

Time Management for New Faculty

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Abstract

In this article, we describe techniques for time management for new faculty members, covering a wide range of topics ranging from advice on scheduling meetings, email, to writing grant proposals and teaching.

1 Introduction

Time is that quality of nature which keeps events from happening all at once. Lately it doesn't seem to be working. — Anonymous.

You got the job. You negotiated startup and teaching load. You defended your thesis, took that long-awaited vacation, and you moved to the new place. Suddenly, you are not a graduate student any more. You have to teach, write proposals, supervise graduate students, give talks, write papers, serve on departmental committees, organize projects, and by the way, you are actually here to do research. How can it be possible to find time to do all this?

With good time management, it actually *is* possible. In this paper, we describe the time management techniques that we have learned in our first few years as assistant professors, and we outline the measures that we have taken in order to find time for the really important things in life.

2 Communication and Collaboration

I am definitely going to take a course on time management... just as soon as I can work it into my schedule. — Louis E. Boone.

Our most important asset as assistant professors is our graduate students, and advising them requires a significant portion of our time. In addition, we often spend time collaborating with colleagues from our and other institutions – it is one of the blessings of this job, because it adds fun and new perspective to our research. Frequently, however, our time is requested for not-so-fun or not-so-critical tasks, which may include meeting with visitors, departmen-

tal chores such as participating in committees or organizing events, hosting candidates, giving talks, etc. Most of the time these requests come through e-mail, and they sit in our inbox until we answer them. Answering these requests is not always easy – there are times when we really want to say no, but we do not know if we should, and we do not know if we have time or want to fulfill the request, and we certainly do not have time *now* to think about what we should do. Therefore such requests typically rot in the inbox for awhile, until we are finally left with no excuse for the delay and reply with the obligatory “yes”, subjecting our professional life to stress due to scheduling mess. This section addresses three keys to successful communication: Efficient scheduling of meetings, learning to say “no”, and dealing with e-mail.

2.1 Scheduling Meetings

Meetings with students and other faculty are important for your work, and there your schedule often includes days packed with regular meetings. Here are a few guidelines that will make your time in meetings as productive as possible:

Always schedule every bit of your time. Going to the office in the morning without having an accurate plan of how you will spend your day is a sure way to waste time. Use a calendar (Corporate Time, Outlook, paper, or anything else) to allocate the time you plan to devote to your work to individual tasks. Scheduling time does not mean that you have to meet with somebody, but it could just be free thinking time that you can spend to read a paper or to think about your research.

Record all the information about the meeting in your calendar. Record the beginning, the end, as well as the location and the attendees. That way you make sure you won't need to look elsewhere and waste time.

Allocate time for popup meetings. Schedule your regular weekly meetings, and a weekly slot to assign to non-regular meetings. Every time someone asks you for your time, they can get the first available

“non-regular-meeting” slot. (And yes, it’s OK to tell someone “I am too busy to meet now, but I can meet with you in 2 weeks”).

Schedule thinking time. As assistant professors, we often give our first available slot to every person requesting a meeting. That way we spent all our time in meetings and have no time left to think (no, you cannot think at night after a day in which you packed eight meetings). So schedule thinking time so it looks “busy” in your calendar. That way, you will be less inclined to give it away.

Allocate regular exercise time. Physical exercise is important to keep you healthy and sane, and it deserves time in your schedule.

Pack your regular meetings back-to-back in a few of your weekdays. If your meetings are adjacent to each other, no meeting can last longer than scheduled. Leaving a day or two in your schedule with no regular meetings in it helps you schedule valuable, uninterrupted research time in that day.

Never schedule (or attend) a meeting without a clear agenda and goals, and without a clear ending time. Meetings with no agenda and goals are the biggest time sinks.

Hang a clock on the wall which you can look at without your visitor noticing. To avoid overtime meetings without having to look at your watch during the meeting, hang a clock right above the visitor’s head. Looking at your watch can often be misunderstood; but you can glance at the wall clock as often as you like and plan the remainder of the meeting.

Give structured time to your graduate students. Ask your graduate students to bring a notepad where they will have bulletized the items they want to discuss with you. That should be the same notepad every time. Explain to them that this way they have all your meetings transcribed, they get the best out of your (and their) time, and they have all the material available when they need to put together a paper outline. Always set a plan of action with goals for the next meeting.

When an unscheduled visitor pops up, stand. Although it may be considered rude, it helps the interruption end faster. An interruption of more than two minutes can ruin your carefully planned schedule.

2.2 Learn To Say “No”

One of the most useful lessons is that not every task is equally important. There are tasks that will be there at the end of the day and you will not have been able to get to them. There are tasks that will be there even at the end of the week, or the month, and you will not have been able to get to them. And

there are tasks from last year that, despite all your good intentions, you know will never be done. Here are some general tips:

Say No. Learn to say politely but firmly “no” if you feel that you will not have the time to show a good performance for a task. Beware of committing to something “six months down the road” because you will be equally busy, if not even busier. When presented with a choice on whether or not to commit to a task the following questions are useful:

1. “How will this help my research program (and my tenure case)?”
2. “Will this improve my standing in my department or my community?”
3. “How long will this take?”
4. “What is the deadline?”
5. “How busy am I during the period when I must devote time to this task?”
6. “Will this be fun to do?”

Only commit to this task if the answers to the above questions are favorable.

Create and maintain a task list with priorities. In the list, you will have records containing the information: *task description, importance, date due.* Knowing your tasks at every given period of time helps generate acceptable reasons why you cannot commit to a new task, and keeps you from over-committing your time. Your peers will admire your organizational skills and will complain less if you readily produce the reasons you cannot commit to what they asked you to do.

Prioritize all the tasks according to the above questions. Everything you have to do should have an importance tag, and that tag should determine its completion priority. Your task list should give strictly higher priority and more time to important and long-term tasks (e.g., a paper due next month) than to non-important and short-term tasks (e.g., an administrative report due next week).

Delegate as many tasks as possible to your administrative assistant. Try to avoid making copies, finding flight schedules, ordering items over the Internet, and printing papers. For example, you can have a special folder into which you save any papers that you encounter and would like to read. Once every few days, send an email to your administrative assistant asking them to print all the files in the folder. Although any of these tasks might seem like small time-savers, they add up to a few hours per week that can be spent on more important issues.

Schedule meetings if necessary, but only if necessary. A good schedule is to setup weekly hour-long

meetings with graduate students and with colleagues or collaborating faculty. Another good policy is to have a fixed schedule for project meetings involving several people, and to have large chunks of time during the week to meet with graduate students, but on an on-demand schedule. This gives the flexibility to selectively focus on different topics over a few weeks, while still making steady progress on bigger projects.

2.3 E-mail

E-mail is the way others will destroy your perfectly managed calendar, unless you keep a firm hand over it. Here is some advice:

- Turn off the sound/popup “you’ve got mail” notification. Do it NOW.
- Read e-mail twice a day. Once in the morning, and once at the end of the day is good enough.
- Keep your inbox empty at all times. In other words, never leave in your inbox a message you have already read. A message you read should either be
 - deleted or transferred to the appropriate message folder.
 - answered and deleted or transferred to the appropriate message folder.
 - transformed into a task and transferred to the task list and/or the calendar.

That way, you will *never* keep a message you have read in your inbox. If you do not have time to answer or organize a message, you should not be reading e-mail in the first place! We found this guideline one of the most useful; an empty inbox is a huge stress reliever.

- Install a good spam and low-priority message filter, to reduce the filtering time needed for you to process your inbox.

3 Your Duties as a Faculty Member

Time is a great teacher, but unfortunately it kills all its pupils. — Hector Louis Berlioz.

3.1 Writing Grant Proposals

Writing grant proposals can be one of the less pleasant aspects of faculty life. You have to have grants to support your group, to purchase equipment, and for travel. Writing a grant can take as much time as writing a full paper, and it is sometimes doubtful whether the money is worth all the time you invest. From our experience, writing grants can have several positive effects. First, it can help you to focus your research goals. Any grant proposal that you write requires you to think ahead about the types of problems

you would like to address. Second, it forces you to formulate your ideas in writing. Structured writing often helps to realize issues that you had not thought of when you just pondered about some idea.

One issue about writing grants is that you will be competing with the senior professors in your field — people who have an established research record and who tend to get much larger grants from funding agencies than you as a new assistant professor. The only approach that we know so far is to apply for a variety of smaller grants, to establish a good research record, and to hope that in a few years you will be considered one of the senior people in your field. There are several granting agencies that have smaller grant programs, primarily the NSF, but also agencies such as NASA, DOE, and ONR have special grant programs for new faculty. Another approach is to team up with a larger group of faculty in your department and to write a joint grant that benefits the whole group. No matter which approach you follow, planning which grant announcements you will respond to, and allocating time in advance for writing proposals is a great start for successful proposals.

3.2 Professional Service

It seems that as a new faculty member, you have suddenly become very popular among a large group of people. Members of editorial boards of journals will contact you to review papers for them, you will be invited to serve on program committees and proposal review panels, you will receive invitations to give talks, and you will be asked to serve on college- or university-level committees. Juggling these tasks efficiently requires good scheduling, but even more good judgment to select the important tasks, filter unimportant tasks, and accept only those you have time to perform while maintaining high standards.

3.2.1 Journal Reviews

Journal reviews are an important service to the community, and you should make sure that whenever you accept a review, you will finish it on time and devote some time to giving the authors good comments. Journal reviews have the fortunate(?) property that they are not immediately due, and thus it is easy to say yes since the review is only due in two months — creating a big backlog at some time in the future. Thus only accept journal reviews if you know that you do not have already several other reviews outstanding, and take your other duties (including upcoming events) into account. One approach that has worked for us is to start journal reviews right away: Give the paper to one of your students and schedule a meeting to discuss the paper within a couple of weeks. During

this time you also read the paper carefully. Then in a meeting with the student, you discuss the review, and the student writes a first draft that you can then later revise. This way we teach our students how to write good reviews, and at the same time there is a deadline by when the review will be well underway.

3.2.2 Program Committees

It is important to accept program committee work. It significantly improves your level of exposure to the community, and it offers you a valuable overview of the current research in your area of interest. Often, however, invitations exceed your capacity. Although it is a true honor to be in a program committee, if you over-commit yourself you will not complete the task as well as you should, thereby hurting your image in the community. Therefore, accept only the committees you can indeed do a good job in, and do it. *Important note:* If you give papers to students to review, make sure to also review them yourself.

3.2.3 Proposal Review Panels

Proposal review panels (e.g., NSF review panels) are a good way to learn how to write a good grant proposal. As you evaluate your assigned proposals, you will notice what makes a good proposal and what reviewers are looking for. At the panel review, you have the opportunity to interact with your peers and listen to their point of view when evaluating the proposals. As in program committees, you should not underestimate the workload a review panel involves, and you should only accept if you know you will have enough time to do a high-standard evaluation.

3.3 University Service

Most new faculty members do not have to perform much university service in their first three to six years. Especially when you start out as a new faculty member you do not have much of an overview of the different connections between departments and colleges within your university, and committee work may seem quite arduous. After a few years though, you will have realized the importance of certain committees, and you might even play a role in shaping the development of a new area within your university.

There are always cases where it is clearly beneficial for you from the start to serve on a committee. One example is the departmental graduate student admissions committee which allows you to get a look at the students that apply to your department (although beware: The workload in the admissions committee is usually high.) Another example might be a recruiting committee of another department that is planning to hire a faculty member in your (broad) area of interest.

3.4 Teaching

It is very easy as a new faculty member to invest what seems like an infinite amount of time into teaching, as you will receive immediate reward. Students will like you, they will come to your office hours, you will get applause after class, and your classes will become popular and large. But recall that your job is based on a combination on teaching and research, and that without an outstanding research portfolio within six years it is very unlikely that you will get tenure. In fact, for most tenure-track positions, what counts is your research as long as your teaching is above a threshold.¹

This does not mean that you should neglect teaching, but be careful that you do not invest too much time into it. Negotiate to teach a course that you have taught as a graduate student, or teach a course where you have been teaching assistant. Ask and receive as much material (slides, notes, exams, homeworks) from others who have taught the course before, use material from colleagues at other universities who have taught a similar course, or use a textbook that comes with plenty of teaching material.

3.4.1 Lectures

Try to keep the preparation for each lecture to a fixed number of hours. If you are preparing slides, this means literally that you limit the number of minutes that you spend on each slide. If you have taught the class before, print the slides out early and go over them before class. You will also need to schedule time before classes start for the semester to delegate homework and recitation-related tasks to the TAs (if applicable). If this is a new class: you will need two to three full weeks before the semester to set everything up, plus two to three hours per class during the week.

3.4.2 Office Hours and E-mail

Clearly differentiate between your graduate students and group members and other students who are taking one of your classes. Be available even on a very short notice for the former group, but develop a routine on how to maximize your efficiency of interaction with the latter.

Be available during one or two hours of office hours per week, and answer questions directly after class when students approach you. Strongly discourage students to show up randomly at other times as it may interrupt your day.

Batch answering emails from students to one big session once a day. Keep a policy about which

¹Note that this could be very different for faculty members at teaching colleges instead of research colleges.

emails you answer. Answer questions about the lectures or clarifications about homework and project statements, but forward all emails concerning specific questions about a homework or course projects to a teaching assistant. If an email requires a very cumbersome reply, just offer to talk with the student after class or during office hours. If you have several teaching assistants, divide their responsibility of answering email messages. According to our experience, a good way to divide time is to assign a fraction of the weekdays to each TA. Another way is to assign "epochs" of e-mail messages to each TA who is responsible for each homework. Each homework has a start and an end date, which define an epoch. That way, each TA is responsible for a subset of homeworks and addresses all related requests. For students who cannot make it to your office hours, you can offer to schedule an appointment outside your regular office hours. Experience says that students hardly ever ask for an appointment; they prefer to come during the posted office hours.

3.4.3 Grading

If a student has a regrade request about a homework, first ask whether the issue can be resolved with the teaching assistants directly. Only if mediation is necessary, look at the request. Ask students to submit all regrade requests about exams in writing and within a few days from the time they receive their exam results. Warn students that a regrading request will cause the entire exam to be regraded, and thereby the overall grade can increase or decrease.

If you give an exam, always have the exam solved beforehand. Exams and homeworks can be handed back after class by a teaching assistant or at a central place in the department. You can ask qualified TAs to come up with questions which you then modify, and return the exam to the TAs for generating the solutions — again, all this before the exam.

At Cornell, exams that are held outside of class are usually given in the evening, starting at 7:30pm. We then grade the exam with the teaching assistants starting at 10pm until we finish, often late into the night with the benefit that the grading is constrained to that one night. In the Database Group at Cornell, we have the tradition of asking the whole group to help out during the first one or two hours of grading and we bribe students (and faculty) with free pizza. This parallelism greatly accelerates the completion of questions that are difficult to grade, such as questions asking students to write SQL queries or relational algebra expressions.

3.5 If You Feel Overloaded

If you think that your workload is too high or you think you are spending too much time in committees, talk to your chair. The chair can give you time off teaching, he can allocate you a semester where you only have to teach a seminar in your area, and he can release you from committees.

4 Conclusions

Time is the most valuable thing a man can spend. — Laertius Diogenes.

Being a faculty member is the best job that we can imagine: You have the academic freedom to define your own research agenda; you see graduate students who are eager to learn to grow from fighting with reading assignments on research papers to producing original research; you interact and collaborate with colleagues at your department who are the experts in their fields; and you have become part of the larger database research community where you can play a role in shaping the goals of this community and where you will make friends that last a lifetime. Welcome on board and enjoy the ride!

Acknowledgments. We collected material from many sources for this article. Mark Hill's website² has a lot of useful links for new faculty, including his advice on oral presentations.³ Randy Pausch has a great set of slides on time management on his website.⁴ Tomorrow's Professor Listserv is a mailing list with postings twice weekly covering a wide range of topics from academic careers to research and teaching and time management.⁵ The CRA Academic Careers Workshops always contain an informative section on time management.⁶

About the authors. Anastassia Ailamaki is an Assistant Professor at Carnegie Mellon University. Although she seeks every imaginable resource to improve her time management skills, at the end of the day she still wonders "where does time go." Johannes Gehrke is an Assistant Professor at Cornell University. He has determined that time management is NP-hard and is carefully tuning heuristics.

²<http://www.cs.wisc.edu/~markhill/>

³<http://www.cs.wisc.edu/~markhill/conference-talk.html>

⁴<http://wonderland.hcii.cs.cmu.edu/Randy/timetalk.htm>

⁵<http://ctl.stanford.edu/Tomprof/index.shtml>

⁶<http://www.cra.org/>