more (clearly **not** mandatory to succeed as an economist), you might want to take/go to computer science courses like 6.867 (Machine Learning) and 6.864 (Natural Language Processing). You can also find online classes, like the Standford classes by Stephen Boyd, by Hastie & Tibshirani, by Tim Roughgarden and/or any of the CS230/231 suite of classes on deep learning.

Below is a (non-exhaustive) list of the most used in Economics and what they can (non-exhaustively) be used for.

- **Stata**: Still widely used in Economics. It might not always be the best/quickest program to less standard analysis, but it is quite practical for anything straightforward. **2021 Update**: The Department now has a Stata license for personal use. Details are on this page.
- **R** has the great advantage of being free. It is more and more used and it is quite good for data cleaning, maybe a bit less for standard analysis.
- **Matlab**: Very much used in Time series and in Macroeconomics. It is quite fast and flexible.
- **Python**: Python is open source and is probably today industry standard (not yet in academia). It is a general-purpose programming language so it provides more flexibility and is quite fast. You might want to use the freely available Anaconda distribution of Python for quicker processing.
- **Julia**: Recently born at MIT, Julia is probably the fastest language available today, exceeding the speed of C or C++ (unless you are a real expert). When compared to Python and Matlab, the speedup is remarkable – an order of magnitude or more in many cases! However, it is a fairly recent language, with not too many resources and packages available yet. *Note: there is definitely no consensus on Julia among the Econ grad students. Some people truly love it and others have had terrible experiences with it. If you get into Julia, or are considering so, do ask around: there are true experts in our department!*

7.3.2 PDFs and Paper/Bibliography management

- Most people use **LaTeX** in order to make PDFs and slides. Some people like to use its more user-friendly version, **LyX**. They can both be downloaded for free - here (LaTeX) and here (LyX).
- **Zotero** is a wonderful software that allows you to store papers in an organized manner and make your bibliography from it directly (no more google search for citations). Moreover, you can use its plugin, ZotFile, to rename and save the PDFs in Dropbox (where we have almost unlimited space) rather than in Zotero (where we don't). And with their browser connectors you can do all of it with a single click. Really a game changer! Download here Zotero and ZotFile. Plus follow the instructions in Jon Cohen's wonderful How to empirical (More on it later).
- **Evernote**: a super helpful organizational tool. A lot of students and faculty use it to organize their research logs and notes (some seem even to be obsessed with it ;)).

7.3.3 Some great editors

- For R, you can get **RStudio**. It has a nice and intuitive interface, and it's free like everything R-related.
- (More controversial): for LaTeX, you can get **TeXStudio** (but you might prefer something else). It auto-completes everything, allows you to save your preamble as template, has a panel full of greek letters and symbols, allows you to define keyboard shortcuts, it has good find and replace, etc, etc....
- Everything else: if you get into more advanced programming, **Atom**, **Sublime Text** and **VS Code** are the most popular choices for editors. But you will probably already know it by then...

7.4 On TeXStudio and TeX in general: pro advice

- In TeXStudio, you can save your preamble by making it a **"new template"** in Save as. This might not seem a big deal, but having a template for psets with the commands you ALWAYS use can be a huge time-saver.
- **Define commands!** This save you ABSURD amounts of time. An example are quotes, super-annoying in LaTeX, especially for non-US keyboards. So you can just add the following to the preamble:

  ```
  \newcommand{\qt}[1]{``#1''}
  ```

  and use it as any other command to save time. When you use a variable with super/subscripts many times, just make it a command! This is a silly example, some more are reported below...
- **Keyboard shortcuts**: use them! TeXStudio has all of them listed in Preferences>Shortcuts. Here is a very convenient cheatsheet. Some common to all editors that you *really* have to know about (Windows/Mac):
  - Shift+Ctrl/Cmd+D: for subscripts with braces;
  - Shift+Ctrl/Cmd+U: for superscripts;
  - Standard Ctrl/Cmd+B/I/U for formatting

  In the amazing TeXStudio, you can also define new shortcuts, even for enviroments (when you get tired of typing "begin" and "end" compulsively, just make your computer do it!)

Two telling examples of Useful LaTeX commands

- Limit from T to infinity:

  ```
  \newcommand{\linfty}{\lim_{T \to \infty}}
  ```

- Create partial derivatives:

  ```
  \newcommand{\deriv}[2]{\frac{\partial #1}{\partial #2}}
  ```

which creates partial derivatives as

```
\deriv{X}{Y}
```

7.5 Useful Websites

Here is a non-exhaustive list of useful websites. Some of them have related MIT perks that we list in the following.

7.5.1 Software-related

Assuming everyone knows stackexchange, aka "just google: do …in …, hit first result", the most useful resources to learn software are:

- For Zotero (this is a game- and life-changer): First entry in How to empirical.
- For R: wait for 14.382, it will be your daily bread ;) Wonderful cheatsheets; Software Carpentry.
- For Stata: Wonderful cheatsheets; A Visual Guide to Stata Graphics.
- For Matlab: see the GEA code archive. A series of codes put together for beginner lectures. Includes most basic commands and some value function iteration. *Caveat: accuracy not assured.*
- For Python and Julia: QuantEcon. A project set up by Tom Sargent among others... This will teach you Python reasonably well, introduce object-oriented programming and make you implement a lot of Bellman equations. Not as great for Julia, but will show you the basic commands.
- (For fun): C++ learncpp. *Caveat: addictive.*

7.5.2 General Interest, Tech-Adjacent

- Some practioner's guides on software / workflow: Code and Data for the Social Sciences: A Practitioner's Guide and The Plain Person's Guide to Plain Text Social Science.
- Jon Cohen started this amazing shared spreadsheet, How to empirical. It contains software-related tips and tricks, a list of methodological papers (econometrics), and a list of datasets. It is intended to be a shared resource, so use it and feel free to add to it!
- Make your figures look pretty! It does make a world of difference. Here is An Economist's Guide to Visualizing Data. Note that this is NOT relevant for problem sets (see Staying Happy (in the First Year and Beyond) below), but useful for when you start writing and presenting papers.
- VoxEU: the CEPR official website, interesting high-quality policy research in article format;
- RataType. Teaches you to type way faster.
  Caveat: Also weirdly addictive/worrying.

8 Mental Health and Your Community

Mental health is a function of many inputs, some of which we have no control over, some of which we do. Managing variables in our grasp can be pivotal in determining whether exogenous shocks (challenging coursework, harsh criticism in seminars, papers falling through, the job market, *the tenure process...*) throw us out of equilibrium. When you need help, get help!

Remark: If you notice someone seems uncharacteristically withdrawn, anxious, or depressed, check in with them. Or, if you're not close enough for that to feel natural, ask one of their friends to check in. If you are unsure how to start such a conversation, try one of the following questions.

8.1 Resources at MIT

The transition to first year is challenging, shifting mindsets from coursework to thesis-writing is challenging, choosing a research agenda is challenging, preparing for the job market is challenging. Not just academically, but also emotionally. Lots of MIT economics PhDs have benefited from the extensive set of mental health services that MIT provides. Fortunately, MIT makes this reasonably easy. Call or email MIT Mental Health and ask for an appointment, or drop in during their walk-in hours. It's free, and it's for everybody – don't worry whether your stuff is "serious enough." Sometimes one or two sessions alone can make a huge difference.

You can see a counselor/therapist at MIT Medical (5 min walk from the dept.) free of charge. Appointments are typically an hour long, once every two weeks. If all you need are periodic check-ins to discuss medication dosages/update prescriptions, these can be made as brief 30 minutes every 2-3 weeks, once your situation stabilizes. The waiting time for a first appointment is approximately two weeks.

If you'd like to see a counselor/therapist more often than once every two weeks, you can see a professional outside MIT. MIT Medical can provide a list of mental health professionals who accept the MIT Student Extended Plan insurance. If you have preferences (gender, therapeutic methods, etc.) they can tailor the list appropriately. These services are ***free*** when provided by someone who accepts our insurance: the first 52 visits in a calendar year are covered in full (100%), after which there is a $5 copay per visit with no annual maximum number of visits (info here).

For urgent issues, there are 24 hour phone services, available at 617-253-2916 on weekdays during the day and 617-253-4481 during nights and weekends. Walk-in consultations are available on the third floor of MIT Medical on weekday afternoons, 2-4 p.m.

For quick (20 min) and confidential meetings with a counselor, MIT offers drop-in meeting through the "Let's Chat" program during the academic year on Tuesdays from 1-3 p.m. in Room 8-316. This is a good way to get advice about a specific problem, or to see what it's like to talk to a counselor or therapist at MIT.

Remember that many successful MIT graduates, current MIT graduate students, and MIT professors have used and are using mental health services. Getting help when you need it (not just with a hard problem set question!) is a key way to stay happy and succeed at MIT.

The Economics Department also has a Mental Health & Peer Support graduate student group, which facilitates a number of events each year with the goals of helping students de-stress, form good habits, and receive information on self-care as they transition from year to year in the program.

8.2 Recognizing a Problem

A big issue in self-diagnosing systematic issues with mental health is that (1) it can be hard to remember what life was like when you weren't suffering, and (2) it is tempting to ascribe the source of persistent unhappiness to external circumstances. That is, if you can only resolve your current stressors, your mental health will recover. In turn, it seems logical that the best policy is not to redress "symptoms," but the "cause": "If I can just get through this course, if I can just get this presentation out of the way, if I can just impress this professor, if I can just land some interesting results, if I can just get this published, if I can just place well on the job market... then the self-doubt will end, the tension in my chest will release, the sense of dread will diminish, the racing thoughts will relent. There will be no occasion for panic attacks. I'll reach out to my friends and spend time with them again. I'll stop having difficulty falling asleep. I'll wake up and want to get out of bed." Yet, as time passes, something new always seems to come up, and the cycle continues – we chase after a sense of peace which never comes.

For sure, external circumstances can take a huge toll on one's mood, and often catalyze greater emotional disruption. It is important to recognize, however, that mental health conditions like anxiety and depression are not pure byproducts of our circumstances, but are conditions that can arise independently and exogenously, *informing* how we internalize these circumstances. Poor mental health can be addressed *separate* of whatever troubles it happens to be accentuating, and, once addressed, can make your troubles feel far less troublesome.

Accepting that there might be some latent process in your mind coloring your perception of reality is... difficult, to say the least. For a concrete place to start, it can be helpful to use your past self as a benchmark! Ask yourself if your emotional response to a particular event is out of the ordinary. You might not have a wide cross-section (being but a single person living life on a linear timeline), but you have a big T! Question whether you felt commensurately stressed or anxious the last time you were under this amount of pressure, several years ago. Try to recall how you felt the last time you gave a talk, or had a dispute with a friend. Is your current response outsized?

And, even if your current unhappiness isn't an "aberration," that might itself be a signal you would benefit from meeting with someone. The PhD will stay hard, and the stressors you have now may persist through your entire career. You will continue to confront stressful deadlines, be made to engage with material you have yet to master, and exist in an institutional setting that highly values signs of approval yet scarcely grants them. But you can take action to address your response to these issues now, rather than waiting for some external change! If these things are making you unhappy now, you might as well try to take steps to address this emotional response earlier, as opposed to later. This is both to literally minimize time in life being unhappy, and to prevent the burden of shouldering it alone from compounding into something more severe.

8.3 Physiological Inputs to Mental Health

The categories below might seem obvious, but a surprising number of peers this author has spoken with have been fuzzy on details. While we have your attention, read on!

- **Sleep.** Getting enough *quality* sleep is critical to stress management. Poor sleep will not only make you less productive and more forgetful, compounding likely "well-founded" sources of stress, but causes a build-up of cortisol, leading to greater subjective experience of stress symptoms: muscle tension, fast heart-rate, mood swings, and irritability. Insufficient sleep also impairs your ability to evaluate how well-founded anxieties are, which can cause you to blow small setbacks out of proportion: a blank facial expression in a seminar becomes a condemnation of an idea, three incomplete tasks become evidence of your crumbling executive capacity, an advisor's constructive criticism becomes proof they think little of your worth as a researcher, etc.

  Yet, as important as sleep is, many students are ignorant that *a lot more* goes into being well-rested than being unconscious for 7-9 hours. In particular, one should be mindful of the following:

  1. *Consistent wake-up time:* The most important component to stabilizing circadian rhythm (your body's internal clock, which regulates natural sleep and wakefulness patterns), is the time you *wake up* (notably, not when you get into bed). Even on weekends and days you stay up late, it pays to stick to a fixed wake-time. Just like adjusting to jet-lag, after several days of holding to your wake-time, absent confounding influences (like excess caffeine, medication, etc.), you will naturally grow tired at a consistent hour, and find yourself waking up without an alarm.
  2. *Completion of sleep cycles:* Your body takes 90 minutes to complete a full sleep cycle (composed of "rapid eye movement" (REM) sleep (light sleep) and non-rapid eye movement (NREM) sleep (deep sleep).[47] As cycles pass, NREM (deep sleep) stages become lighter, and REM (light sleep) stages will last longer. To feel fully rested, your body should ideally complete 4-6 in a night. Ideally, you should wake up at the end of a cycle, when sleep is lightest. When one's alarm is ill-timed, and interrupts a deeper stage of sleep, you can experience grogginess through the afternoon, even if you slept more than 7 hours! To the extent you can finagle it, try to stabilize your wake-time such that you can time a period of light sleep with your alarm (or forgo the alarm altogether).
  3. *Sleep quality:* To achieve deep sleep, it is important to rest somewhere (i) very dark, and (ii) very quiet. Both light and noise pollution interfere with your ability to achieve deep sleep. *Even if* they aren't causing you to fully wake up, your sleep is still being impaired. Invest in black-out curtains, an eye mask, earplugs, and/or a white/brown noise machine.

- **Vitamin D (Sunlight).** A lack of sunlight is the primary cause of seasonal affective disorder – characterized by fatigue, depression, hopelessness, and social withdrawal in the colder, darker months. However, most modern office workers actually experience

[47] For greater description of what both these stages consist of, read here.

a Vitamin D deficiency all year round! If dedicating more time in your day to being outdoors isn't tenable, it is worth reading up on whether you might fit the bill for taking supplements.

- **Food.** There is established science on the mechanism by which diet affects emotions. There is a close relationship between your brain and your gastrointestinal (GI) tract:[48] the gut harbors numerous bacteria that create chemical substances in constant communication with the brain, such as dopamine and serotonin.

  Consuming a nutrient-rich diet encourages the growth of "good" bacteria in the gut, positively influencing the production of these chemicals. This results in the brain receiving positive messages, leading to a better mental state. Conversely, poor production of these chemicals will stymie generation of the positive signals necessary for mood stabilization, resulting in worse, more erratic mental states. Sticking to a nutrient-rich diet reduces mood swings, enhances ability to concentrate, and can alleviate symptoms of depression and anxiety.

  You will find that many psychiatrists/therapists will push you to speak with a nutritionist when your mental state is especially poor. MIT Medical has a dedicated Eating Concerns team whom you can reach out to for more tailored guidance.

- **(Minimal!) Physical Activity.** More physical activity is (almost) always better, but the greatest returns are actually experienced in going from nothing to a simple daily 20 minute walk. We won't sing the praises of exercising here, as most people already here know this. What we want to stress, instead, is that even if you aren't feeling up to the task of a hardcore, sustained exercise regimen (which often coincides with, and pro-cyclically exacerbates, poor mental health), small efforts will go a long way for your mood: according to the Anxiety and Depression Association of America, a simple 10-minute walk may be as effective as a 45-minute workout in terms of reducing anxiety and depression. Start small!

8.4 Therapy

8.4.1 Problems Therapy Can Help With

Therapy takes many forms and can be used to tackle many problems. You do not need to be in the midst of a major mental health crisis to benefit from speaking with someone: therapists can specialize in anything from perfectionism, cultural adjustment, career concerns, social anxiety, sleep, relationship struggles, or run-of-the-mill stress. In fact, for almost any personal issue you can think of, there exists someone who specializes in it.

You can meet with a therapist to talk through things as simple as processing recent interactions with friends, or how to set schedules and stick to them. Therapists can provide you with coping strategies for challenges and setbacks (major and minor); work with you to overcome ingrained self-destructive attitudes and reactionary behavior; assist in identifying issues causing conflict in interpersonal relationships, and advise on how to reach resolution.

Therapists usually list upfront what their specialties are, and you can use those as a guide for who may be a good fit. As a function of being in Cambridge, there are many

[48] Often called the "second brain."

therapists around here who even specialize in the acute stressors of graduate school!

8.4.2 When to Look

Not only is it true that therapy need not be reserved exclusively for extreme circumstances, but it pays to look for a therapist while you are *not* in extreme circumstances. Finding a therapist that works for you can be an extended process. Expediting this search is almost always better. There are several reasons for this:

1. When you're at your lowest (e.g. in the throws of the job market), it will be *far* more challenging to search for help – both logistically and emotionally.

2. Therapists *tend to have greater availability for new clients in the summer months*, after recurrent clients have moved from the area or organically decide to end visits. While you might feel great during the summer, recognize this mental state can be subject to a sharp change once the semester begins. Set up a safety net for yourself while you have unstructured time on your hands!

3. You will experience the highest returns speaking with someone whom you share an established relationship with. Use the months of feeling "sort of okay" to share who you are with them, so when you experience a downturn, (i) you won't need to fill them in on all the surrounding context of what's bothering you, and (ii) you can give weight to their assessment of you, since they've now known you for a decent chunk of time.

8.4.3 Types of Therapeutic Approaches

Beyond personality and demographic fit, a massive determinant of success in therapy will be the treatment approach. Usually, therapists will list these on their profiles. If they have not, you can ask this in your 15 minute consultation call. It is also reasonably common for therapists to use a mix of approaches – again, this can be a great thing to ask about during the consultation call. Know that people can be *really* put off by particular approaches, so it is important to recognize this might be a factor systematically driving why you prefer certain therapists over other.

To get a sense of what each approach constitutes, you can read more here. To know where to start, it can be helpful to speak with peers about the approach their therapist uses.

8.4.4 Outline of Process to Find Therapist

Counselors/therapists/psychiatrists at MIT are usually not meant for consistent, long-term meetings. They are spread extremely thin, and will often be upfront that they are meeting with you to assist you in looking outside of MIT. Meetings are usually capped at one hour, every other week. Most students seeking a longer-term relationship will look outside MIT.

It is straightforward to meet with anyone outside of MIT who is "within-network" (accepts BlueCross-BlueShield insurance). It is also possible to meet with independent/out-of-network professionals, but the reimbursement process is a tad more complicated, and the copay *might* be higher (though this is rare). See the following page for a bit of information on how insurance and referrals work for off-campus therapists.

1. Multiple **websites exist to locate therapists** outside of MIT. One first place you can try is Thriving Campus. This portal enables you to search through therapists in the area, as well as filter by specialty and insurance plan. Another website is Psychology Today.

2. You will see these **platforms permit you to filter on many things**, such as demographics, specialties, therapeutic methods, and insurance accepted. You will also see that all therapists must write small blurbs about themselves. These can say a lot! Beyond the literal information conveyed, the manner they convey said information will often signal details of their personality, communication style, and types of clients they work well with.

3. Once you settle on a set of individuals you might like to meet with, you can **send them an email directly through the website portal**. This introduction is meant to be short – you don't need to spell out anything sensitive, just give a quick description of yourself, mention you have BCBS insurance, and tell them your availability in the immediate future.

4. They will then (usually) either reply that they are all booked and can't accept any new clients, *or* will schedule a **15 minute consultation call**, where you can relay any sensitive information on the sorts of things you're working through, as well as why you think they might be a good fit for your needs. You should try to be pretty clear about the most important things you want to address, so they can be candid about whether their specialties align.[49]

5. For many, the biggest difficulty finding a therapist is the first step of reaching out. A second challenge, however, is **sustaining your momentum** as therapists get back to you saying they aren't accepting clients. You might send out 15 introductory emails and get only 2-3 positive responses of availability.

6. The next challenge is that **you may not like the first person you meet with**. After the 15 minute consultation call, you will be asked to fill out some paperwork, and then schedule a "real" first meeting. This might not be a groundbreaking exchange: sometimes, therapists in early meetings will approach conversations in an overly neutral/textbook manner, as they don't know you yet, and want to be risk-averse. Other times, you might be frustrated that they ask the "wrong" questions given the information you provide. Or, you did almost all the talking, and didn't get much of an impression of them at all.

7. It is thus advisable that unless there were immediately glaring incompatibilities, you try to meet at least a few more times. However, you *should not* persist in meeting with someone who isn't a good fit! You will want to **balance giving the dynamic a chance (it can take multiple meetings to feel someone out) against accelerating your search for better help**.

8. If you determine a therapist **isn't working for you**, you should go back to your list of options and **begin contacting people again**. It can be helpful to have another option before ending meetings, especially if you're receiving treatment for depression, or something otherwise impairing executive capacity.

[49]For instance, there are many definitions of "trauma" – confirm their intended clientele isn't veterans.

9. **Therapists are used to clients "breaking up" with them** – do not let the perceived "awkwardness" of this interaction stall your receiving proper care! It is sufficient to communicate: "I've decided to try a different approach with another therapist – thank you so much for your time and assistance over these past sessions." For thoughts on when and how to approach ending a therapist relationship, you can read more here.

8.5 Community Care

This guide's "Mental Health" section has almost exclusively focused on how to take care of oneself. This is to be expected, as advice of this form can only be adopted individually. However, such an emphasis might mislead one to believe mental health in the department is a "separable" problem.[50]

How supported and cared for *we* feel drives how emotionally invested we are in one another's lives, which eventually determines how supported others feel (and so forth). Yes, there are many things we do to take care of ourselves (as evinced in this section), but there are also things we can do to take care of others. For sure, life is busy and the PhD demanding, and it is not feasible nor advisable to make all of your peers' struggles your own. However, it needn't be high-effort nor time consuming to make the department a more welcoming and lively place to work.

Remember that in some form or another, the PhD is difficult for everyone. Most will have just moved to the area, many from foreign countries. Many find themselves lacking in deep local friendships. Many long-term relationships are put under new strain, sometimes coming to an unexpected end. As graduate school intensifies, it grows more difficult to apportion the proper time to establish and maintain meaningful connections. Lack of clear boundaries as to when one should "stop working" can mean invitations turned down and weekends at one's desk. Many, many of your peers will feel lonely at some point in their graduate career.

Let's be good to one another.

. . .

"I've learned that intelligence alone doesn't mean a damn thing. Here in your university, intelligence, education, knowledge, have all become great idols. But I know now there's one thing you've all overlooked: intelligence and education that hasn't been tempered by human affection isn't worth a damn." – Daniel Keyes, Flowers for Algernon

[50] Even the very term *"self-care"* didn't originate as an individualistic concept! Popularized by the Black Power movement of the 1960s and '70s, the notion of "self-care" was a call for Black communities, living under institutions that did not have their interests in mind, to build for themselves the structures and resources to provide for themselves that which the government was not. (Think: medical care, financial services and banking, food security, and support for children and the elderly.) The "self" being the whole of a community, and "care" something that was to be achieved collectively.

A Glossary of Acronyms

- DHS: (U.S.) Department of Homeland Security
- DUA: Data Use Agreement (*not* the mezzo-soprano disco-pop icon)
- GEA: Graduate Economics Association
- GSU: (MIT) Graduate Student Union
- IAP: Independent Activities Period; four weeks during month of January for flexible learning and research.
- IM: Intramural (Teams)
- IRB: Institutional Review Board
- IRS: (U.S.) Internal Revenue Service
- ISO: (MIT) International Students Office
- ITIN: Individual Taxpayer Identification Number
- MIT: u doing ok, bestie?
- RMV: (Massachusetts) Registry of Motor Vehicles
- SSA: Social Security Administration
- SSN: Social Security Number
- VPN: Virtual Private Network

B Discussion of On-Campus Housing Options

GEA has compiled some scattered thoughts that members of the department have shared on campus housing options. It is by no means a holistic analysis, but might still be informative!

- **70 Amherst**
  - Literally down the street from the Economics Department (5 minute walk maximum — only Site 4 is closer).
  - Budget friendly, but limited options (see Unit Types).
  - Most 70 Amherst rooms aren't apartment style (they have shared bathroom/kitchen in hallway)
  - Two kitchens on every floor, but communal fridges are often packed (so having a mini-fridge is useful).
  - It is extremely close (7ish minute walk) to the Kendall T Station. By extension, it is also close to Brother's Marketplace (pricey for Groceries), Chipotle, Shy Bird, DIG, etc.
  - 5 minutes to Stata Center Gym.

- BlueBike stations are directly across the street, if that is your thing.

- **Site 4**
  - Very new, closest place you could possibly live to the department.
  - Quite expensive, as it's geared toward couples/families who will share the rent.
  - The building has many fun/modern amenities, including a playground for kids, gym, and various study spaces (accessible to all students, even if they don't live there!)
  - Related to the above, students who live there have remarked it's not much of a social/communal residence, and have felt a bit out of place not having a kid.
  - While you might think that a modern high rise will surely imply beautiful/modern apartments, the aesthetic decisions for Site 4 apartment designs are *VERY* particular, so you should be sure to see a room before jumping in.

- **Ashdown House**
  - 18 minute walk to the Economics Department (more like 15 if you take a shortcut through MIT Building 7).
  - Lobby has a tracker to tell you when the shuttles are coming.
  - Has a dedicated aerobics room with machines (decently sized).
  - You can borrow space heaters, sports gear, irons, etc. (you probably can do this with other residences).
  - 12 minute walk to Target in Central Square (and by extension, the Central T Station).
  - 5 minute walk to Z Center Gym (and sports fields).
  - 5 minute walk to New Vassar Dining Hall.
  - Bluebike stations are nearby.

- **Tang**
  - Pretty cheap - personally, I think it gets an unfairly bad reputation
  - Great views if you are on the correct side (B is good) and on a sufficiently high floor.
  - Though, from the upper floors, you can feel the building shaking when it is windy.
  - Some people say that Tang has roaches, but I never saw any.
  - My roommate said that Tang windows leaked when it rained (again, this never happened to me though)
  - The kitchens aren't huge (wouldn't be surprised if that is an on-campus issue in general)

- *Miscellaneous remarks:*
  - **Sid-Pac**, as far as I know, is the only housing option where some suites require residents to share bedrooms
  - Also, regarding **Westgate** (family/couples-only housing), at least for 2019-2020 and 2020-2021, some non-couples/non-families lived there (might have been a temporary policy, though).

C The Desk Allocation

How the allocation mechanism works:

1. Students fill out the linked survey. If a student does not fill out the survey after 3 warning follow-ups, they will be assigned whatever desk is left after everyone else specifies what they want. Fill out the survey!

2. Students are sorted into priority tiers:

   (a) Current/past GEA presidents (3rd year +) invoking service priority for the current term [internally tiered by cohort seniority]

   (b) Current/past GEA officers (treasurers, social chairs, etc.) (3rd year +) invoking service priority for the current term [internally tiered by cohort seniority]

   (c) *[... insert hypothetical 7th, 8th years in order of descending seniority]*

   (d) 6th years

   (e) 5th years

   (f) 4th years

   (g) 3rd years

   (h) 2nd year GEA officers (of any position)

   (i) 2nd year pantry-management volunteers (if any desks remain unallocated)

   (j) (Remaining 2nd years -> separate allocation process to be conducted for nominal desk assignments in 487)

3. Within each tier, a random ordering is generated. The randomized ordering (as well as who invoked service priority) will only be revealed at the end, alongside final desk allocations. This is to avoid unnecessary strategic behavior, and, more importantly, treatment of one's peers as a means to an end.

   (a) Groups of 1-3 may be formed (by you all).

   (b) *Groups* cannot be formed between thesis writers and 2nd years, under any circumstances. (Desks are limited; we cannot leave a third year without a desk.) However, thesis writers can express a preference to be moved to the bottom of the allocation in the event they'd like to be in the same office as a 2nd year GEA officer/pantry manager. This preference will only be accommodated if it makes no thesis writer worse-off.

   (c) When groups are formed **within the same priority tier**, the group's placement in the internal ordering will be given by the average of its members'. (Ties broken on coin flip.)

   (d) **GEA officers invoking service priority** may form a group of up to no more than 2. Their group will retain the same tier and internal randomized order as the officer invoking service priority. (That is to say, GEA officers cannot usurp other officers' seniority.)

   (e) In the case of **groups formed across thesis-writing cohorts** (this basically never happens, but covering our bases), all members of the group will be inserted into the lowest priority tier of any of its constituent members. The set of older students slotted into lower tiers will be slotted in as a block at the top of said tier's original randomized ordering (ranked amongst one another by their initial tier + randomized ordering). The order of groups within the low tier will then be given by the (adjusted) average order of its members.

   i. *Painfully explicit example:* A 6th year (6A) forms a group with a 4th year (4B, initial rank b), and two 5th years (5C, 5D, initial randomized 5th year ranks c < d) form a different group with another 4th year (4E, initial rank e). The 6th year and 5th years are moved from their higher priority tiers to that of the 4th years.
   ii. The new ordering within the 4th year tier becomes: (1) 6A, (2) 5C, (3) 5D, (4) ... [original orderings + 3]
   iii. Group orders for <6A, 4B> and <5C, 5D, 4E> will be computed by the averages $(1 + (b + 3))/2$ and $(2 + 3 + (e + 3))/3$, respectively. (Ties broken on coin flip.)

4. For each tier (by order of priority), for each group (by internal ordering in tier):
   - Groups are assigned the set of highest-ranked (as expressed through survey) desks available, subject to the constraint that all group members be in the same room. In cases where two members of a group have the same desk in a set as their top choice, priority will be given to whichever member has a higher individual internal ordering.
5. Assignments are announced, and for two days, any pair (or chain) of individuals may come forward proposing a Pareto-improving swap.
   - GEA must be formally notified and give direct approval of any swap (even within-office). This is for purposes of linking students to desks for department admin/IT folks.
   - GEA retains the right to deny a swap (/strongly dissuade/propose alternatives) if we hold private information that the swap will cause major logistical disruptions for others (unlikely to be the case, but covering our bases so we don't get sued).
6. We'll then send out a finalized list of desk allocations, and announce the "move-in" day, where everyone switches to their new locations! (It's always a bit chaotic, but is important everyone switches at once/coordinates, as otherwise someone can get stuck with someone occupying their old desk but being unable to move into their new desk for some period of time.)

D Acknowledgments

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See past guides here! And if you would like to contribute, write something here!

E List of Past GEA Committees (with Contact Info)

2023-24
Co-Presidents (joint contact): Lia Petrose & Vincent Rollet
Treasurer: James Okun
Co-Social Chairs: Andrew Komo & Keelan Beirne
2022-23
Co-Presidents: Reca Sarfati & Nagisa Tadjfar
Treasurer: Dean Li
Social Chair: Whitney Zhang
2021-22
Co-Presidents: Rebekah Dix & Shinnosuke Kikuchi
Treasurer: Reca Sarfati
Social Chair: Nagisa Tadjfar
Community Revitalization Chair (things were sad after Covid.): Sylvia Klosin
2020-21
Co-Presidents: Adam Solomon & Jaume Vives
Treasurer: Mohit Karnani
Social Chair: Ying Gao
2019-20
President: Marc de la Barrera & Diana Sverdlin
Treasurer: Mohit Karnani
Social Chair: Ari Bronsler
2018-19
Co-Presidents: Clemence Idoux & Martina Uccioli
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Treasurer: Matthew Ridley
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Treasurer: Ariel Zucker
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Co-Presidents: Gabriel Kreindler & Brendan Price
Treasurer: Alex Bartik
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