This document: what it is and isn’t. This document aims to help MSCS faculty (and, perhaps, prospective faculty) better understand departmental culture, especially as it relates to mission, service and student-related activities. It reflects departmental values and expectations that, inevitably, play a role in our evaluations, formal or informal, of each other’s work in these areas.

The “big tent philosophy”

St. Olaf College has a decades-long record of success in attracting students to mathematics and allied fields. We subscribe, in our own parlance, to a “big tent philosophy” (BTP): we see our disciplines as useful for and accessible to a large majority of students, not just a small elite. Our quantitative success, moreover, has not come at the expense of quality: our graduates are notably successful in further education and in mathematics-related professions.

We attribute our success to several factors. First and most important is the student-centered nature of our program. We believe that all students benefit by seeing and studying as much of our disciplines as possible, inside and outside of classrooms, and we work to build a broad “culture” that supports this cause. We support, for example, a weekly colloquium and newsletter, an informal problem-solving group, student chapters of Pi Mu Epsilon and the Association of Computing Machinery, and a wide variety of social events.

A BTP offers us several advantages:

• A BTP’s welcoming approach is consonant with St. Olaf’s larger institutional values. As our mission statement declares, “St. Olaf College strives to be an inclusive community, respecting those of differing backgrounds and beliefs.”

• A BTP reflects our own passion for and desire to share our disciplines. We believe mathematics and allied fields can be studied by students of all backgrounds, preparations, and interests—whether they aim for a PhD in one of our fields or take just a single course for general education credit. Regardless of their plans and interests, students will benefit from the analytical and reasoning skills they acquire from studying our disciplines.

• A BTP supports St. Olaf’s commitment to the liberal arts. Believing that students benefit from studying a variety of subjects, including mathematical ones, we welcome involvement of both majors and non-majors. We see studying our disciplines at any level as an integral part of a well-rounded education.

• With a BTP in place we can both hire and support more faculty and in turn, benefit our students, through a larger menu of courses, more scheduling flexibility, and greater capacity to prepare students aiming for advanced degrees.

We acknowledge that the BTP is not the only defensible approach a department like ours might take towards its major. A “gold standard philosophy,” for instance, might aim more narrowly than we do at graduate school preparation as a measure of success. Operating under a BTP may also require additional teaching effort to help a broad cohort of students succeed. The main point is not that one philosophy is right and the other wrong; it’s that we’ve chosen one alternative and believe that its costs are worth paying relative to its benefits to us.
General expectations of MSCS faculty

In support of our program and its goals and philosophy, MSCS faculty have developed various habits and expectations. Here are some samples.

Availability to students and other faculty. Regents Hall of Mathematical Sciences should be a lively place full of interactions among students, faculty, and staff. Normally, faculty are expected to be on campus at least 4 days a week, although travel to conferences or other unusual obligations may reduce that number slightly. We typically provide 4–5 well-publicized office hours weekly, spread across 3–5 days. During these times any student can drop by any faculty office. Office hours are typically posted outside offices, in course syllabi, and by electronic means, including St. Olaf’s on-line directory. In practice many faculty make themselves available for brief interactions with students and with other faculty by leaving office doors open for much of the day, through e-mail, and the like.

Focused scholarly activity. At some time each week many faculty members find quiet space and time to focus on individual professional activity. This may occur in offices (with doors closed), in the library, or elsewhere. If this focused time is scheduled during the normal work-week, it is helpful to students and colleagues to have that time publicized just like office hours.

Department, program, and full-faculty meetings. MSCS meetings are held almost every week. All MSCS faculty should attend and participate. Individual programs (e.g., mathematics, statistics, computer science) may also meet weekly; program members should attend those meetings, too. General St. Olaf faculty meetings occur monthly; all faculty should attend.

Departmental service. MSCS departmental life goes well beyond its classroom offerings, including such things as departmental committees, arranging colloquia, the MSCS Mess newsletter, course placement, contests, event planning, peer mentorship, etc. All MSCS faculty (tenured, non-tenured, and non-tenure-track) are expected to do their share in making these things happen, with some needing to take leadership roles; “volunteer opportunities” are available every semester. Newer faculty are more likely to take on tasks (e.g. edit the MSCS Mess), while more seasoned faculty are expected to play bigger roles (e.g. lead a departmental committee).

Student advising. Tenured and tenure-track faculty members (after their first year) are expected to have student advisees. First year students are assigned advisors by the registrar, and need not be MSCS majors or concentrators. Older students, typically majors or concentrators, may request a particular faculty member to be his or her advisor. Advising loads vary widely across the college. It is not unusual for MSCS faculty to advise around 20 students, but faculty are encouraged not to accept more than 25.

Service to the college. All tenured and tenure-track faculty are expected to contribute “service and leadership within and beyond the institution” (from the Faculty Manual, Section 4.VII.3). Other than service to the department as described above, faculty are expected to serve on college-wide committees, contribute to institutional projects, enrich the community with one’s professional expertise, and generally serve the mission of the college. In MSCS we expect faculty contributions in this category to vary somewhat according to one’s accumulated time at the college, as well as career stage. Tenure-track faculty in their first year or two are expected to advise students and serve the department as described above, but are not expected to stand for college-wide election. Tenure-track faculty past their first 2-3 years are expected to serve beyond the department, perhaps in the NSM or other parts of the college. Tenure-track faculty in years 3-6 should volunteer to stand for college-wide election or look for other
ways to contribute to the mission of the college beyond the confines of MSCS. Tenured faculty will continue to serve the college in a variety of ways in between their sabbaticals, taking on bigger responsibilities and leadership roles suited to their interests and skills.

**Time away from class.** Travel to conferences, illnesses, personal matters, and more can result in a faculty member being away from a regularly scheduled class meeting. Every effort should be made to obtain class coverage from a department colleague, and, vice versa, department members are encouraged to help one another out as needed. Travel to professional conferences is encouraged, but faculty members should not miss more than 1-2 days of class per semester. It is college policy that faculty members must inform the Chair of their travel plans in advance. The college also has a policy regarding coverage of courses for long-term illnesses.

**Beyond-the-classroom events in MSCS**

The department organizes and hosts many events and activities through the year, with varying mixtures of academic, informative, and social purposes. Here are some examples, in categories.

**Weekly or frequent departmental events**

- **Colloquia.** For many years the department has sponsored a weekly student-focused colloquium, with topics varying among mathematics, statistics, and computer science. Consistent with our BTP, we try hard to ensure that talks are interesting and accessible to students at about the linear algebra level. Students and faculty are encouraged to attend.

- **Research seminar.** Talks in this (approximately) weekly event usually aim higher than in the weekly colloquium; the presumed audience is faculty and a small number of more advanced students. Interested faculty and students are encouraged to attend.

**Annual special MSCS events; most faculty attend**

- **Tailgate party.** This early October event usually involves a colloquium or series of short talks, often centering on sports followed by a cookout and information session when students find out about the many opportunities studying in MSCS can offer. All MSCS students are welcome, especially students in introductory-level MSCS courses; faculty are strongly encouraged to participate either in the colloquium itself or as cooks and organizers.

- **MSCS recital.** For many years the department has hosted a Spring recital and talent show, with student and faculty performers welcome. Faculty are strongly encouraged to attend—and to contribute either to the talent or to the snack menu.

- **Senior banquet.** In late April or early May the department hosts an on-campus banquet for graduating MSCS majors and concentrators. Faculty are expected to attend and to contribute to the program.

- **Commencement reception.** Commencement always occurs on the Sunday of Memorial Day weekend. The department hosts a late-morning reception for graduating seniors and their families. Faculty are expected to attend the reception and the Commencement ceremony.
Annual general-audience events; many faculty attend

- **Math Across the Cannon.** Each year St. Olaf and Carleton jointly sponsor a colloquium and a public lecture by a prominent mathematical scientist. Each school hosts one talk and organizes social events. All students and faculty are strongly encouraged to attend.

- **Kleber-Gery Lectures.** Each year, the Economics and MSCS departments sponsor a speaker of interest to both departments. The two departments usually alternate in inviting speakers, most of whom give both a research colloquium and a public talk. All faculty are encouraged to attend.

Annual student-oriented events; some faculty attend

- **Graduate school information nights.** Each fall the Statistics and the Mathematics programs schedule (separate) events. A panel of alumni currently in graduate school serve as resources. Graduate school-intending students are the principal audience; a few faculty organizers from each program are expected to attend, though all are welcome.

- **Northfield Undergraduate Mathematics Research Symposium.** Each fall St. Olaf or Carleton host a joint research symposium, featuring mathematics research by students, whether through a summer REU or some other channel. Presenters pitch talks at their student peers. Students from both colleges attend; mathematics faculty are encouraged to hear at least some talks.

- **REU information nights.** These might occur in early spring, before summer REU applications are due. A few faculty organizers from each program are expected to attend, though all are welcome.

- **Women in MSCS night.** Each year the department holds an evening event to discuss issues and opportunities for women in MSCS. Women students, alumnae, and women faculty are encouraged to participate.

Recurring student-oriented events; a few faculty attend

- **Problem solving practice and competitions.** Meeting one evening weekly all year, one faculty member leads and advises the problem solving group; all interested students are welcome. The group participates in at least two annual on-campus contests (the MAA-NCS team competition in mid-November and the Putnam in December) and also in the annual Konhauser Problemfest at an area college each February.

- **Game nights.** The department maintains a wide variety of board games in its 6th-floor lounge. Occasional informal evening game nights are organized. Students are encouraged to attend; one or more faculty organizers and attenders are always needed.

- **GRE prep sessions.** These are held about weekly for the first two months of spring semester; one mathematics faculty member organizes and leads the activity.