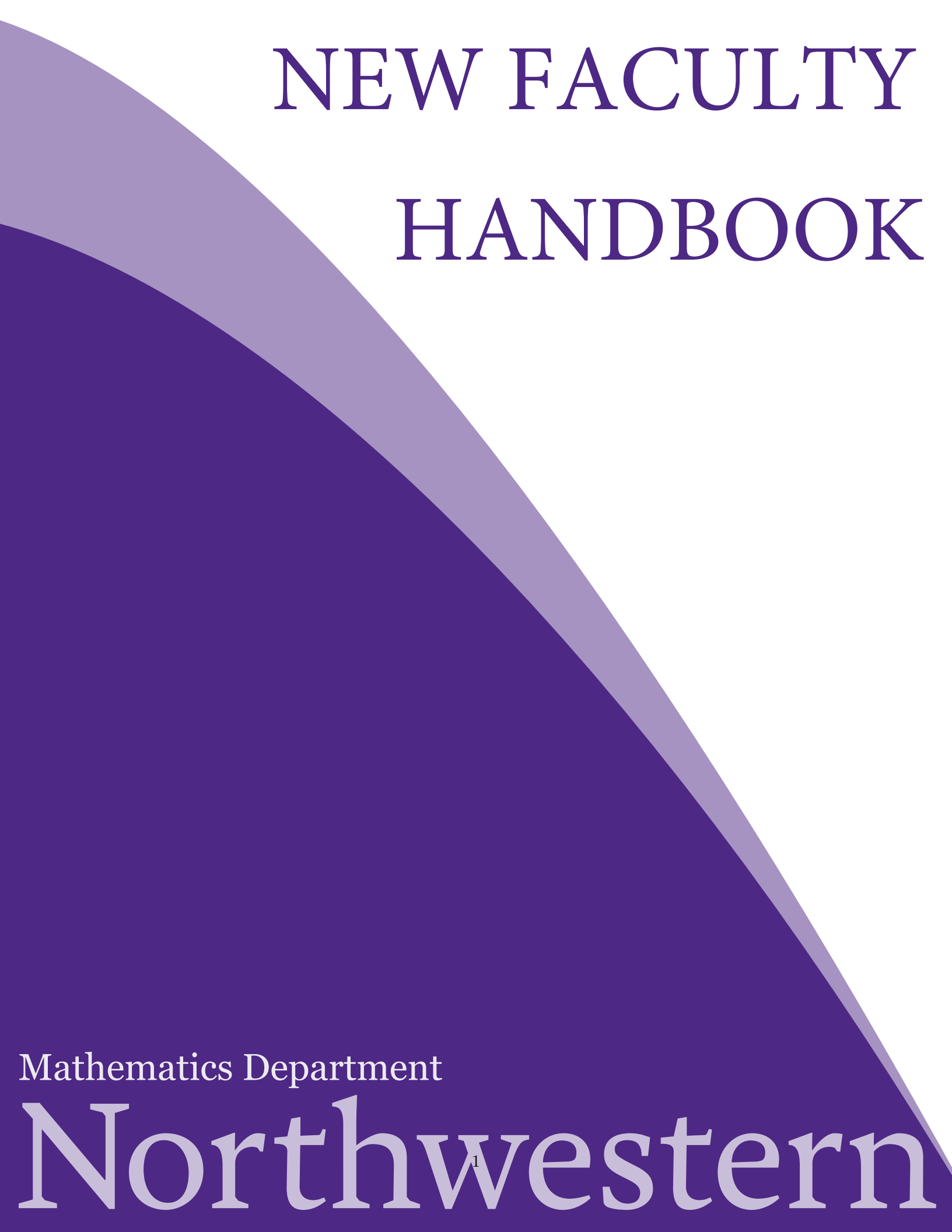


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NEW FACULTY HANDBOOK

Mathematics Department

Northwestern



Northwestern University Mathematics Department, 2026

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Last updated: September 14, 2026

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1 Department Contacts

Contact	Topics
Chair Antonio (Tuca) Auffinger (tuca@northwestern.edu, 1-5524)	
Associate Chair Aaron Peterson (aaron@northwestern.edu, 7-1298)	Scheduling
Director of Graduate Studies (DGS) Jared Wunsch (jwunsch@northwestern.edu, 1-5580)	Graduate Courses 400-599
Director of Undergraduate Studies (DUS) Aaron Greicius (dus-math@northwestern.edu, 7-0486)	Undergraduate Courses 250-399
Director of Calculus Maria Nastasescu (calculus@math.northwestern.edu, 1-5519)	Undergraduate Courses 100-240
Director of MENU Aaron Brown (F,S) (menu@northwestern.edu, 1-3738) Gabor Szekelyhidi (W) (gaborsz@northwestern.edu)	Courses 290/291/311/321/331/360
TA Coordinator Sonja Mapes (smapes@northwestern.edu)	Teaching Assistants
Undergraduate Program Assistant Jenima Lyon (jenima.lyon@northwestern.edu, 1-3377)	Textbooks, Rooms, Schedule
Graduate Program Assistant Eric West (eric.west@northwestern.edu, 1-8035)	Textbooks, Rooms, Schedule
NUIT (consultant@northwestern.edu, 1-HELP)	General IT Help
Business Administrator (BA) Deavon Mitchell (deavon.mitchell@northwestern.edu, 1-3131)	Finances and Travel
Financial Program Assistant Alicia Lederer (alicia.leder@northwestern.edu, 1-8017)	Finances and Travel

2 Getting Started at NU

Intake Checklist for New Faculty.

1. Establish your NU and Math identities.

During the summer, you should have received both a NetID and an EmplID from Weinberg College along with instructions on how to activate them. See Deavon Mitchell if this did not happen.

2. Verify information in your HR profile

Verify that your personal information is in the Human Resources system. Deavon or Alicia can provide this information, or you can call 7-6843 to verify your status.

3. WildCARD

Obtain a WildCARD from the WildCARD Office (Your WildCARD is your university identification.) Bring a picture ID (driver's license, state ID, or a valid, unexpired passport) to the WildCARD office in the underground level of Norris University Center during regular business hours.

4. Math Library Access

E-mail Deavon Mitchel to make sure your WildCARD gives you access to the Lunt math library.

5. Keys

See Eric West to receive your office and building keys. (NOTE: \$20 deposit is required to obtain keys, except for Tenure-Line Faculty).

6. Headshot Photo for Math Department Website

Please e-mail Jenima Lyon a jpeg file.

Prepare for your courses.

1. Find your teaching assignment(s) for the year on the page

<https://www.math.northwestern.edu/undergraduate/courses/current-year-courses/index.html>

Additional details (like room, TAs, etc) appear on the schedules for each quarter:

<https://www.math.northwestern.edu/undergraduate/courses/current-year-courses/fall.html>

<https://www.math.northwestern.edu/undergraduate/courses/current-year-courses/winter.html>

<https://www.math.northwestern.edu/undergraduate/courses/current-year-courses/spring.html>

Changes (especially with room assignments) may sometimes occur very close to the first day of classes, so you should verify your assignment on the day before classes begin.

2. Obtain syllabi for your courses from the appropriate person in the contacts table.

3. Obtain a desk copy of the textbooks for your courses. See Eric West.

4. Find your classroom(s). Know where your classrooms are and how long it will take you to walk there. Note whether your classrooms have a blackboard or whiteboard and note the technology available in the room. Practice using the technology before the first day of class.

3 Getting Around in the Department of Mathematics

3.1 Administrative Platforms

Smartsheet

The Department uses Smartsheet to collect, organize, and display information (like course assignments, visitor requests, committee requests, etc). Instructions for logging into Smartsheet are posted on the intranet page under DATABASE DATA ENTRY (PASSWORD REQUIRED), and are also included as an appendix.

PlanIt Purple (Department Calendars)

The Department uses PlanIt Purple, Northwestern's central event repository, to schedule events like seminars, colloquia, and other meetings. Instructions for using PlanIt Purple are posted on the intranet page under DATABASE DATA ENTRY (PASSWORD REQUIRED), and are also included as an appendix.

Other Systems

The University uses many other software system to manage parts of its operations. The NUPortal provides links to access each of these systems. The intranet page contains a link to NUPortal.

3.2 Presence on Campus

Faculty Absences - More than a week

If you have a quarter without teaching, you are still expected to be generally present on campus. According to Weinberg College policy, a consecutive absence of more than a week during a quarter in which you are not on approved leave requires permission from the chair. A consecutive absence of more than two weeks requires permission from the Dean's office. Please send Tuca Auffinger an email if you're planning such an absence.

Empty Office?

If your office will be empty for any reason (even one or a couple of days!) and you are willing to allow a visitor to use it, please fill in this form:

<https://app.smartsheet.com/b/form/13d9e6ff13d948599899d9175ab5335d>

3.3 Building and Access Information

Daily Teas

During the regular academic year, with few exceptions, teas are held Monday through Friday in the Common Room at 3:45 p.m. All are encouraged to participate and to bring their own mug. Mugs and espresso cups in the cabinet above the sink are reserved for guests and short-term visitors.

Common Room Kitchen

The kitchen is located inside the Common Room. Please clean up after yourself. The refrigerator will be cleaned out on a quarterly basis. Espresso is available for purchase inside the office for \$1 per 2 pods.

Lunt Hall Facility Questions

If anything needs repair, e-mail staff@math.northwestern.edu with a description and location of the problem.

Mail

Mailboxes are located outside the Math Office, room 201. The University mail system should not be used for personal mail. Please provide staff with address changes and specific forwarding dates. As a courtesy, the staff will forward all first class mail and journals for 3 months. Do not leave valuable items (electronics, cash, textbooks, etc.) in mailboxes. Things could go missing and the Department will not be able to reimburse for your loss.

3.4 Event Planning and Guests

1. Special Event Planning

E-mail Eric West.

2. Visitors

Use the Visitor Request Form on the intranet page to request office space and hotel reservations for visitors.

3. Reimbursement

E-mail Alicia Lederer.

See the Financials page on the Department website for information on submitting reimbursement requests, requesting purchases, and other financial topics.

3.5 Meal Reimbursement

Group Meal Reimbursement

The College and Department have limits on reimbursement for group meals. See the “Mathematics Department Group Meal Reimbursement” appendix for detailed information.

Grading Meal Reimbursement (“Pizza Policy”)

To facilitate efficient scoring of examinations for large coordinated courses, the Department will subsidize a portion of the meal.

Midterms: For grading parties of 12 or more during the day, or for grading parties of 8 or more in the case of evening grading.

Finals: For grading parties of 8 or more at any time of day.

Policy: In either situation the department will fund \$4 per person per midterm, or \$5 per person per final exam, with everything beyond that paid by the grading party. It doesn’t have to be pizza: you may apply these funds to, e.g., Alinea takeout if you wish.

3.6 Department By-Laws

By-laws govern Department processes involving hiring, reappointment, and promotion. You can find these under the DEPARTMENT BUSINESS section of the intranet page.

3.7 Department Office Holders, Committee Assignments, and Representatives

Department office holders, committee assignments, and representatives can be found through the Department intranet page.

3.8 Teaching Load for Tenure-Line Faculty

See the document “Tenure line course load”, available on the intranet page, for information about the course load of tenure-line faculty.

4 Teaching in the Department of Mathematics

4.1 Northwestern's Academic Calendar and Systems

The Quarter System

Northwestern operates on a quarter system: fall quarter runs from mid-September through early December; winter from early January through mid-March; spring from late March through early June. Each quarter is approximately 10 weeks long. The registrar's calendar web site links to the official calendar for each academic year.

Reading Period

The last 3-5 days of each quarter are a Reading Period. *You may not administer examinations or require students to submit assignments during Reading Period.* During Reading Period you may hold reviews or elect to not to have any class meetings. Any new material presented should not be assessed on the final examination.

Canvas (Learning Management System)

The Canvas (<https://canvas.northwestern.edu/>) learning management system has many useful features for managing your courses and communicating with your students, including an online gradebook. Student names appear automatically in Canvas once your course is activated. Activating your Canvas account requires a NetID and your name needs to be listed as the instructor of the course by the Registrar's Office (check with Jenima Lyon to see whether this has been done).

CAESAR (Student Data System)

With your NetID you can also access CAESAR (<http://www.northwestern.edu/caesar/>), the online grading, registration, and student management system. There you can obtain a class list with students' pictures under "Instructor/Advisor – My Classes – Class Roster" (be sure the correct term is selected). This is an effective tool for learning student names. CAESAR is the portal where you will enter grades at the end of the quarter. Be very careful if you choose to print your roster, as the roster contains sensitive student information (student ID number and picture). If you choose to print your roster, be sure to shred it at the end of the term.

Crowdmark

Northwestern has an institutional license for Crowdmark, an online grading platform. Reach out to Aaron Peterson for guidance on setting up and using Crowdmark in your course.

4.2 College Teaching Policies

The college teaching policies are collected in the document *Teaching in Weinberg College*, accessible on the college's Teaching Guides and Resources page (linked to from the intranet page).

4.3 Courses

4.3.1 Coordinated vs Non-Coordinated Courses

Coordinated Calculus Courses

Math 220-1, 220-2, 228-1, and 230-1. These multi-section courses run “in lockstep,” with shared syllabi, common midterm and final examinations, common homework assignments, and pooled discussion sections. The course materials and syllabus for coordinated calculus courses are set by the Department. For more detailed information, see the appendix “Coordinated Calculus Courses”.

Other Common Exam Courses

Math 218-1,2,3; 230-2; 290-1,2,3; and 310-1,2,3. These multi-section courses also have common homework and examinations, but the discussion sections are not pooled. The course materials and syllabus for common exam courses are set by the Department. See the “Policy on Common Examinations” appendix for more information.

Graduate Courses

Faculty assigned to graduate courses for the first time should consult with the Director of Graduate Studies about expectations for student work, evaluation, and grading standards.

Non-Coordinated Courses

Most courses are not multi-section coordinated courses. In a non-coordinated course, the instructor generally has the ability to control the course materials and syllabus (at long as the course objectives set by the Department are satisfied). In some exceptional circumstances (such as courses taught for special programs), the instructor does not have as much control.

4.3.2 Course Schedule

Lectures

Generally, courses meet each week for 50-minute lectures on Mondays, Wednesdays, and Fridays. Because the campus is large and students may have a class immediately following yours, you must end your class meetings on time.

Discussion Sections

Only undergraduate courses have discussion sections. On Tuesdays or Thursdays at the same hour¹ as the corresponding lecture, students meet with a Teaching Assistant (TA) for a 50-minute discussion/quiz section.

Ordinarily discussion sections do not meet during the first week of classes or during Reading Period. Some instructors² opt to lecture during the discussion section scheduled in the first week of classes to provide some momentum for the course. Instructions on how to organize this additional lecture are emailed by the Director of Undergraduate Studies the week before classes begin. Notify your students and teaching assistants whether or not class will meet during the discussion section

¹For coordinated calculus courses, the discussion sections are pooled and students may enroll in a discussion at a different time than their lecture.

²This is not possible for coordinated calculus courses.

time during the first week of the quarter and during Reading Period.

See the appendix for guidelines on how to properly utilize the discussion section for your course.

4.3.3 Important Enrollment and Teaching Policies

Students requesting permission to miss discussion section

Due to time conflicts, students may ask for permission to register for lecture and discussion sections that are not linked, usually because of a time conflict with another course they wish to take. Department policy does not allow this in any 100- or 200-level course (except multi-section coordinated courses with coupled discussions, like MATH 230-2, MATH 290, and MATH 310). In 300-level courses, the student should be referred to the Director of Undergraduate Studies, who will consult with the course instructor(s) before making a decision. With few exceptions, Weinberg will not approve time-conflict requests if the conflict exceeds 10% (usually 20 minutes) of your weekly class time.

Students seeking to add your course

The Department controls course enrollments centrally to ensure students are treated equally and fairly across our curriculum. A student who asks (orally or by email) for permission to add your course should be directed to Jenima Lyon.

Faculty Absences - Less than a week

Please submit this form in advance of a teaching absence, including in the case when you plan to teach remotely. Or you can just email the Chair if you prefer.

<https://app.smartsheet.com/b/form/323440cf8f364cef80f43fa1cb80a78b>

Absences from campus of more than a day or two require prior approval from the Chair.

There are two standard ways to replace your teaching in the case of an absence: find a replacement instructor or teach remotely.

IMPORTANT: You may not, under any circumstances, ask your TA to substitute for you in lecture.

Note that teaching remotely means synchronous teaching via Zoom. Do not pre-record classes as a substitute for synchronous teaching. The expectation is that all classes during Fall, Winter, and Spring quarters are taught in person but faculty may, if unanticipated circumstances arise, teach up to 10% (i.e. up to 3 lectures) of a course remotely. If you are teaching a coordinated calculus class we ask that you avoid the remote teaching option if possible and first look for a substitute from among the other instructors.

For some small graduate classes (e.g. topics courses), rescheduling a class in case of an absence may be possible but all students must be able to make the rescheduled time.

If you suddenly take ill and must miss a class, you should immediately notify the office staff and all other instructors of the courses you will miss; send an email to staff@math.northwestern.edu and cc the other instructors in the course(s) you will miss. If at all possible, try to find a substitute to take over your class and inform the staff (847-491-3377) as early as possible about the arrangements

you have made. As a last resort, if you are not able to contact a staff member, use Canvas to notify your students about a canceled class. As soon as possible, schedule a makeup class.

Remote Teaching

Classes at Northwestern are in-person, except in extraordinary circumstances (see above). In the event that we return to remote instruction (or if you want ideas to enhance your in-person instruction), see our comprehensive document at

https://www.math.northwestern.edu/intranet/recommendations_for_remote_mathematics_instruction.pdf

The above document as well as additional information about remote teaching can be accessed from our INTRANET page → TEACHING RESOURCES → Remote Teaching and Learning.

Students with Disabilities

Instructors are encouraged to announce at the first class meeting and include on the syllabus a statement inviting students with disabilities to meet with them during office hours to discuss accommodations of their needs. Student accessibility accommodations must be approved by the AccessibleNU office (<http://www.northwestern.edu/accessiblenu/>; 847-467-5530). If a student is approved for accommodations, you will receive a detailed letter indicating what accommodations should be offered to them. Do not hesitate to contact AccessibleNU for clarification or assistance. AccessibleNU can proctor examinations for students with special examination accommodations.

Academic Integrity

Northwestern defines academic dishonesty as cheating, plagiarism, fabrication, obtaining an unfair advantage, aiding and abetting academic dishonesty, falsifying records and official documents, and obtaining unauthorized access to computerized records; details of these offenses may be found in the Undergraduate Catalog, the Student Handbook, and in the Academic Integrity guide available from the office of the Associate Provost for Undergraduate Education.

Faculty legislation requires that all cases of suspected dishonesty in Weinberg College courses be immediately referred to the Assistant Dean for Academic Integrity, Ricardo Court (847-491-7560, court@northwestern.edu), who reviews cases according to established procedures. Faculty members who ignore this mandate frequently cause themselves remarkable trouble and they risk a personal libel suit. For more information visit <https://www.weinberg.northwestern.edu/undergraduate/courses-registration-grades/integrity/>.

You may consult with the Director of Undergraduate Studies or, for calculus courses, the Director of Calculus, about cases of suspected academic dishonesty before reporting them to the Assistant Dean. Both have extensive experience in this area. In such cases describe the incident without revealing the name(s) of the student(s) involved.

An ounce of prevention is worth a pound of cure. Northwestern does not have an honors system. You are responsible for arranging proctoring for all of your examinations and quizzes. Proctors may not leave the exam room at any time during a quiz or examination. Be sure your TAs are aware of this before administering the first quiz or examination. Require students to place all belongings with the exception of permitted examination materials at the front of the classroom

before administering an examination. You and your TAs should learn the names and faces of your students early in the quarter to prevent a student from taking an examination in place of another.

4.3.4 Syllabus, Assessment, and Grading

Syllabus

For each course, prepare a syllabus that includes your name, office location, office phone, email address, and office hours, along with similar information about your TA(s). The syllabus should also list the textbook, the dates of all examinations, your scheme for determining final grades, and any course-specific policies. Include information for students with disabilities and about expectations for academic honesty and use of generative AI. The Director of Undergraduate Studies will send an update regarding the standard syllabus blurbs provided by the College and University.

Post the information contained in your syllabus on your course Canvas site and/or distribute a paper handout of your syllabus on the first day of class.

Assignments and Quizzes

You should include a list of homework assignments in your syllabus. You may elect to have the TA administer a weekly quiz in discussion sections based on the week's assignments.

Our 300-level classes often assign graded homework and sometimes include quizzes. The amount of grading and other work assigned to the TA should not pose an unfair time burden; see the section on TAs below.

It is the responsibility of instructors to write quizzes. Instructors may ask their TAs to duplicate copies of quizzes for their classes, in which case instructors should send the quizzes to their TAs well in advance of section time.

Midterm Examinations

Most 200-level (and many 300-level) classes have two 50-minute examinations. Coordinated calculus courses and the other common exam courses administer these exams during an evening hour assigned³ by the Registrar. All other courses administer them during discussion section, or, occasionally, during a lecture slot. Examinations during lectures and discussion sections must begin and end on time; if a class meets from 12:00 to 12:50, then the examination must end at 12:50 (not at 12:55 or 1:00). Dates of midterm examinations should be announced at the beginning of the quarter on your syllabus and/or on Canvas.

Final Examinations

Final examinations must occur at the time and date scheduled by the Registrar and announced in the quarterly class schedule. That time can be checked a quarter in advance at <https://www.registrar.northwestern.edu/calendars/final-exam-schedules>. Coordinated calculus courses and common exam courses are assigned exam rooms toward the end of the quarter; the math office will inform you of the location for your class. You must inform your students and TAs of the time and location of the final examination once you know it. Courses without common final

³See <https://www.registrar.northwestern.edu/calendars/midterm-schedules.html> for a schedule of the evening midterm examinations, which are typically held from 6:30pm–7:30pm on the indicated days.

examinations hold their final examination in the course's lecture classroom unless notified otherwise.

Only the WCAS Dean's office can grant requests to take a final examination at a time different from the announced time. If you are approached by a student with such a request, send him/her to the Office of Undergraduate Advising, 1922 Sheridan Rd, to meet with a dean or adviser about petitioning for an incomplete in the course. If the request is granted, the student must take a make-up examination during the following quarter.

Students are required to check the final examination schedule before registering, and should, therefore, never have two final examinations scheduled at the same time. In the rare instance that this nevertheless occurs⁴, direct the student to either the Director of Calculus or the Director of Undergraduate Studies who will verify the nature of the conflict and attempt to find a solution. Do not attempt to solve such problems on your own.

Proctoring and Scoring

Proctoring of exams should be worked out between the instructor and the TAs. Your practice and expectations in this regard should be made clear to your TAs at the very beginning of the quarter. Be sure your TAs understand that Northwestern does not have an honor system and that they are expected to be present in the exam room the entire time the exam is being administered, actively proctoring.

Instructors oversee and take part in the grading of exams; TAs may not grade exams without the guidance of the instructor.

Retention of Materials and Scanning

Examinations and quizzes (both before and after scoring) must be stored with the instructor or course coordinator in a secure location. TAs should never be tasked with storing assessments because their offices are not secure and the instructor must have ready access to the papers if needed.

TAs may be asked to scan student papers (for scoring on Crowdmark) using the scanners available in the Math Library. In this case, the instructor must make sure that the TA knows how to use the scanners, upload student work, handle sensitive student data (like sign-in sheets), and return all physical papers to the instructor for storage after scanning. Undergraduate TAs must be supervised by an instructor when using the scanners.

Instructions for using the scanners are included as an appendix.

Grading

Follow the grading scheme outlined in your syllabus when assigning grades. If you are new to Northwestern or to the course you're teaching, you should obtain feedback from the appropriate person in the Contacts table about your proposed final grades before their irrevocable submission.

Office Hours

Each faculty member and TA is expected to schedule at least 3 office hours per week. It is not necessary to have separate hours for each course you teach, but the times should be convenient for

⁴Usually this happens when a student enrolls in two coordinated mathematics courses simultaneously.

students in all your courses. Many instructors prefer to schedule these on the half hour rather than on the hour, which makes it less likely that students' other courses will conflict with every office hour. Announce your office hours on your syllabus and on your Canvas site.

4.3.5 Teaching Assistants

The TA Coordinator assigns TAs and posts the assignments online at the beginning of each quarter. Please contact your TA(s) as soon as possible to determine their office hours and to discuss your policies and expectations. Ensure that your TA is enrolled on Canvas as a TA (which should happen automatically); this allows them to record grades, email students, and post announcements. It is an excellent idea to meet with your TAs each week to exchange information.

Most teaching assistants are graduate students in the mathematics department. A few may be graduate students in Economics or Statistics. We also employ some undergraduate TAs in 200-level classes; they are subject to special rules. If you have an undergraduate TA, the TA Coordinator will inform you of relevant policies.

Responsibilities to each course assignment begin on the first day of classes of that quarter and end on the day when grades are due to the Registrar's office. The work of teaching assistants varies with the course and the faculty member who has primary responsibility but generally includes answering questions about homework problems in the recitation section (which meets weekly for each course), grading homework, and proctoring and grading quizzes, midterms, and final exams. Responsibility for designing grading rubrics, writing solution sets, and other pedagogically necessary tasks may also be included at the instructor's discretion, but such tasks should be closely supervised, and the quality of the outcome verified, by the instructor. Each graduate student TA must hold three office hours per week. Scheduling of office hours should follow the guidelines for faculty above.

The instructor is ultimately responsible for all instruction and assessment in a course, and the instructor must clearly and unambiguously direct the TAs. This includes specifying the deadlines for completion of individual tasks (e.g. grading). The instructor must exercise oversight over the quality of the work performed by the TAs. Instructors may ask TAs to duplicate copies of quizzes (in order to do this, they must have the quizzes well before class time!). Instructors usually duplicate copies of midterm and final examinations. In large classes and for common examinations, the office staff can assist in duplicating examinations. Work-study students are not allowed to duplicate examinations.

A TA's total workload for all courses s/he covers must not exceed 20 hours in a given week, and (per Department policy) average no more than approximately 12 hours per week over the quarter. TA are responsible for two sections per quarter; thus for each section, the workload should (on average) not exceed approximately six hours per week. This work include all aspects of their involvement with the course: meetings with the instructor, preparation, time in class, office hours, and scoring.

Faculty may not ask their TAs to substitute for them in lecture; you should arrange coverage with another faculty member if you must miss a class.

A bulleted list of TA Duties and Responsibilities is included in the appendix. See the Graduate Student Handbook for the full list of policies pertaining to teaching assistants.

A Appendices

Coordinated Calculus Courses

The Coordinated Calculus Courses are

- Math 220-1 Single-Variable Differential Calculus
- Math 220-2 Single-Variable Integral Calculus
- Math 228-1 Multivariable Differential Calculus for Engineering
- Math 228-2 Multivariable Integral Calculus for Engineering (*Not taught by math faculty)
- Math 230-1 Multivariable Differential Calculus
- Math 230-2 Multivariable Integral Calculus

Coordinated calculus courses are run “in lockstep,” with shared syllabi, exams, homework assignments, discussion worksheets, and a common Canvas course site. Coordinated calculus courses also run shared office hours.

Each course has a coordinator who conducts weekly meetings with all instructors and teaching assistants and distributes the workload for the course. The course coordinator is the primary contact person for all non-section specific concerns. Each course has two common evening midterm examinations and a common final examination.

Office Hours

All calculus instructors and graduate TAs teaching a common calculus class are expected to hold three office hours. Undergraduate TAs should hold two office hours. Usually, these office hours are open to all students in the course.

Course Meetings

Each instructor and teaching assistant assigned to a coordinated calculus course must attend weekly planning meetings led by the course coordinator (for the meeting with instructors) or a designated instructor (for the meeting with the TAs). These meetings address current course topics, pedagogy, homework assignments, exams, and various administrative issues.

Syllabi

Coordinated calculus courses adhere to common day-by-day syllabi. The course coordinator will provide instructors with the syllabus.

Examinations

Each coordinated calculus course offers two common midterm examinations administered in the evening, and one common final exam. These exams are scheduled with the registrar's office before the beginning of the term. Final examinations can only be given at the time and date scheduled by the registrar and announced in the quarterly class schedule. The rooms for the midterm and final exams are not assigned until the middle of the quarter. The Midterm Examination schedule is available at

<https://www.registrar.northwestern.edu/calendars/midterm-schedules.html>

The Final Examination schedule is available at

<https://www.registrar.northwestern.edu/calendars/final-exam-schedules/>

In these courses the common midterm exam times are required course meetings and we do not offer make-up exams. The University requires students to check the final examination schedule and the common midterm examination schedule before registering for courses and to avoid conflicts. A student who has a conflict between a common midterm examination and another midterm examination (or other activity, such as a varsity athletic competition) must contact the course coordinator, who may be able to arrange for the student to take the exam remotely or at a slightly different (but overlapping) time. Individual instructors may not make this determination, and should immediately direct such students to the course coordinator. The options are even more limited for the final examination, and it is likely that a student who has a conflict between a common final examination and another final examination will need to petition the Assistant Dean for Academic Standing for an incomplete grade in the course. If approved, the student will take a make-up final examination during the following academic quarter. Again, direct all such students to the course coordinator.

All instructors and TAs share in grading the common midterms and final. The grading sessions are scheduled just following the exam or on the following day. Grading is done via Crowdmark, an internet based grading system. Details will be supplied by the course coordinator.

Homework Assignments

Coordinated calculus courses have online homework assignments. Students complete the online assignments through MyLab Math, an online homework system provider. The MyLab Math homework assignments are set up by the course coordinator before the start of the term. Each coordinated calculus course instructor must have a MyLab Math account; you will be contacted by the Director of Calculus with instructions on how to create an account and register as an instructor for your course.

Quizzes

The quizzes will be administered in discussion section and graded by the teaching assistants. The course coordinator will provide details about how the quizzes are created and graded.

Discussion Sections

For each of the four coordinated calculus courses, discussion sections are pooled across all MWF lecture sections and all instructors for the course. Students register separately for a MWF lecture section and for a discussion section. This system differs from the way discussion sections are scheduled for all other math courses, where a specific MWF lecture section is always linked to a specific discussion section.

Students are not allowed to freely switch between discussion sections. For example, a student who takes Math 230-1 and has registered for Section 921 must attend Section 921 throughout the quarter.

Students in coordinated calculus courses work on a worksheet (created by the instructors) with guidance from the TA for 30 minutes of discussion. Their goal in discussion is to generate ideas for how to attack the problems on the worksheet, not necessarily to solve all of the problems on the worksheet completely. Students work in small groups of 1-4 students and are encouraged to interact with their peers. As part of this process the teaching assistant circulates around the room, facilitating the discussion within each group and answering questions (but not providing solutions!) as needed. In the remaining 20 minutes (at the beginning or end of discussion, as directed by the coordinator), the TA administered the quiz.

The TAs communicate any feedback about students to the instructors via e-mail or during the weekly meeting.

Grading

The instructors for each Coordinated Calculus Course determine course grades as a group, usually two days after scoring final examinations. Plan your travel accordingly.

The weights of the examinations, quizzes, and homework are set by the Director of Calculus.

Grading Statement

You may provide your sections with the following grading statement.

"An overall percentage of 90% or greater will earn at least an A-. An overall percentage of 80% or greater will earn at least a B-. An overall percentage of 70% or greater will earn at least a C-. Beyond this guarantee, course grades are at the discretion of the instructional team."

Course grades often end up being more generous than those based on the above scale, but there is no guarantee of that. We hope for a class average near 75%-80% on examinations. Although the distribution of final grades can vary slightly from quarter to quarter, the coordinator consults with the Director of Calculus to ensure that grades for each quarter are commensurate with grades in past quarters.

First-time course coordinators must submit their proposed grade distribution to the Calculus Director (or, if s/he is unavailable, the Director of Undergraduate Studies) for approval before the instructors submit final grades to the registrar.

Peer-Guided Study Groups

Parallel to these basic courses, the Searle Center runs a Peer-Guided Study Group program. Students who participate will meet weekly in small groups with a trained peer facilitator in a formal study-group. One of the course instructors should be assigned as the Peer-Guided study group liaison, and will be responsible for meeting weekly with the lead peer facilitators to ensure that the facilitators understand the course material and conventions.

Last updated on September 11, 2026.

Policy on Common Examinations

Common examinations in Math 220, 228-1, 230, 290, and 310

During the regular academic year, Math 220-1, 220-2, 228-1, 230-1, 230-2, and the 290 and 310 sequences administer common evening midterms and common final exams with common grading for all sections. Exceptions can be made only by the Undergraduate committee.

Final examinations for these courses are given during a common time slot mandated by the Registrar. The Directors of Calculus and MENU negotiate evening midterm examination dates and times with the Registrar and representatives from other departments administering evening midterms. These schedules are negotiated and finalized a quarter in advance: by Spring for the next Fall, by Fall for Winter, and by Winter for Spring.

These common exam times appear on the Registrar's web site: The Midterm Examination schedule is available at

<https://www.registrar.northwestern.edu/calendars/midterm-schedules.html>

The Final Examination schedule is available at

<https://www.registrar.northwestern.edu/calendars/final-exam-schedules/index.html>

Common exam times are available to students and faculty in advance of pre-registration for each quarter.

Common examinations in other courses

In general, we do not allow common midterm or final exams in multi-section* courses other than Math 220-1, 220-2, 228-1, 230-1, 230-2, and the 290 and 310 sequences to avoid creating exam conflicts for students (for example, Math 240 is sometimes taken concurrently with Math 230-2).

Exceptions to this policy can be made by the Director of Undergraduate Studies. Instructors who wish to arrange a common exam in multi-section* courses other than those listed above should consult the DUS by the beginning of the preceding quarter. If permission is granted, the instructor must arrange with the Director of Calculus to include the examination in the common midterm and final examination schedules **by the following deadlines:**

For Fall: First week of the preceding Spring

For Winter: First week of Fall

For Spring: First week of Winter

*These policies apply to multi-section courses with lectures at *different* hours. A course which has multiple sections that meet at the same hour can schedule a common final exam without difficulty, since all sections will have the same final exam slot assigned by the Registrar.

Last updated August 1, 2019.

Guidelines on discussion sections in non-coordinated courses in the Mathematics Department

The role of the discussion section

In broad terms, the role of the discussion section is to facilitate mastery of the material introduced in lectures. The discussion section should be aligned with the course objectives and provide students with the chance to reflect on their learning and preparedness for exams. A discussion section is not meant to be used as an extra lecture or as an office hour.

Guidance on teaching assistants

Every aspect of the course (including the discussion section) is ultimately the instructor's responsibility. The instructor should ensure that the discussion section is structured in a manner that aligns well with rest of the course and should work with the TA to improve aspects of the discussion section that are not successful.

Instructors should communicate to their TA what was covered during lectures, especially any concepts or notations that differ from those of the textbook, and assist the TA with developing a plan for running the weekly discussion section. Since TAs have varying degrees of prior exposure to the course material and different levels of teaching experience, they cannot generally be expected to generate examples or problems at the appropriate level of difficulty for the course without substantial input from the instructor.

Suggested best practices for working with teaching assistants include:

- Schedule weekly meetings with your TA
- Attend the first discussion section and provide feedback on how to effectively lead future class meetings
- Discuss with your TA specific modes of running the discussion (group work, whole class discussion, review, quizzes)
- Provide a concrete plan for 50 minutes worth of content to be covered during the discussion section
- Review effective teaching strategies with your TA
- Ensure the TA is informed on course policies and advise them to forward you important questions from the students.

- Clarify general expectations and deadlines. Provide a sense of oversight and teamwork.

Important note: A teaching assistant's assigned instructional duties should take no more than six hours per section per week. TAs are expected to grade the weekly homework or quiz (but not **both**).

Discussion section format

While there are many different modes of conducting a successful discussion section, the format should generally be more interactive than the lectures, promoting depth and fluency of knowledge. This can be achieved, for example, by providing students with the opportunity to ask questions and work on problems with guidance from the TA.

A discussion section may contain a combination of the following:

- A graded assessment (e.g., quiz)
- Group work: students work in small groups on assigned problems
- Whole class discussion: the TA solves problems on the board with feedback from the students
- Review: the TA reviews portions of the material and gives students the opportunity to ask questions

Examples of successful discussion sections

1. Students work in small groups on three practice questions assigned by the instructor. The TA visits each group and gives hints, if applicable. A representative of each group writes the group's joint solution to a problem on the board. The whole class discusses the solutions.
2. The discussion section begins with a 15-minute quiz. After the students complete the quiz, the TA reviews a difficult concept. The students are given the opportunity to ask questions. The whole class then discusses a problem related to the concept reviewed. The TA leads the class conversation and incorporates the students' suggestions into the solution she writes on the board.

Common pitfalls

- A discussion section that fails to provide students with meaningful ways of engaging with the material might result in low attendance.
- Interactive features of the discussion section may be unsuccessful if they are not effectively applied and reinforced.
- Without the instructor's guidance, TAs have been known to lecture on material that has not yet been covered in class or on topics that they themselves find of interest, which tend to be at the graduate level and thus inappropriate.

TA Duties and Responsibilities

of

Math Graduate Students

Core TA Job Duties

- Meeting with the instructor or the course head once a week;
- Full-time TAs: Holding two 50-minute discussion sections per week;
- Office hours for full-time TAs: Holding three office hours (combined for both sections) per week;
- Office hours for half-time TAs: Holding two office hours per week;
- Grading of weekly quizzes and/or homework problem sets and entering grades on Canvas;
- Proctoring and grading of all midterms and the final exam and entering exam grades on Canvas.

Further TA Responsibilities

- It is the responsibility of a TA or grader to find out about exam proctoring and grading times ahead of time and to arrange their schedule to avoid any time conflicts during these times.
- A TA or grader must be reachable through their department e-mail and must answer all queries from the instructor or course head in a timely manner (certainly within 24 hours).
- A TA or grader must grade papers according to a rubric approved by the instructor or course head.
- A TA or grader must complete assigned grading in a timely fashion, with deadlines as specified by the instructor.
- All substitutions must be requested at least two weeks in advance and must be approved in writing (e.g., by e-mail) by the instructor and course head.
- Any absence due to an emergency (such as sudden illness) must be reported immediately to the instructor and course head with cc to the staff at staff@math.northwestern.edu.

Please note: Failure of a TA to complete these duties and responsibilities constitutes delinquency and may result in punitive action by the department or the graduate school.

Last updated: June 3, 2026

UGTA Job Duties

- Attend weekly course TA meetings (led by the TA Liaison).
- Hold one 50-minute discussion section per course per week.
- Hold two office hours per week in Locy 209.
- Perform any required weekly grading under the supervision of an instructor or a graduate student TA.
- Proctor and grade all midterm exams.
- Proctor and grade the final exam.

UGTA Responsibilities

- It is the responsibility of a TA to find out about exam proctoring and grading times well in advance of the exam and to arrange his/her schedule to avoid any time conflicts during these times.
- A TA or grader must be reachable through his/her university e-mail and must answer all queries from instructors and the course head in a timely manner (and certainly within 24 hours).
- A TA or grader must grade papers according to a rubric developed by or with an instructor or the Coordinator.
- All substitutions must be requested at least two weeks in advance and must be approved in writing (e.g. via e-mail) by the Coordinator.
- Any absence due to an emergency (such as sudden illness) must be reported immediately to the Coordinator with cc to the department staff (staff@math.northwestern.edu).

Guidelines for Performing Job Duties

- During the first week of the quarter:
 - Be in touch with the Coordinator and TA Liaison of your course.
 - Attend the first course TA meeting (if scheduled).
 - Obtain a copy of the course syllabus and policies from Canvas.
 - Obtain a copy of the course textbook listed on the syllabus from the Math department office.
 - Schedule **two office hours per week** in Locy 209, and send your office hour schedule to the TA Liaison or Course Coordinator by the end of the first week.
 - Locate the room in which your discussion section meets.
 - **Check the dates and times of the midterms and the final examination. Plan to be available for proctoring and for grading** (usually, but not always, grading is done right after an exam).

- During the first discussion section of the quarter:
 - Write your name, e-mail address, and office hours on the blackboard.
 - Communicate your policies and expectations to your students.
- Before each discussion section:
 - **Work through the materials you have been given for discussion to ensure that you can solve and explain worksheet exercises, or answer questions about quiz questions.**
 - Check your course enrollment on Caesar and print enough copies of the materials you need for you and your students.
 - Take a copy of the text and chalk with you.
- During each discussion section:
 - Begin class on time.
 - Conduct the discussion as instructed by the course coordinator or TA liaison. This might mean some combination of group work on worksheets or administering quizzes, or other activities. If you are conducting group work please refer back to instructions provided in TA training on how to most effectively facilitate group work.
 - Record comments on student progress or struggles to pass along to the instructors, if applicable.
 - End class on time.
 - Avoid criticizing the course, any of the instructors or TAs, the text, the Math Department, the College, the University, and the students.
- After each discussion section:
 - Return any materials that the instructors need or scan and upload materials into Crowdmark. Do this in a timely fashion. If there are no such materials then disregard this step.
- Chalkboards
 - Erase completely.
 - Order: Middle-front-back, left to right, top to bottom.
 - Divide board space.
 - Write large and dark, and make sure that your handwriting is legible.
- Public Speaking
 - Dress appropriately.
 - Face your audience.
 - Speak loudly and clearly.
 - Establish eye contact.
 - Gesture to emphasize concepts.

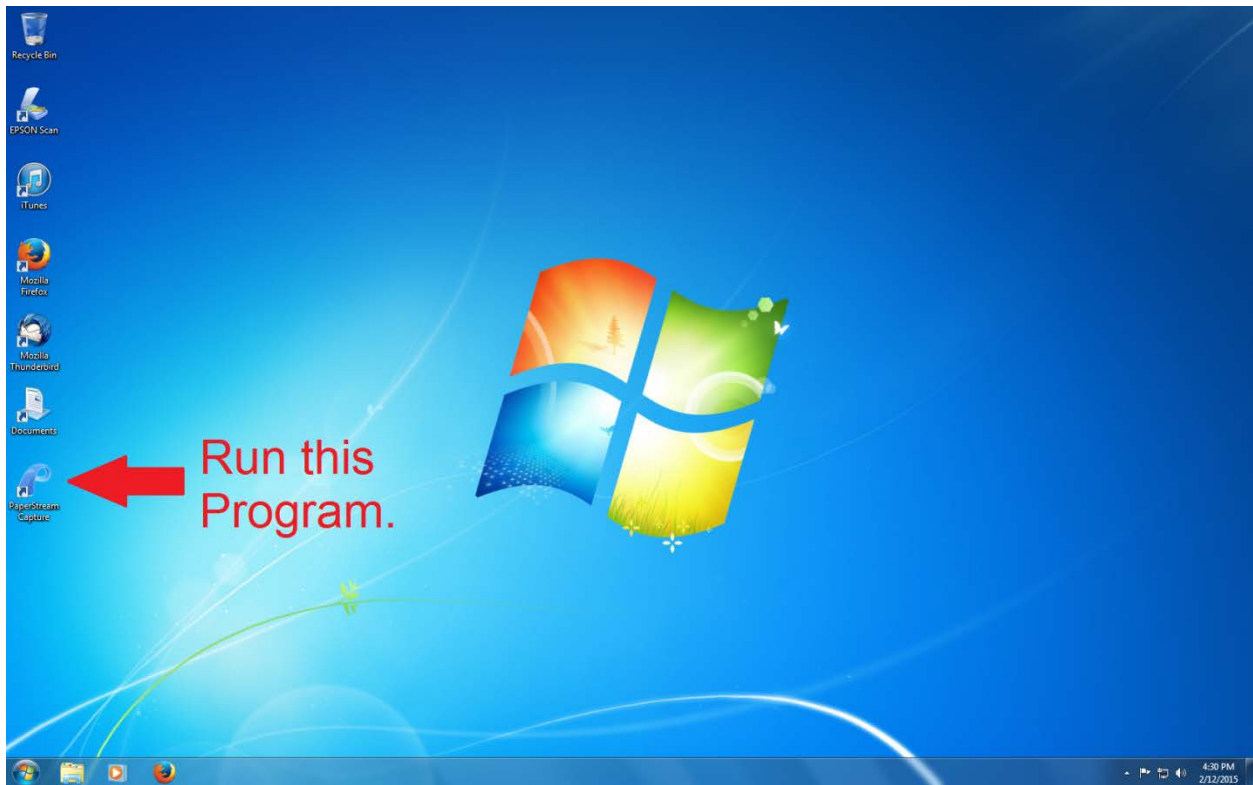
- Questions
 - Restate (or ask the student to restate) questions so that everyone (in their group) can hear them.
 - Redirect some questions to the class instead of answering them directly.
 - Answer to the entire class, not just to the student asking the question.
- During Office Hours:
 - Arrive on time, and do not leave early.
 - Manage time wisely.
 - Consider having students answer each others' questions if you know that they are capable.

Scanning and Uploading Completed Exams

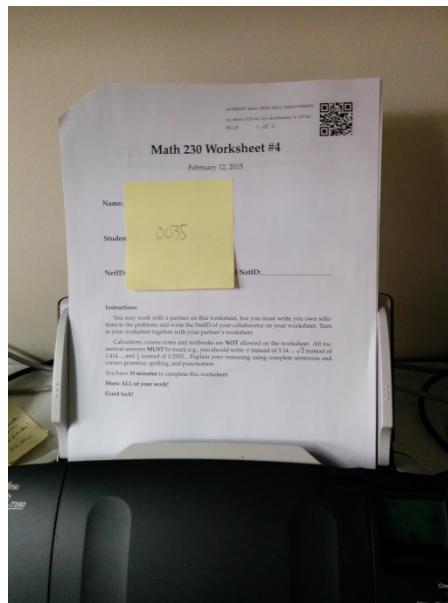
After students have completed the assessment, the assessments must be scanned and uploaded to Crowdmark. This can be done in the basement computer lab in Lunt. Proceed as follows.

1. Remove staples from exams using the paper cutters. Take care to not damage the QR codes. Only the corner needs to be cut.
2. Login to the Lunt machines locally using username 'math'. As a shortcut to do a *local login*, simply type the following string: `.\math`. The password is 'tdoc=-s'. ("The Derivative Of Sine = - Cos.")
3. Make sure scanner is turned on.
4. Open the PageStream app using the shortcut on Desktop.
5. Place exams to be scanned in scanner in batches of 10-30. You do not need to include blank exam booklets.
6. On machines in Lunt select the 'CalcExams' profile from the list of scanning profiles on PaperStream. Scanning will commence immediately.
7. Be prepared to keep scanned pages exiting from the bottom of the scanner organized to prevent jamming.
8. When scanning is completed, select 'Release' or 'Complete Batch'.
9. Use the 'ScansFolder' shortcut on Desktop, located close to the PaperStream shortcut, to navigate to the folder where the scans live.
10. On the assessment Dashboard page on Crowdmark, click 'Upload assessments' under the Administration heading. Drag a scanned file to the box or browse to select one. The upload will begin immediately. When the upload is complete, there should be no pending uploads or errors. After all scanned files have been uploaded, **double check the number of uploads is equal to the number of assessments**. If not, check the log to determine where errors occurred.

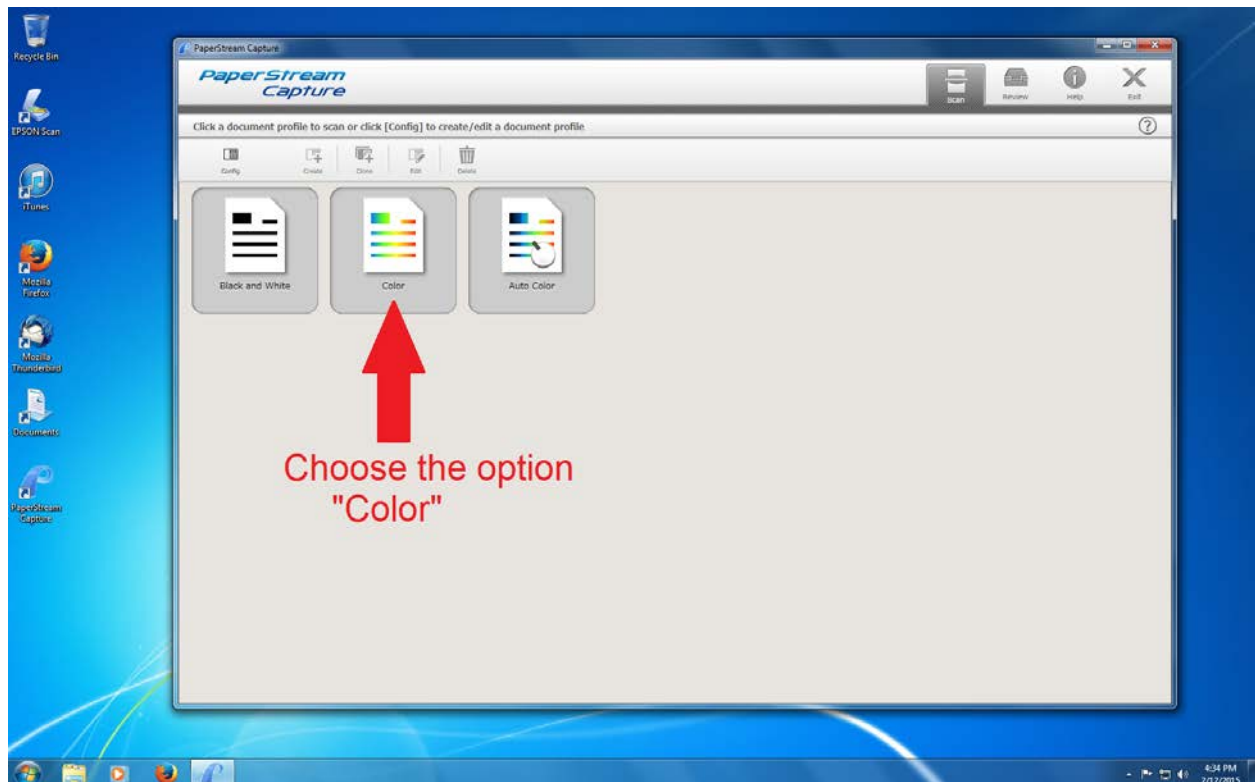
1. Run the program "PaperStream Capture".



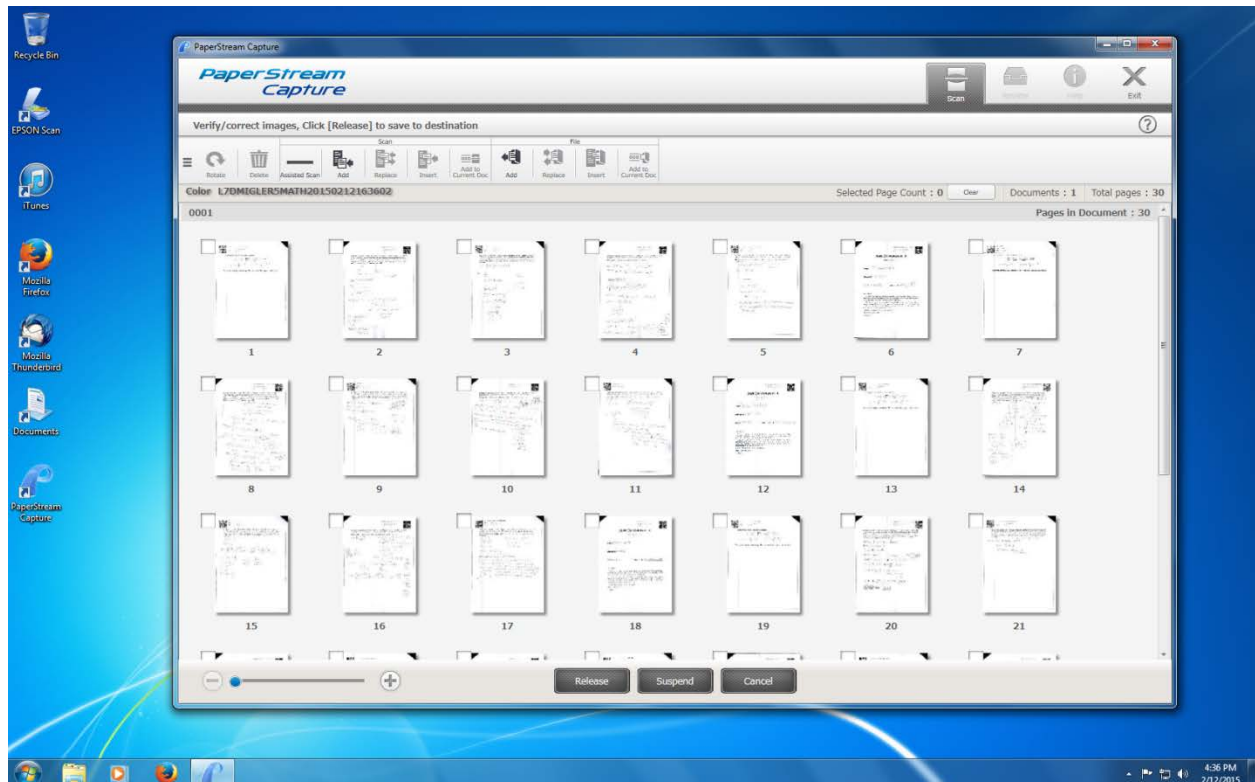
2. Turn on the scanner and fully expand the attachments of the scanner, and put the paper in.



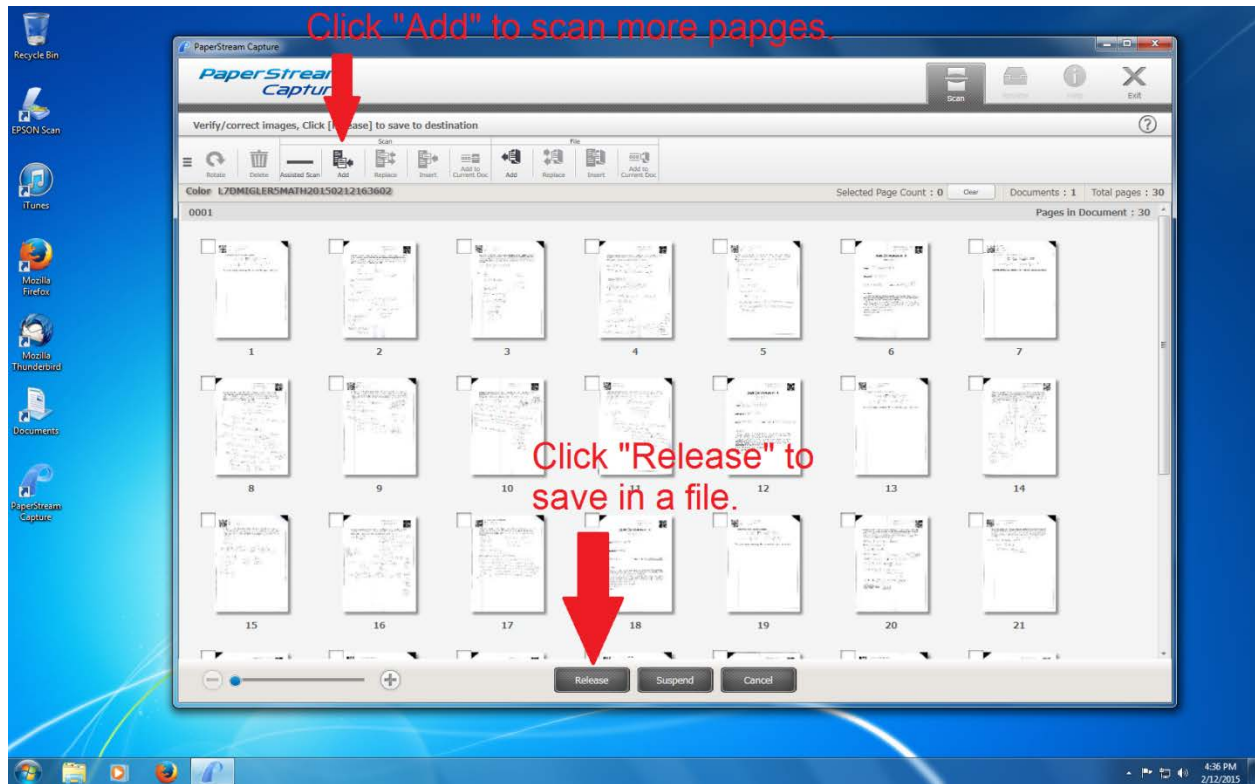
3. After opening the program and put the paper in, click the option "Color".



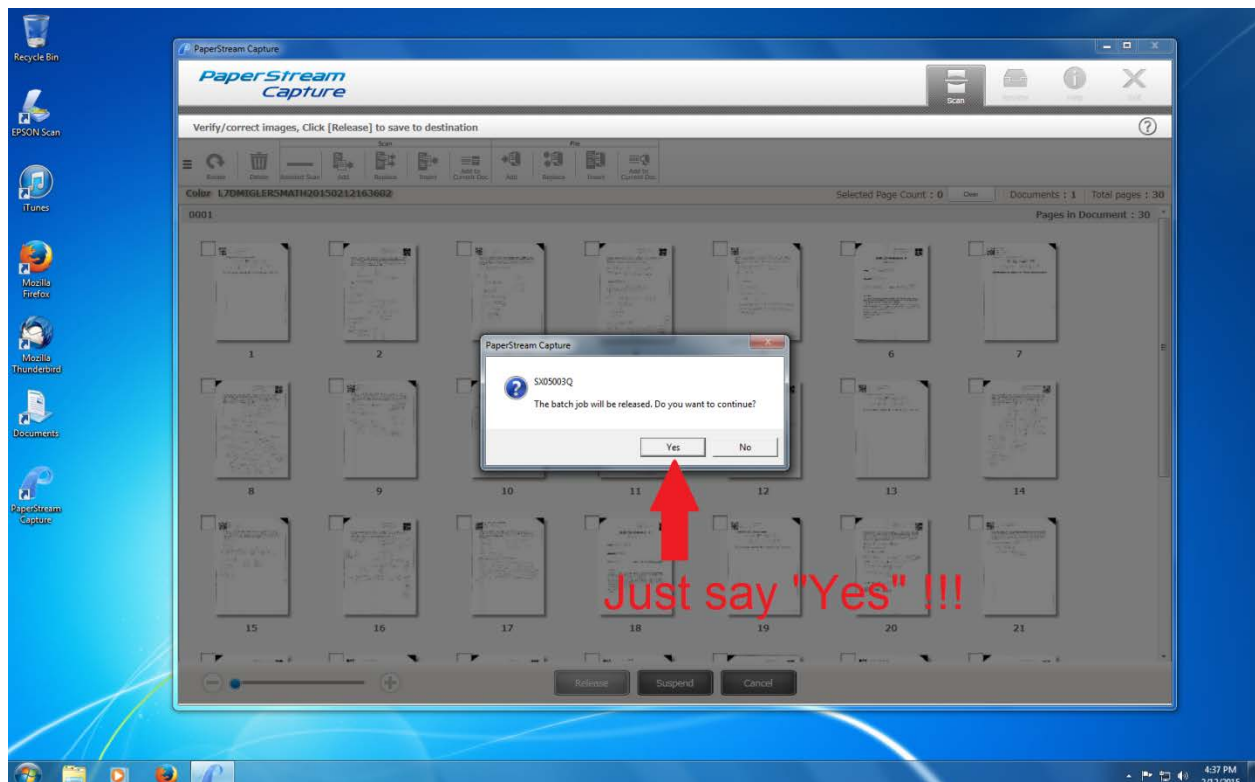
4. The scanner will start scanning, and the small images of pages will appear.



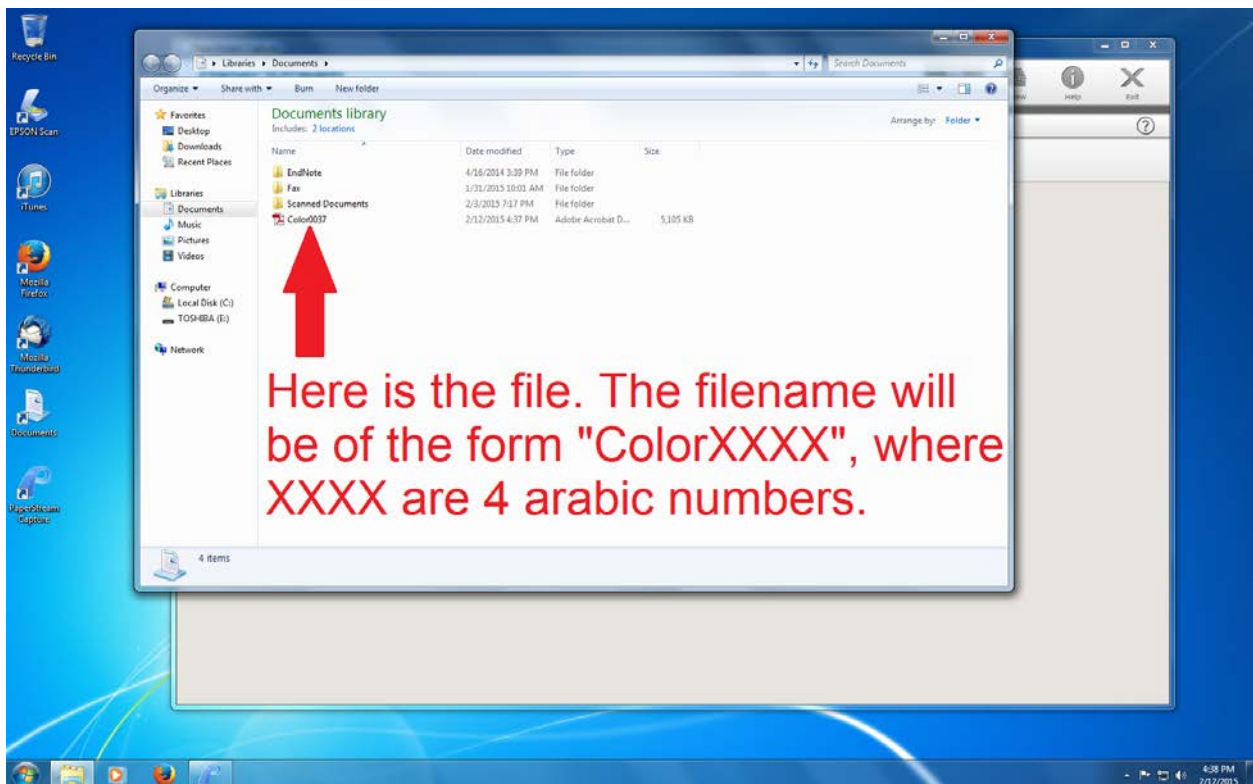
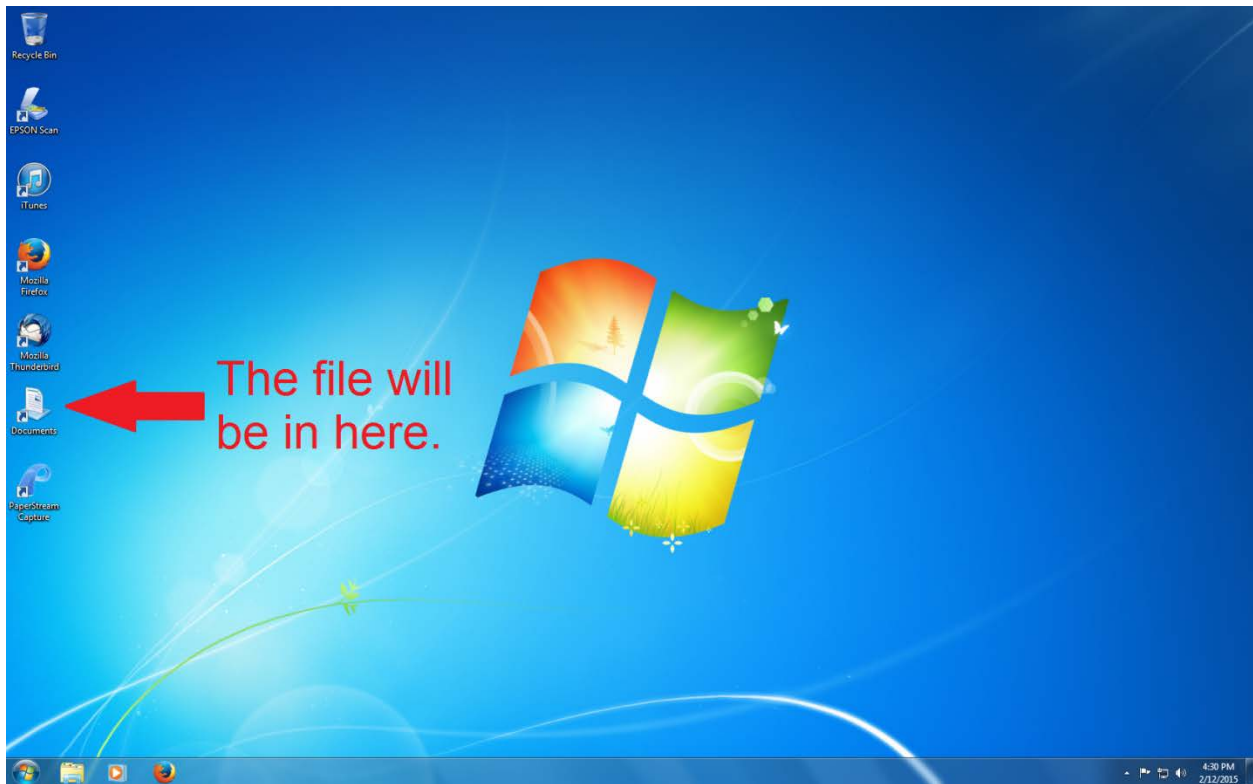
5. To save file, click “Release”; to scan more paper, click “Add”



6. After you click “Release”, a box will show up. Choose “Yes” to confirm saving the file, “No” to go back.



7. The file will be saved in the "Document" folder, which can be accessed from the Desktop.



Accessing SmartSheet

1. Click the link for the desired resource, or go to [Smartsheet.com](https://smartsheet.com) and select “Log In”.
2. Select “Sign in with Microsoft”.
3. If prompted, enter your “@northwestern.edu” e-mail address, and click “sign in”. Then sign in using your usual Northwestern login credentials. (This step may be skipped if you are already logged into Microsoft on your browser.)

You will complete the following additional steps if this is your first time accessing Smartsheet:

4. Smartsheet will send an e-mail to your “@northwestern.edu” e-mail address asking to **“Confirm your email address to start using Azure AD / Office 365 authentication”**. Click the link for “Link My Account” found in this e-mail.
5. Click through the additional data waiver/password advice screen, the CAPTCHA, and the notification that you’ve been added to the NU Smartsheet account as a non-licensed user.

Note: After your initial time accessing SmartSheet, you can log in using either the “Sign in with Microsoft” workflow or the “Sign in with your company account” workflow.

OVERVIEW OF PLANIT PURPLE

The Department of Mathematics Event Calendar is hosted in [PlanIt Purple](https://planitpurple.northwestern.edu/), the central repository for events happening throughout the entire Northwestern community.

Each event belongs to one “Group”. A group has “Contributors” (add/edit/delete events) and “Managers” (contribute + edit group details). Each seminar (and other type of event) has a corresponding “Group” managed by the lead organizer of the seminar. **Ask your seminar organizer for “Contributor” access. Include your netID.**

LOG INTO PLANIT PURPLE USING NETID

Visit <https://planitpurple.northwestern.edu/> and select “[ADD/MANAGE EVENTS](#)”.

GRANTING “CONTRIBUTOR” OR “MANAGER” ACCESS

1. Log into PlanIt Purple.
2. Select the name of the appropriate group under “My Groups”.
3. Select the [Add Manager] or [Add Contributor] buttons to grant access.

EDIT OR ADD AN EVENT

To edit an existing event in PlanIt Purple:

- a) Access the appropriate group from the Dashboard, navigate to the “Upcoming Events” section, and select [edit] next to an existing event. Make the necessary changes, and then save the event.

There are three ways to add a new event in PlanIt Purple:

- a) Directly from your Dashboard: select [ADD AN EVENT] next to the appropriate group.
- b) Access the appropriate group from the Dashboard, and then select [+ ADD AN EVENT] under the “Upcoming Events” section.
- c) Edit an existing event, and select [Duplicate event] at the top of the page; this creates a new copy of the event that you can edit and save.

Note: For event titles, follow the format “Seminar Name | Speaker (Institution)”. This will keep our seminar calendar looking somewhat uniform!

Note: The feeds update every two hours, so edits may not immediately appear on the website.

PROTIP: The default reservation for the seminar will appear under the seminar title once you access the group from the dashboard. Refer to this when scheduling events.

PROTIP: Room details can be tedious to enter. Instead of creating a new event from scratch, it is often easier to duplicate an event and then edit the copy.

Caution: PlanIt Purple is not a room reservation system. If you wish to schedule an event with an unusual time or room, you will need to work with the staff to make a reservation.

SUBSCRIBE TO A FEED USING A CALENDAR APPLICATION

To subscribe to a feed using the iCal protocol, use a link of the form

<https://planitpurple.northwestern.edu/feed/ical/XXXX>

where XXXX is one of the following 4-digit numbers:

- 2229 – Seminar Calendar (all events)
- 2310 – Seminar Calendar – 2 Week Digest
- 2230 – Algebraic Geometry Seminar
- 2231 – Analysis Seminar
- 2232 – Colloquium
- 2233 – Dynamical Systems Seminar
- 2234 – Geometry/Physics Seminar
- 2235 – Graduate Student Seminar
- 2236 – Informal Dynamical Systems Seminar
- 2237 – Informal Geometric Analysis Seminar
- 2480 – Math + AI Panels
- 4854 – Noncommutative Geometry Seminar
- 2238 – Number Theory Seminar
- 2239 – NUMS
- 2240 – Probability Seminar
- 2241 – Sheaf Quantization Seminar
- 2242 – Special Lectures
- 2243 – Topology Seminar

MATHEMATICS DEPARTMENT GROUP MEAL REIMBURSEMENT

LAST UPDATE: FALL 2024

- (1) Tenure-line recruitment group meals:

\$520 maximum total and \$130 maximum per person.

- (2) Other group meals, which include an outside speaker/visitor:

- (a) Weinberg College limit for reimbursement is \$360 maximum total and \$100 maximum per person.
- (b) The department contributes \$150 maximum for seminar dinners up to \$65 per person.
- (c) The department contributes \$360 maximum for colloquium dinners up to \$90 per person.

Subject to these limits, the department will cover the meals of:

- the speaker,
- all faculty present, with a copay of \$20,
- all graduate students, with a copay of \$10.

Faculty discretionary funds, if available, may be used to pay what the department doesn't cover (this is still subject to the Weinberg limits of \$360 total maximum and \$100 per person max).

Please consult the staff in advance if you wish to request a group meal reimbursement above \$360.

- (3) If your group meal does not include an outside speaker/visitor:

Reimbursement is only allowed in special circumstances. Please consult the staff in advance.