Work Load Credit
Plan B

Policy:

1. Teaching/Advising/Service workload is to be measured in a point system with points valued about half of the current work load credits. Tenure track faculty must earn 30 points per year. Lecturers must earn 36. Points are awarded for advising, large classes, critical departmental service, etc., as described in the chart below.

2. All faculty members must teach at least one undergrad class per year.

3. Points may be "banked" (i.e. saved for later use) essentially forever. Banked points can be used for smoothing. In other words, they can make up for fluctuations in numbers of students or size of classes. Or someone might teach three courses one year and two the next. They can also be used for teaching leaves. Because the department must be able to plan, all requests for a change in usual teaching load must be made in the fall of the previous year, at the time that teaching preferences are declared. Approval of the requests will be typical but not guaranteed – satisfaction of the department's overall teaching responsibilities is foremost.

4. Points may be awarded by the chair to support academic initiatives. A process for applying for these awards will be defined.

5. Point assignments:

a. Organized classes (per class):

- Standard size: 2 points for each credit hour (i. e., 6 points for a standard three hour course)
- Large: up to 4 points, on a sliding scale, for each credit hour (i.e., up to 12 points for a more than 200 person, three hour course)
- Writing component: 2.5 points for each credit hour (i. e., 7.5 points for a three hour course with a significant writing component).

b. Individual instruction (per student-semester):

- CS370 1
- CS379H 2
- CS395 1.5
- Masters Thesis candidate 1.5
- PhD Thesis candidate 3.5

c. New Faculty Allowances (per semester)

- Assistant professor in first two years: 9
- Assistant professor after first two years 6
- Tenured new faculty to be negotiated at time of hiring

d. Departmental Service Allowances (per year)

- Department chair - 24
- Associate department chair(s) - 12-24 (negotiated based upon responsibilities)
- Chair, PhD admissions committee: 6
- Member, PhD admissions committee: 3
- Graduate advisor: 9
- Turing Scholars Director: 12.
- Faculty recruiting ? (possibly dependent upon number of slots)
- Other significant standing or ad hoc service responsibilities ?

5. Leaves. Faculty who are very active in research and have many student advisees will easily accumulate extra points (see some typical scenarios, below). Faculty who are less active may accumulate extra points at a lower rate. Subject to advance warning requirements and needs of the department, faculty may use these excess points for leaves. Our goal is that most faculty should be able to take a one-semester leave every seven years. We need to set the cost of a leave (in points) so that this happens. It looks like (see the scenarios) that it should cost about 45 points to go on a one semester leave. So, in essence, to earn a leave you must bank 3 points for every leave point. We may also want to set a minimum time, e. g., three or four years, between leaves.

Example scenarios (considering academic years):

a. Assistant professor in first year: He/she teaches one undergrad and one graduate course and earns 12 points in addition to the 18 point credit for new assistant professors. This meets the 30 point requirement. For every advisee, extra points are earned toward a leave.

b. Tenured professor very active in research: He/she teaches one undergraduate and one graduate course and earns 12 points. In addition, he/she has three PhD students in candidacy (21 points), three younger PhD students (9 points), one masters student (3 points), and two undergraduates taking CS 370 (4 points). This is a total of 49 points and thus a surplus of 19 points for the year. At this annual rate, the professor will earn one semester of leave every three years.

c. Tenured professor moderately active in research: He/she teaches one undergraduate and one graduate course and earns 12 points. In addition, he/she has two PhD students in candidacy (14 points), one younger PhD student (3 points), two masters students (6 points), and one undergraduate taking CS 370 (2 points). This is a total of 37 points and thus a surplus of 7 points for the year. At this rate, the professor will get one semester off every 6.5 years.

d. Tenured professor modestly active in research: He/she teaches three classes per year including at least one undergraduate and one graduate course and earns 18 points. In addition, he/she has one PhD student in candidacy (7 points), and three undergraduates taking CS 370 (6 points). This is a total of 31 points and thus a surplus of only 1 point for the year. The minimum has been reached but there won't be a leave unless major service roles are assumed or large classes are taught.

e. Tenured professor inactive in research: He/she teaches four classes per year including at least one undergraduate and one graduate course and earns 24 points. In addition, he/she has one masters student (3 points), and two undergraduates taking CS 370 (4 points). This is a total of 31 points and thus a surplus of only 1 point for the year. Again, the minimum has been reached but there won't be a leave unless major service roles are assumed or large classes are taught.

f. Lecturer: He/she teaches six standard sized classes per year to earn the requisite 36 points.

g. Lecturer with large classes: He/she teaches two large classes (18 points per year) plus three standard sized classes (18 points per year) to earn the requisite 36 points. If only one .large class is taught per year, the lecturer will teach five standard-sized classes most years but only four every third year thanks to the banking.

h. Lecturer with advisees: He/she teaches six standard sized classes per year to earn the requisite 36 points but also advises two undergraduates per year for a total of 40 points and thus a surplus of 4 points for the year. The lecturer could use those points to smooth if, at some point, there's not quite a full time load to assign.

Goals that Motivated this Plan:

- Create a system that is fair, transparent, and predictable to everyone. We do not want a system that puts undue burden on the department chair to make qualitative decisions about who is next in line to take on extra work. We do not want to encourage disputes.
- Provide incentives so that everyone pitches in to get the necessary work done. This work includes not just the teaching of organized classes but also other activities. In particular, the department is committed to providing research opportunities to all Turing Scholars. In addition, the university is committed to providing more research opportunities for all students. So we must have a scheme that offers incentives for taking on undergraduates, both in 370s and in 379H's.
- Make leaves more frequent for more active researchers but not exclude anyone entirely.
- Make sure that there are no incentives to contort the system in unproductive ways. For example, we do not want there to be an incentive to prevent a PhD student from graduating just to keep getting credit for him/her. Any sort of threshold points system is likely to create such an incentive for an advisor who is about to fall below the threshold for some important reward like a leave.

Why keep a Point System when we finally have a chance to get rid of it?

Almost without exception, complex economic systems are based on some sort of currency (government-issued scrip, gold, or whatever). Call it money. Money is the way to decide how much my giving you potatoes is worth compared to you building me a house. Without money, any exchange system will become hopelessly Byzantine. Points are our money. By using points, we avoid major pitfalls associated with other kinds of systems. In particular:

- Plan A has thresholds instead of the gradual accumulation of points. Thresholds can contort behavior in a lot of undesirable ways. For example, someone might think, "I'm over threshold on my responsibility so I win nothing if I take on that extra undergrad who comes knocking at my door". Or someone else might think, "I'm not close to making the threshold so I'm going to have to have to teach an extra class and I'm not going to get a leave anyway, so I win nothing if I take on that undergrad who comes knocking at my door." One of the most pernicious consequences of a threshold for measuring research by counting PhD students is that it might induce someone who was close to missing the threshold, say for earning a leave, to force a student to stick around.
- Plan C replaces money with the chair's discretion. That's unpredictable to the faculty and places an undue burden on the chair.

The two major responsibilities of the faculty do are teaching and research. Some people do more of one and less of the other. We need a way to measure research involvement so that we can create a system in which the people who choose to be less active in research will play a greater role in teaching. Counting graduate students is one way to do that. There are other ways, but they have pitfalls. For example:

- We could measure research activity by how much research money is brought in. This is attractive because managing research grants is time-consuming. But using money as the measure has a widely disparate impact on some research areas as opposed to others. We don't want that.
- We could leave it up to the chair to decide who is "research active". But that invites the sort of invidious comparisons that will create rifts and ill-will within the faculty.