How to Run the Evaluation Committee the Way I Did

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Abstract

This document gives instructions for running the evaluation committe in Mathematics the way I did it in 2018-19. The source of this file (.tex) and the included files (.txt, .html, .docx, .ipynb) are also available.

Possible uses of these instructions include the following.

- Faculty members could use them to better understand how the committee functioned and how their own rating was determined.
- The faculty as a whole could use them as a starting point for discussions on what aspects of the procedure, or of the underlying policy, should be changed.
- The next vice chair could use them to run the committee, or some aspects of it, the same way.

Contents

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1 Timeline

August   • Start requesting members for the committee. Although you do not need them until late September, lack of committee members routinely delays the process.

  • Update the Committee, Service, and Teaching forms; see section 3.

  • Update the list of people who get evaluated and the list of committees that were active, with their chairs.

August/September   • Make folders in OneDrive. I have EvaluationCommittee/2018/ with folders I and II within them for group I and II. Within the appropriate group, make a folder for each faculty member. Within each of I and II make folders 1Instructions and 2Summaries.

  • Copy Syllabuses and Student evaluations from the department admin drive into each faculty member's folder.

  • From the admin drive get the spreadsheet with course offerings, instructors, and enrollments. From the chair get grade distributions. Process these as described in section 8.

September   • Send out the Committee, Service, and Teaching forms and information requests; see the emails in section 2.

  • Chase those who do not submit their forms. Track in a spreadsheet.

- When forms are submitted, check that they seem complete and ask for corrections or clarifications as needed. Process forms to make summary spreadsheets; see section 4. Upload forms etc. to each faculty member's folder. Upload Committee forms and summaries into the 2Summaries folders.

- Update and upload the Service and Teaching procedures and information; see sections 6 and 7.

September/October • Give committee members access to OneDrive folders. Assign each 2/3 of the faculty, excluding themselves.

- Schedule Service and Teaching meetings.

- Have the meetings. Committee members leave the room when their own ratings are done and only learn their own ratings when the letters are sent out. Ask committee members for suggestions on improving the process. Send the ratings to the chair; the vice-chair's ratings are sent by another committee member.

November • If you are new, get access to all Math faculty data in Digital Measures by asking the chair to ask the Associate Dean to grant it.

- Update and post the Digital Measures instructions; see section 5.2.

- Set up the Digital Measures reports; see section 5.1.

- Update the Research form.

- Update and send the Research email.

December/January • As Research forms arrive, check that the numbers of publications and grants matches what is in Digital Measures and ask for corrections. When everything agrees, process forms to make summary spreadsheets and upload forms etc. to each faculty member's folder. Track submissions in a spreadsheet.

January • Chase those who do not submit their forms.

- Upload Research summary spreadsheet, publication information from Digital Measures, and grant information from Digital Measures.

- Schedule the Research meeting as soon as possible. The chair is supposed to send the letters with ratings by the beginning of February.

- Have the meetings. Ask committee members for suggestions on improving the process. Send the ratings to the chair.

2 Emails

2.1 Committee Chairs

```
=== Committee reporting form due September 7

Hello,

Please find attached the reporting form for the performance of the
members of your committee during the 2017-18 academic year. If you
need the form in another format, please let me know.

Return your completed forms to me by Friday September 7. Preferably:
```

1) Edit the .docx file.

2) Name it with your committee and the year (e.g. GraduateCommittee2018.docx).

3) Send it to me by email.

If your committee was inactive, then send me an email to that effect.

The committees were

Graduate - Savin
Undergraduate - Young
PandT - Aizicovici
Evaluation - Mohlenkamp
Outreach - Singh
ColloquiumVisitors - Lin
AdvisoryBoard - Eisworth
CommitteeChairs - Eisworth
CourseCoordinators - Eisworth
Grievance - Vinogradov
GroupIVSearch - Eisworth
CalculusBook - Mohlenkamp
LinearAlgebra - Young

Cheers,
Martin

2.2   Service

=== Service form due September 7

Hello,

Please find attached the reporting form for Service. On it, report your service activities from the 2017-18 academic year, which we will count as August 19, 2017 to August 18, 2018. If you need the form in another format, please let me know.

Return your completed form to me by Friday September 7. Preferably:

1) Edit the .docx file to include your information. Delete the instructions and any categories for which you have nothing to report.

2) Name it with your last name and the year (e.g. MohlenkampService2018.docx).

3) Send it to me by email.

Cheers,
Martin

2.3   Teaching

==== Teaching Form due September 28

Hello,

Please find attached the reporting form for Teaching. On it, report
your teaching activities from the 2017-18 academic year, which we will
count as August 19, 2017 to August 18, 2018. If you need the form in
another format, please let me know.

Return your completed form and sample(s) to me by Friday September 28. Preferably:

1) Edit the .docx file to include your information. Delete the
instructions and any categories for which you have nothing to report.

2) Name it with your last name and the year (e.g. MohlenkampTeaching2018.docx).

3) Send it to me by email.

4) With the form send:

a) One final exam (or replacement summative assessment) that you wrote
and used in 2017-8. If you only taught in courses with common finals
that you did not write, send some similar assessment that you
wrote. Name the file like MohlenkampTeachingExam2018.pdf.

b) (optional) Some other teaching material that you produced that you
think is novel, unique to you, or especially effective. Name the file
like MohlenkampTeachingSample2018.pdf. If the material is a web page,
then send the URL instead of a file.

Cheers,
Martin

2.4   Research

=== Research information due January 7

Hello,

Your research information for the evaluation committee is due January
7. You are encouraged to submit it before leaving for the winter
break; if something new happens after you submit it, then you can send
an updated version.

The reporting period is the calendar year 2018. Publications use a
3-year window and so also include 2016 and 2017.

1) Enter publications (papers, chapters, etc.) submitted, accepted, or
published in 2016, 2017, and 2018 in Digital Measures, using the
instructions at
    http://www.ohiouniversityfaculty.com/mohlenka/misc/MATHdigitalmeasures.html

2) Enter grant information (applications, new awards, continuing
grants) in Digital Measures, using the instructions at
    http://www.ohiouniversityfaculty.com/mohlenka/misc/MATHdigitalmeasures.html

3) Edit the attached .docx file to include your information. Delete
the instructions and any categories in which you have nothing to
report. Name it with your last name and the year
(e.g. MohlenkampResearch2018.docx). Send it to me via email.

4) Select one sample of your own work that you think represents the
    quality of your current research. Typically this will be a recent
    publication or preprint, but it could be a talk, grant application,
    etc. Send it (or a web link to it) to me by email.

Cheers,
Martin

3   Forms

Reporting Form for Service by Committee.   **Department of Mathematics.**

Committee name:

Committee chair or person making this report:

Briefly describe the major activities of the committee.

Estimate the amount of time required of committee members. (Alternatively, estimate for each member individually below.)

List each committee member, and for each rate their level of contribution. (e.g. poor, satisfactory, outstanding) Elaborate for ratings other than satisfactory and as you see fit.

Reporting Form for Service.   Department of Mathematics.

Name:

Leadership roles: (e.g. graduate chair, chair of a committee, course coordinator)

Membership in other committees: Briefly describe your contribution to each committee.

Advising: Mean number of advisees/semester for Undergraduate_____ and Graduate_____

Tutorial/Ph.D. Comprehensive Examinations written and graded. (Count according to the date they were administered.)

Routine activities performed (e.g. proctoring comprehensive examinations, being a member of a thesis/dissertation committee (give student name, level, department, and whether they finished), writing recommendation letters (give number of people for whom you wrote letters), etc.)

Service to the profession. (Service related to research, such as refereeing articles, reviewing grants, editing journals, or organizing conferences, may be counted here or on the research form, but not both.)

Describe any other significant service related activities or any other matters that you wish to bring to the attention of the evaluation committee.

Reporting Form for Teaching.   **Department of Mathematics.**

Name:

Non-"MATH" courses taught and enrollment: (All courses with the "MATH" prefix are retrieved automatically.)

Dissertation students. (Give the student's name and the semester(s) they were your student.)

Approved independent studies. (Give the student's name, the semester, and the subject studied.)

Honors Tutorials. (Give the student's name, the semester, and the subject studied.)

Development of new courses. (Only courses developed during this evaluation period.)

 Teaching of new or significantly revised courses. (Only courses taught during this evaluation period.)

Teaching related workshops/conferences attended, grants received. Give dates, places, subjects.

Describe any other significant teaching related activities or any other matters that you wish to bring to the attention of the evaluation committee.

2018 Reporting Form for Research.   **Department of Mathematics.**

Name:

Publications. Items submitted, accepted, or published in 2016, 2017, and 2018 will be retrieved from Digital Measures. As an accuracy check, list here:

Number published:

Number accepted but not yet published:

Number submitted but not yet accepted:

Grants. External grant applications and continuing grants active in 2018 will be retrieved from Digital Measures. As an accuracy check, list here:

Number of grant applications pending or not funded:

Number of active grants:

Talks. Include type (invited plenary, invited special session, contributed, seminar, colloquium), length of talk, venue (conference or seminar name), location, and date.

Conferences attended (without a talk).

Research/service to the profession. (These activities may be listed here or under service, but **not** in both places.)

Refereeing articles (give journals and number of manuscripts):

Grant reviews and service on grant panels:

Editorships of journals:

Organizing a conference or special session:

Holding an office in a professional organization (e.g. AMS, MAA, SIAM, SOA):

Ph.D. student who completed a dissertation. Give name and title of dissertation, semester of completion.

Describe any other significant research related activities or any other matters that you wish to bring to the attention of the evaluation committee.

4 Summaries

Summaries help the committee consider multiple people at the same time. Information in them is objective, not making judgments. Committee members might start with these summaries, add columns with their own notes, and then arrange the rows to give rankings. Here are the column headers I used, with [] expanding abbreviations.

4.1 Service

4.1.1 Group I

- Lead
- Member
- UG adv[ising]
- G adv[ising]
- [comprehensive] exams
- PhD/MS cm[(committees)
- [recommendation] letters
- other routine
- Fac Mtg [(attendance)]
- professional
- other

4.1.2 Group II

- Lead
- Member
- UG adv[ising]
- G adv[ising]
- [recommendation] letters
- other routine
- Fac Mtg [(attendance)]
- professional
- other

4.2   Teaching

4.2.1   Group I

- [HTC] Tutorial

- Dissertation [students]

- Independent [study classes]

- Workshops/conferences

- develop new [courses]

- Teach new/revise [courses]

- Other

- Notes

4.2.2   Group II

- Independent [study classes]

- Workshops/conferences

- develop new [courses]

- Teach new/revise [courses]

- Other

- Notes

4.3   Research, Group I

- Journal Articles
  - Publish
  - Accept
  - Submit

- Conference Proceedings
  - Publish
  - Accept
  - Submit

- Other Publications
  - Publish
  - Accept
  - Submit

- Grants
  - Apply
  - Active

- Talks

- Conference [without talk]

- PhD [student finished]

- referee

- grant review

- editor

- organize [conference or session]

- office [in professional organization]

- Other

- Notes

5 Digital Measures

5.1 How to get reports

Create reports as follows. Run them to see results.

5.1.1 MATHGrant

1. Set date range, including future years.

2. Set to include Department(All), enabled accounts only.

3. Set the Data to include. Within "Common Items", within "Contracts, Grants, and Sponsored Research", select

   - Contract/Grant/Research Type
   - Contract/Grant/Research Title
   - Sponsoring Organization
   - Awarding Organization Is
   - Investigators
     - People at Ohio University
     - First Name
     - Middle Name/Initial
     - Last Name
     - Role
     - If a student, what is his/her level?

  – Percent of Effort
- Amount Requested
- Amount Funded
- Current Status
- Month Submitted for Funding
- Year Submitted for Funding
- Start Month of Funding
- Start Year of Funding
- End Month of Funding
- End Year of Funding

5.1.2   MATHPub

1. Set date range to the 3-year window.

2. Set to include Department(All), enabled accounts only.

3. Set the Data to include. Within "Common Items", within "Scholarly and Intellectual Contributions", select

   - Contribution Type
   - Explanation of "Other"
   - Current Status
   - Title of Contribution
   - Title of Larger Work
   - Authors
     – People at Ohio University
     – First Name
     – Middle Name/Initial
     – Last Name
     – If a student, what is his/her level?
   - Journal/Publisher/Proceedings Publisher
   - Volume
   - Issue Number/Edition
   - Page Numbers or Number of Pages
   - Editor(s)
   - Digital Object Identifier (DOI)
   - Peer Reviewed?
   - Month Submitted
   - Year Submitted
   - Month Accepted
   - Year Accepted
   - Month Published
   - Year Published

5.2   Instructions for the Faculty

Mathematics Digital Measures Instructions

- [Log in here](#).
- You password is **not** your main OHIO password. If you do not know what it is then [reset it](#).
- If you find these instructions unclear, incorrect, or insufficient, then [email me](#) so I can improve them.
- Do not forget to [check](#) that your entries appear using the instructions below.

To enter a paper that is submitted but not yet accepted:

- [Log in here](#).
- Under **Research and Creative Activity** click on **Scholarly and Intellectual Contributions**.
- Click the button **+ Add New Item**.
- Select the **Contribution Type** such as "Journal Article, Academic Journal".
- Select the **Current Status** as "Submitted"
- Fill in the **Title of Contribution** (the paper title)
- Add other authors. If they are at Ohio Universtiy then use the "Select or type a name.." field; otherwise fill in their name. (Don't both select them/you and fill in the name; that is for pen names and aliases.)
- Fill in the **Journal/Publisher/Proceedings Publisher** field with the name of the journal.
- Fill in the **Was this peer-reviewed/refereed?** field as "Yes" if it is being refereed.
- Fill in the **Date Submitted** with the Month and Year.
- [Check that it worked](#) using the instructions below.

To enter a paper that is accepted but not yet published:

Follow the instructions above for submitted papers, modified as follows:

- Select the **Current Status**, such as "Accepted Pending Revision" or "Accepted and/or in Press"
- Fill in the **Date Accepted** with the Month and Year.

To enter a paper that is published:

Follow the instructions above for accepted papers, modified as follows:

- Select the **Current Status** as "Published".
- Fill in **Volume**, **Issue Number/Edition**, and **Page Numbers or Number of Pages**.
- Fill in other fields, such as Editors, if appropriate.
- Fill in **Web Address** and/or **Digital Object Identifier (DOI)** if available.
- Fill in the **Date Published** with the Month and Year. (Day is optional.)

To add a grant:

- Under **Research and Creative Activity** click on **Contracts, Grants and Sponsored Research**.
- Click the button **+ Add New Item**.
- Select the **Contract/Grant/Research Type**, **Awarding Organization Is**, and **Current Status**.
- Fill in the **Contract/Grant/Research Title**, **Sponsoring Organization**, **Amount Requested** and/or **Amount Funded**, and **Date Submitted for Funding**.
- If the grant is under review or was funded, fill in the actual **Start Date of Funding** and **End Date of Funding**. If it was not funded, set the **Start Date of Funding** and **End Date of Funding** the same as the **Date Submitted for Funding**.

Checking that it worked:

- Hit the **Reports** button at the top of the page.
- Select Arts and Sciences Annual Personal Data Report.
- To check publications:
  - Set the **Date Range** to Jan 01 2016 to Dec 31 2018.
  - Hit the button **Run Report**.
  - Publications will appear under **B. Publications** under subsection headings. Submitted papers should appear under **In preparation**, accepted papers under **Accepted** or **In Press**, and published papers under **Published**.
    - If old stuff appears, it is because the date is incorrect or missing. Go back and edit that item to update it and put in the correct date.
    - If something is missing, it is because the date is incorrect or missing. Go back and edit that item to update it and put in the correct date.
- To check grants:
  - Set the **Date Range** to Jan 01 2018 to Dec 31 2020. (The future dates catch grants that have not yet started.)
  - Hit the button **Run Report**.
  - Grants will also appear under **B. Publications** under subsection **Grants and Sponsored Research**.
    - If old stuff appears, it is because the date is incorrect or missing. Go back and edit that item to update it and put in the correct date. Make sure that unfunded proposals have the **Start Date of Funding** and **End Date of Funding** set the same as the **Date Submitted for Funding** so they do not show up after the year of submission.
    - If something is missing, it is because the date is incorrect or missing. Go back and edit that item to update it and put in the correct date.
- If you see other incorrect things in this report, then please fix them too. We will not use them for evaluation, but the College may use them.

Martin J. Mohlenkamp

Last modified: Fri Nov 30 14:51:20 UTC 2018 by mjm

6 Instructions for the Group I Subcommittee

6.1 Service

6.1.1 ServiceProcedureOne.txt

```
Evaluating Service:
===============================


You have been assigned a subset of the faculty to evaluate. Every
faculty member is being evaluated by two committee members. See the
file AssignmentsOne.txt for your assignment.

See the file ServiceInformationOne.txt
for what information is available and what to watch for.

* Read the information for the faculty you were assigned and rank
  them. Ties are allowed but avoid too many. Gaps are allowed.

* We will meet and try to merge the ranked lists of the committee
  members.

* We will map the rankings to a score in the range 5-10 (assuming no
  terrible performance).

Compiling scores:
-----------------

* Policy says we should each score everyone and then report the mean
  to the chair. If we come to consensus scores we could report those.
  (We could also report dissentions from the consensus.)
```

6.1.2 ServiceInformationOne.txt

```
The following service information is available:
================================================

In each faculty member folder:
------------------------------

* Their form.

In the 2Summaries folder:
-----------------------

* Reports from the chair of each committee
```

```
  + These indicate how active the committee was.

  + These indicate if a committee member did an especially good or bad job.
```

```
* SummaryGroupI_2018.xlsx tab for "Service"
  -- summary spreadsheet of service activities. Notes:

  + I added a few things people forgot and interpreted some others.

  + Dissertation committee for own student does not count as service.

  + Policy says being on a dissertation/thesis committee counts in
    year of completion.
```

```
* SummaryGroupI_2018.xlsx tab for "FacultyMeeting"
  Faculty meeting attendance, which policy says we should count.
  (Does not indicate excused absences.)
```

6.2 Teaching

6.2.1 TeachingProcedureOne.txt

```
Evaluating Teaching:
====================


You have been assigned a subset of the faculty to evaluate. Every
faculty member is being evaluated by two committee members. See the
file AssignmentsOne.txt for your assignment.

See the file TeachingInformationOne.txt
for what information is available and what to watch for.

* Read the information for the faculty you were assigned and rank them
  based on classroom performance (not extras). Ties are allowed but
  avoid too many.

* Compute the extras bonus for each of the faculty you were assigned.

* We will meet and try to merge the ranked lists of the committee
  members.

* We will map classroom performance to a score in the range 5-8
  (assuming no terrible performance).

* We will then add on bonuses for the extras and adjust as needed.

Compiling scores:
-----------------
```

* Policy says we should each score everyone and then report the mean
  to the chair. If we come to consensus scores we could report those.
  (We could also report dissentions from the consensus.)

6.2.2   TeachingInformationOne.txt

```
The following teaching information is available:
==================================================
```

```
In each faculty member folder:
------------------------------
```

* Student evaluations for each class (4xxx/5xxx may be combined).

  + These indicate how well the students thought the class went.

  + Watch for a single student giving all 1's, which may indicate they
    are trying to sabotage the scores or that they thought 1 was good.

  + Watch for comments that indicate good ratings for bad reasons,
    such as "really easy".

  + In classes with a recitation, watch for comments that really apply
    to the recitation leader.

  + There were some anomalies in the administration of the evaluations:

    - [*Name and course number*] is on paper, so global score not computed or entered

    - [*Name and course number*] is on paper, so global score not computed or entered

* Syllabus for each class taught.

  + These may indicate level of effort, activity, organization,
    supplemental materials provided, etc.

* Teaching Sample

  + An exam was requested and a second one suggested.

  + Learn what you can from these and think about how we can make the
  sample request more specific so that it can be more useful.

* Their form

  + This may mention initiatives or revisions to classes.

+ This includes teaching "extras" such as independent studies.

In the summaries folder:

Classroom performance

* byClassOne.xlsx -- data aggregated by Catalog Number (i.e. course),
  to use in comparisons. The columns are:

  Num.Enrolled -- total enrollment

  Responses -- total number of responses to student evaluations

  Global -- global student evaluation for that course; scores from
  each section were weighted by the number of responses.

  GPA -- net grade point average awarded in this course (A=4.0, B=3.0
  etc.). WP, WF, I, NR were counted as F and PR and CR were counted as
  A.

  Apercent -- the percentage of students receiving A or A- in the course.

  DFWpercent -- the percentage of students receiving D, F, or W in the course.

* byLevelOne.xlsx -- data aggregated by course level. 4000 and 5000
  classes were combined to the level 4500. The columns are the same as
  above.

* TeachingMainOne.xlsx -- full data set. Each row is a single course offering.

  Instructor, Term, Catalog.Number, Title, Credit.Hours specify the
  offering.

  Responses, Global, GPA, Apercent, DFWpercent are the same as above.

  C.Global, C.GPA, C.Apercent, C.DFWpercent give the difference
  between the scores for this offering and the scores for all *other*
  offerings of this same course. Positive values indicate that this
  one is higher. NA indicates this was the only offering of this course.

  L.Global, L.GPA, L.Apercent, L.DFWpercent give the difference
  between the scores for this offering and the scores for all *other*
  offerings at the same Level.

* byInstructorOne.xlsx -- data aggregated by instructor.

Has the same columns as byClassOne plus

L.GPA, L.Apercent, L.DFWpercent -- the combined L.GPA, L.Apercent, L.DFWpercent for all sections in TeachingMainOne taught by that instructor, weighted by Num.Enrolled.

L.Global -- the combined L.Global for all sections in TeachingMainOne taught by that instructor that had student evaluations, weighted by Responses.

Notes:

TeachingMainOne also includes the very basic information of who taught what.

Sometimes 4xxx/5xxx courses may have had their evaluations combined.

byLevelOne shows an upward trend in Global, GPA, and Apercent. If we consider the increase in GPA and Apercent as justified, then being assigned higher-level classes increases Global without necessarily indicating better teaching.

The L. columns in byInstructorOne attempt to compensate for appropriate changes in GPA etc. with Level. Note that L.GPA, L.Apercent, L.DFWpercent include all sections while L.Global only includes section with evaluations.

If you can think of other data or other ways of presenting this data that may help, let me know.

Extras

* SummaryGroupI_2018.xlsx tab for "Teaching"
   -- summary spreadsheet of extra items, such as independent studies.

  + Some minor items were included by some people as teaching and by others as service.

  + Independent study 1+3 means an independent study for 1 student and an independent study for 3 students.

  In the past we awarded Group I faculty extra points for teaching extras, using the scale below. We could do that again, or merge with classroom performance.

  + Ph.D. student who did not finish yet (thus rewarded under teaching): 0.5/AY

  + Individual study: 0.2/student/semester. Use discretion for

     multiplier if course was offered to multiple students
     simultaneously. If it resulted in measurable research outcomes
     (such as a poster at a conference), add up to 0.25

  + HTC thesis (normally including meeting throughout AY): 0.5

  + Teaching newly designed course: 0.3

  + Teaching a course for the first time / Revision of a course: 0.05

  + Workshop talk: 0.1

  + Attending workshop: 0.05

6.3 Research

6.3.1 ResearchProcedureOne.txt

```
Evaluating Research:
================================
```

You have been assigned a subset of the faculty to evaluate. Every
faculty member is being evaluated by two committee members. See the
file AssignmentsOne.txt for your assignment.

See the file ResearchInformationOne.txt
for what information is available and what to watch for.

* Read the information for the faculty you were assigned and rank
  them. Ties are allowed but avoid too many. Gaps are allowed.

* We will meet and try to merge the ranked lists of the committee
  members.

* We will map the rankings to a score.

```
Compiling scores:
-----------------
```

* Policy says we should each score everyone and then report the mean
  to the chair. If we come to consensus scores we could report those.
  (We could also report dissentions from the consensus.)

6.3.2 ResearchInformationOne.txt

The following research information is available:

```
==================================================
```

In each faculty member folder:
----

* A sample of their research, which they provided
  (e.g. MohlenkampResearchSample2018.pdf)

  + Some people sent 2 samples.

  + The sample helps you determine the quality of the research, so we
  are not simply counting.

* Their form. (e.g. MohlenkampResearch2018.docx).

  + Check that service to the profession (such as refereeing) was not
  also reported on the service form.

  + There is some confusion about publications that were published
  online in 2018 but will appear in print in 2019. They may be counted
  as published or as accepted.

In the summaries folder:
----

* SummaryGroupI_2018.xlsx tab "Research" -- summary spreadsheet of research
  activities. Notes:

  + I separated journal articles, conference proceedings, and other
  types of publications.

* MathPub2018.xlsx -- spreadsheet with all department publications.

  + This is the full report, but I hid columns that did not seem useful
    and rows for people we are not evaluating.

  + See the person's form for explanations of anomalies, such as
    publications for which they were editor, things listed as
    published that appeared in 2019 and so are on the form as
    accepted, etc.

* MathGrant2018.xlsx -- spreadsheet with all department grants.

  + Applications, even if unsuccessful, count in the year of application.

  + There are a wide variety of sizes of grants, from substantial research
    grants to small travel grants.

+ This is the full report, but I hid columns that did not seem useful
  and rows for people we are not evaluating.

+ Some grants are teaching related and may have been counted in our
  teaching evaluation.

7 Instructions for the Group II Subcommittee

7.1 Service

7.1.1 ServiceProcedureTwo.txt

```
Evaluating Service:
===============================


You have been assigned a subset of the faculty to evaluate. Every
faculty member is being evaluated by two committee members. See the
file AssignmentsTwo.txt for your assignment.

See the file ServiceInformationTwo.txt
for what information is available and what to watch for.

* Read the information for the faculty and rank them.
  Ties are allowed but avoid too many. Gaps are allowed.

* We will meet and try to merge the ranked lists of the committee
  members.

* We will map the rankings to a score in the range 5-10 (assuming no
  terrible performance).

Compiling scores:
-----------------


* Policy says we should each score everyone and then report the mean
  to the chair. If we come to consensus scores we could report those.
  (We could also report dissentions from the consensus.)
```

7.1.2 ServiceInformationTwo.txt

```
The following service information is available:
=================================================

In each faculty member folder:
```

```
------------------------------
```

* Their form.

```
In the 2Summaries folder:
------------------------
```

* Reports from the chair of each committee

  + These indicate how active the committee was.

  + These indicate if a committee member did an especially good or bad job.

* SummaryGroupII_2018.xlsx tab for "Service"
  -- summary spreadsheet of service activities. Notes:

  + I added a few things people forgot and interpreted some others.

* SummaryGroupII_2018.xlsx tab for "FacultyMeeting"
  Faculty meeting attendance, which policy says we should count.
  (Does not indicate excused absences.)

7.2   Teaching

7.2.1   TeachingProcedureTwo.txt

```
Evaluating Teaching:
===================
```

You have been assigned a subset of the faculty to evaluate. Every
faculty member is being evaluated by two committee members. See the
file AssignmentsTwo.txt for your assignment.

See the file TeachingInformationTwo.txt
for what information is available and what to watch for.

* Read the information for the faculty and rank them based on both
  classroom performance and extras. Ties are allowed but avoid too
  many.

* We will meet and try to merge the ranked lists of the committee
  members.

* We will map the rankings to a score in the range 5-10 (assuming no
  terrible performance).

```
Compiling scores:
-----------------
```

```
* Policy says we should each score everyone and then report the mean
  to the chair. If we come to consensus scores we could report those.
  (We could also report dissentions from the consensus.)
```

7.2.2   TeachingInformationTwo.txt

```
The following teaching information is available:
================================================

In each faculty member folder:
------------------------------

* Student evaluations for each class

  + These indicate how well the students thought the class went.

  + Watch for a single student giving all 1's, which may indicate they
    are trying to sabotage the scores or that they thought 1 was good.

  + Watch for comments that indicate good ratings for bad reasons,
    such as "really easy".

  + In classes with a recitation, watch for comments that really apply
    to the recitation leader.

* Syllabus for each class taught.

  + These may indicate level of effort, activity, organization,
    supplemental materials provided, etc.

* Teaching Sample

  + An exam was requested and a second one suggested.

  + Learn what you can from these and think about how we can make the
  sample request more specific so that it can be more useful.

* Their form

  + This may mention initiatives or revisions to classes.

  + This includes teaching "extras" such as independent studies.


In the summaries folder:
------------------------
```

Classroom performance

* byClassTwo.xlsx -- data aggregated by Catalog Number (i.e. course),
  to use in comparisons. The columns are:

  Num.Enrolled -- total enrollment

  Responses -- total number of responses to student evaluations

  Global -- global student evaluation for that course; scores from
  each section were weighted by the number of responses.

  GPA -- net grade point average awarded in this course (A=4.0, B=3.0
  etc.). WP, WF, I, NR were counted as F and PR and CR were counted as
  A.

  Apercent -- the percentage of students receiving A or A- in the course.

  DFWpercent -- the percentage of students receiving D, F, or W in the course.

* byLevelTwo.xlsx -- data aggregated by course level. 4000 and 5000
  classes were combined to the level 4500. The columns are the same as
  above.

* TeachingMainTwo.xlsx -- full data set. Each row is a single course offering.

  Instructor, Term, Catalog.Number, Title, Credit.Hours specify the
  offering.

  Responses, Global, GPA, Apercent, DFWpercent are the same as above.

  C.Global, C.GPA, C.Apercent, C.DFWpercent give the difference
  between the scores for this offering and the scores for all *other*
  offerings of this same course. Positive values indicate that this
  one is higher. NA indicates this was the only offering of this course.

  L.Global, L.GPA, L.Apercent, L.DFWpercent give the difference
  between the scores for this offering and the scores for all *other*
  offerings at the same Level.

* byInstructorTwo.xlsx -- data aggregated by instructor.

  Has the same columns as byClassTwo plus

  L.GPA, L.Apercent, L.DFWpercent -- the combined L.GPA, L.Apercent,
  L.DFWpercent for all sections in TeachingMainTwo taught by that
  instructor, weighted by Num.Enrolled.

```
   L.Global -- the combined L.Global for all sections in
   TeachingMainTwo taught by that instructor that had student
   evaluations, weighted by Responses.

Notes:

TeachingMainTwo also includes the very basic information of who taught what.

The L. columns in byInstructorTwo attempt to compensate for
appropriate changes in GPA etc. with Level. Note that L.GPA,
L.Apercent, L.DFWpercent include all sections while L.Global only
includes section with evaluations.

If you can think of other data or other ways of presenting this data
that may help, let me know.

### Extras

* SummaryGroupII_2018.xlsx tab for "Teaching"
  -- summary spreadsheet of extra items, such as independent studies.

  + Some minor items were included by some people as teaching and by
  others as service.

  + Independent study 1+3 means an independent study for 1 student and an
  independent study for 3 students.
```

8 Teaching Data and Statistics

8.1 Get and Prepare Files

From the admin drives get the fall and spring enrollment spreadsheet, like AY18EnrollmentData.xlsx with 2 tabs. Copy the data from one tab into the other and delete the extra tab. Save as Enrollment.csv

From the department chair get the fall and spring grade distribution (By Instructor and Course) spreadsheets, such as F17.xlsx and S18.xlsx.

- Manually delete top lines up until College.

- Manually delete columns "College" and "Dept/Schl"

- Insert a column "Term" with the term code, e.g. 2181 (fall) or 2185 (spring).

- Check if columns align between F17.xlsx and S18.xlsx. If one semester had a grade (like I) that the other did not, then insert it.

- Copy the data without headers from S18.xlsx into F17.xlsx, so they are combined.

- Manually change the header A- to Aminus, B+ to Bplus, etc.

- Save as Distribution.csv

Create a file StudentEval.csv with header row

`"Term","Catalog.Number","Section","Responses","Global"`

Manually reading off each student evaluation pdf of each faculty being rated, make a row like

`2185,3412,109,41,3.84`

which means in term 2185, the class MATH 3412 section 109 had 41 students fill out the student evaluation and give a global rating of 3.84.

8.2   Process Files

I processed in a jupyter notebook in CoCalc `https://cocalc.com`

Mathematics Evaluation Committee Teaching Data processing

Martin J. Mohlenkamp

Code used Fall 2018. This presentable file created Spring 2019.

The code is in R.

```
In [0]:  # Set people to evaluate. Will need updating
         GroupOne <- c("Aizicovici,Sergiu","Benhaddou,Rida","Bischoff,Marcel",
         "Davydov,Alexei","Eisworth,Todd",'Feng,Yaqin','Fuller,Adam',"Gulisash
         vili,A","Hallman-Thrasher,Allyson","Huynh,Dinh","Just,Winfried","Klei
         n,Robert M","Lin,Wei","Lopez-Permouth,Sergio Roberto","Melkonian,Vard
         ges","Mohlenkamp,Martin","Savin,Tatiana","Shen,Xiaoping","Uspenskiy,V
         ladimir","Vinogradov,Vladimir","Wu,Qiliang","Young,Todd Ray")
         GroupTwo <- c("Barsamian,Mark","Boczko,Erik Miklos","Bubp,Kelly Mari
         e","Hilverding,Monica Sue","Regan,Blake Bauman","Singh,Premjit")
         faculty <- c(GroupOne,GroupTwo)
```

Load Enrollments

```
In [0]:  # read in enrollment data
         eraw <- read.csv("Enrollment.csv",header=TRUE)
         # remove 0 enrollment courses
         # remove duplicated Class.Number in same Term, which are different me
         etings of the same class
         # use fact both are numbers and Term is 4 digits to detect duplicates
         # & is elementwise
         eraw2 <- subset(eraw,(Num.Enrolled != 0) & !duplicated(10000*Class.Nu
         mber + Term))
         #summary(eraw2)
         # Make a single dataframe with the relevant parts
         Title <- factor(eraw2$Title)
         Term <- factor(eraw2$Term)
         Catalog.Number <- factor(eraw2$Catalog.Number)
         Section <- factor(eraw2$Class.Section) # lose Class.
         Instructor <- factor(eraw2$Instructor.s.) # lose .s.
         Credit.Hours<- factor(eraw2$Credit.Hours)
         Num.Enrolled <- as.vector(eraw2$Num.Enrolled)
         Class.Number <- factor(eraw2$Class.Number)
         enroll <- data.frame(Instructor,Term,Class.Number,Catalog.Number,Sect
         ion,Title,Credit.Hours,Num.Enrolled)
         # add the class Level, from 1000, 2000, 3000, 4500, 6000, 7000, 8000
         Levelmap <- function(x){
             if(x == "D005") return(1000)
             if(x <2000) return(1000)
             if(x <3000) return(2000)
             if(x <4000) return(3000)
             if(x <6000) return(4500)
             if(x <7000) return(6000)
             if(x <8000) return(7000)
             if(x <9000) return(8000)
             return(NA)
         }
         enroll$Level <- factor(sapply(as.vector(enroll$Catalog.Number),Levelm
         ap))
         summary(enroll)
```

```
In [0]:  # Apply any Manual adjustments:
         # Eisworth took over from Chapin
         enroll[enroll$Class.Number %in% c(8329,8455),]$Instructor <- NA
```

```
In [0]:  # filter to get only faculty
         #levels(enroll$Instructor)[! levels(enroll$Instructor) %in% faculty]
          # check who is not included to see if we missed any
         enrollf <- subset(enroll,Instructor %in% faculty)
         # order by faculty
         enrollf <- enrollf[order(enrollf$Instructor,enrollf$Catalog.Number),]
         #summary(enrollf)
         #head(enrollf)
         #levels(enrollf$Instructor)
```

Load and Include Student Evaluation Scores

```
In [0]:  # load in and include student evaluation scores
         seval <- read.csv("StudentEval.csv",header=TRUE)
         # make factors
         seval$Term <- factor(seval$Term)
         seval$Catalog.Number <- factor(seval$Catalog.Number)
         seval$Section <- factor(seval$Section)
         #summary(seval)
         # add blanks for scores
         enrollf$Global <- enrollf$Responses <- NA
         # add in available scores
         for(i in 1:nrow(seval)){
             match <- as.vector(enrollf$Term) == as.vector(seval[i,]$Term) & a
         s.vector(enrollf$Catalog.Number) == as.vector(seval[i,]$Catalog.Numbe
         r) & as.vector(enrollf$Section) == as.vector(seval[i,]$Section)
             if(sum(match) == 1){
                 #print(enrollf[match,])
                 enrollf[match,]$Responses <- seval[i,]$Responses
                 enrollf[match,]$Global <- seval[i,]$Global
             }else{
                 print("no match")
                 print(seval[i,])
             }
             }
         # Manually resolve any non-matches
         summary(enrollf)
```

```
In [0]:  # no score, look for missing things
         #subset(enrollf,is.na(Global) & Level==1000) # none
         #subset(enrollf,is.na(Global) & Level==2000) # HTC only
         #subset(enrollf,is.na(Global) & Level==3000) # HTC and one independen
         t study
         #subset(enrollf,is.na(Global) & Level==4500) # HTC, small enrollment,
         5xxx probably counted with 4xxx
         #subset(enrollf,is.na(Global) & Level==6000) # low enroll
```

Load and Include Grade Distributions

In [0]:
```r
# load in distributions
gdist <- read.csv("Distribution.csv",header=TRUE)
# blank instructors are really the one above
tmp <- as.vector(gdist$Instructor)
for(i in 2:length(tmp)){if(tmp[i] == ''){tmp[i] <- tmp[i-1]}}
gdist$Instructor <- factor(tmp)
# make factors of term
gdist$Term <- factor(gdist$Term)
# convert Course to Catalog.Number
gdist$Catalog.Number <- factor(substr(gdist$Course,6,20))
# set NA counts to 0
gdist[is.na(gdist)] <- 0
# compute GPA. WP WF FS FN F I NR count as 0; PR and CR count as 4
gdist$GPA <- with(gdist,((A+PR+CR)*4.0+Aminus*3.67+Bplus*3.33+B*3.0+B
minus*2.67+Cplus*2.33+C*2.0+Cminus*1.67+Dplus*1.33+D*1.0+Dminus*0.67)
/Grades)
# compute Apercent
gdist$Apercent <- (gdist$A+gdist$Aminus)/gdist$Grades*100
# compute DFWprecent
gdist$DFWpercent <- gdist$D.F.W/gdist$Grades*100
#summary(gdist)
# add blanks
enrollf$DFWpercent <- enrollf$Apercent <- enrollf$GPA <- NA
# add in available data
for(i in 1:nrow(enrollf)){
    match <- gdist$Term == as.vector(enrollf[i,]$Term) & gdist$Catalo
g.Number == as.vector(enrollf[i,]$Catalog.Number) & gdist$Instructor
== as.vector(enrollf[i,]$Instructor)
    if(sum(match) == 0){
        print("no match found")
        print(enrollf[i,])
    }else{
        # copy in
        enrollf[i,]$GPA <- gdist[match,]$GPA
        enrollf[i,]$Apercent <- gdist[match,]$Apercent
        enrollf[i,]$DFWpercent <- gdist[match,]$DFWpercent
        if(sum(match) > 1){
            print("duplicate matches")
            print(enrollf[i,1:3])
        }
    }
    }
summary(enrollf)
#head(enrollf)
```

Analyze

In [0]:
```r
# function definitions
# aggregate based on some split
aggregator <- function(splitdata,splitname){
    # splitdata -- data already split e.g. by Level e.g. split(data,data$Level)
    # splitname -- string with name to use e.g. "Level"
    Responses <- unlist(lapply(splitdata,function(dat){return(sum(dat$Responses,na.rm=TRUE))}))
    NumEnrolled <- unlist(lapply(splitdata,function(dat){return(sum(dat$Num.Enrolled,na.rm=TRUE))}))
    # Global is weighted by number of responses
    Global <- unlist(lapply(splitdata,function(dat){return(sum(dat$Responses*dat$Global,na.rm=TRUE)/sum(dat$Responses,na.rm=TRUE))}))
    # Apercent, DFWpercent, GPA weighted by Num.Enrolled (not checked
that matches number of grades)
    GPA <- unlist(lapply(splitdata,function(dat){return(sum(dat$Num.Enrolled*dat$GPA)/sum(dat$Num.Enrolled))}))
    Apercent <- unlist(lapply(splitdata,function(dat){return(sum(dat$Num.Enrolled*dat$Apercent)/sum(dat$Num.Enrolled))}))
    DFWpercent <- unlist(lapply(splitdata,function(dat){return(sum(dat$Num.Enrolled*dat$DFWpercent)/sum(dat$Num.Enrolled))}))
    # make a frame and order
    bysplit <- data.frame(Split=names(Global),Num.Enrolled=NumEnrolled,Responses=Responses,Global=Global,GPA=GPA,Apercent=Apercent,DFWpercent=DFWpercent)
    bysplit <- bysplit[order(bysplit$Split),]
    # set name
    names(bysplit)[1] <- splitname
    rownames(bysplit) <- NULL
    return(bysplit)
    }

# add comparative Global, Apercent, DFWpercent, GPA for each section
 taught, by Catalog.Number and by Level
sectioncomparer <- function(data,bydataLevel,bydataCatalog.Number){
    # data -- data frame to modify
    # bydataLevel -- aggregated data made by aggregator by Level
    # bydataCatalog.Number-- aggregated data made by aggregator by Catalog.Number
    # add factors -- L. for Level or C. for Catalog.Number
    #                 Global, Apercent, DFWpercent, GPA
    #                 (own score - other's score)
    # make space
    data$L.DFWpercent <- data$L.Apercent <- data$L.GPA <- data$L.Global <- data$C.DFWpercent <- data$C.Apercent <- data$C.GPA <- data$C.Global <-NA
    for(i in 1:length(data[,1])){
        # extract Class
        Catalog.Number <- as.vector(data[i,]$Catalog.Number)
        Class <- bydataCatalog.Number[bydataCatalog.Number$Catalog.Number==Catalog.Number,]
        # extract Level
        Level <- as.vector(data[i,]$Level)
        Leveldat <- bydataLevel[bydataLevel$Level==Level,]
        if( ! is.na(data[i,]$Global) ){
            # only add if something to compare to
```

```r
                    # by Catalog.Number
                    if(Class$Responses > data[i,]$Responses){
                        # not just this section
                        data[i,]$C.Global <- data[i,]$Global - (Class$Global*
Class$Responses-data[i,]$Global*data[i,]$Responses)/(Class$Responses-
data[i,]$Responses)
                    }
                    # by level
                    if(Leveldat$Responses > data[i,]$Responses){
                        # not just this section
                        data[i,]$L.Global <- data[i,]$Global - (Leveldat$Glob
al*Leveldat$Responses-data[i,]$Global*data[i,]$Responses)/(Leveldat$R
esponses-data[i,]$Responses)
                    }
            }
            # Apercent, DFWpercent, GPA always exist
            if(Class$Num.Enrolled > data[i,]$Num.Enrolled){
                # not just this section
                data[i,]$C.Apercent <- data[i,]$Apercent - (Class$Apercen
t*Class$Num.Enrolled-data[i,]$Apercent*data[i,]$Num.Enrolled)/(Class$
Num.Enrolled-data[i,]$Num.Enrolled)
                data[i,]$C.DFWpercent <- data[i,]$DFWpercent - (Class$DFW
percent*Class$Num.Enrolled-data[i,]$DFWpercent*data[i,]$Num.Enrolled)
/(Class$Num.Enrolled-data[i,]$Num.Enrolled)
                data[i,]$C.GPA <- data[i,]$GPA - (Class$GPA*Class$Num.Enr
olled-data[i,]$GPA*data[i,]$Num.Enrolled)/(Class$Num.Enrolled-data[i
,]$Num.Enrolled)
            }
            if(Leveldat$Num.Enrolled > data[i,]$Num.Enrolled){
                # not just this section
                data[i,]$L.Apercent <- data[i,]$Apercent - (Leveldat$Aper
cent*Leveldat$Num.Enrolled-data[i,]$Apercent*data[i,]$Num.Enrolled)/(
Leveldat$Num.Enrolled-data[i,]$Num.Enrolled)
                data[i,]$L.DFWpercent <- data[i,]$DFWpercent - (Leveldat$
DFWpercent*Leveldat$Num.Enrolled-data[i,]$DFWpercent*data[i,]$Num.Enr
olled)/(Leveldat$Num.Enrolled-data[i,]$Num.Enrolled)
                data[i,]$L.GPA <- data[i,]$GPA - (Leveldat$GPA*Leveldat$N
um.Enrolled-data[i,]$GPA*data[i,]$Num.Enrolled)/(Leveldat$Num.Enrolle
d-data[i,]$Num.Enrolled)
            }
        }
    return(data)
}
# add comparative Global, Apercent, DFWpercent, GPA for each instruct
or, versus Level
instructorcomparer <- function(data,maindata){
    # data -- instructor data frame to modify
    # maindata -- main (section) data frame
    # add factors -- L. since by Level
    #               Global, Apercent, DFWpercent, GPA
    #               mean of corresponding L. data in maindata
    # make space
    data$L.DFWpercent <- data$L.Apercent <- data$L.GPA <- data$L.Glob
al <- NA
    for(i in 1:length(data[,1])){
        # extract Instructor
        Instructor <- as.vector(data[i,]$Instructor)
```

```
            Instructordat <- maindata[maindata$Instructor==Instructor,]
            # Apercent, DFWpercent, GPA always exist
            data[i,]$L.Apercent <- sum(Instructordat$L.Apercent*Instructo
rdat$Num.Enrolled)/sum(Instructordat$Num.Enrolled)
            data[i,]$L.DFWpercent <- sum(Instructordat$L.DFWpercent*Instr
uctordat$Num.Enrolled)/sum(Instructordat$Num.Enrolled)
            data[i,]$L.GPA <- sum(Instructordat$L.GPA*Instructordat$Num.E
nrolled)/sum(Instructordat$Num.Enrolled)
            # Global may have NA
            #data[i,]$L.Global <- mean(Instructordat$L.Global,na.rm=TRUE)
            data[i,]$L.Global <- with(subset(Instructordat,!is.na(L.Globa
l)),sum(L.Global*Responses)/sum(Responses))
            }
      return(data)
}
```

Analyze and output to files

In [0]:
```r
# subset main data by group.
enrollfOne <- subset(enrollf,enrollf$Instructor %in% GroupOne)
enrollfTwo <- subset(enrollf,enrollf$Instructor %in% GroupTwo)
### split by Level
byLevel <- aggregator(split(enrollf,enrollf$Level,drop=TRUE),"Level")
byLevelOne <-aggregator(split(enrollfOne,enrollfOne$Level,drop=TRUE),
"Level")
byLevelTwo <-aggregator(split(enrollfTwo,enrollfTwo$Level,drop=TRUE),
"Level")
write.csv(byLevel,"byLevel.csv",row.names=FALSE)
write.csv(byLevelOne,"byLevelOne.csv",row.names=FALSE)
write.csv(byLevelTwo,"byLevelTwo.csv",row.names=FALSE)
#byLevel
#byLevelOne
#byLevelTwo
### split by Class
byClass <- aggregator(split(enrollf,enrollf$Catalog.Number,drop=TRUE
),"Catalog.Number")
byClassOne <- aggregator(split(enrollfOne,enrollfOne$Catalog.Number,d
rop=TRUE),"Catalog.Number")
byClassTwo <- aggregator(split(enrollfTwo,enrollfTwo$Catalog.Number,d
rop=TRUE),"Catalog.Number")
write.csv(byClass,"byClass.csv",row.names=FALSE)
write.csv(byClassOne,"byClassOne.csv",row.names=FALSE)
write.csv(byClassTwo,"byClassTwo.csv",row.names=FALSE)
#byClassTwo
# add comparative data to main using Class and Level
enrollf <- sectioncomparer(enrollf,byLevel,byClass)
enrollfOne <- sectioncomparer(enrollfOne,byLevelOne,byClassOne)
enrollfTwo <- sectioncomparer(enrollfTwo,byLevelTwo,byClassTwo)
write.csv(enrollf,"TeachingMain.csv",row.names=FALSE)
write.csv(enrollfOne,"TeachingMainOne.csv",row.names=FALSE)
write.csv(enrollfTwo,"TeachingMainTwo.csv",row.names=FALSE)
### split by Instructor
byInstructor <- aggregator(split(enrollf,enrollf$Instructor,drop=TRUE
),"Instructor")
byInstructorOne <- aggregator(split(enrollfOne,enrollfOne$Instructor,
drop=TRUE),"Instructor")
byInstructorTwo <- aggregator(split(enrollfTwo,enrollfTwo$Instructor,
drop=TRUE),"Instructor")
# use main comparative data to get instructor comparative data
byInstructor <- instructorcomparer(byInstructor,enrollf)
byInstructorOne <- instructorcomparer(byInstructorOne,enrollfOne)
byInstructorTwo <- instructorcomparer(byInstructorTwo,enrollfTwo)
write.csv(byInstructor,"byInstructor.csv",row.names=FALSE)
write.csv(byInstructorOne,"byInstructorOne.csv",row.names=FALSE)
write.csv(byInstructorTwo,"byInstructorTwo.csv",row.names=FALSE)
```