

Natural Sciences and Mathematics Council Meeting Minutes
13 November 2018 in SU2579 3:30-5:00 PM

1. Call to Order

- Presiding: Kathy Shan
- Present: Alessandro Arsie, John Bellizzi, Maria Diakonova, Kathy Fisher (secretary), Sally Harmych, Michael Heben, David Krantz, Brenda Leady, Tom Megeath, Kristi Mock, Qin Shao, Von Sigler, Henry Steby, Rebecca Sturges and Sibylle Weck-Schwarz
- Absent: Terry Bigioni (excused), Yashika Bhoge (excused)
- Others: Brian Ashburner, John Plenefisch

Approval of Minutes

- April 18 approved
- Sept 18 approved (with minor correction)

2. Unfinished Business

NSM Tenure and Promotion Elaborations (Alessandro Arsie)

- Compared NSM with Faculty Senate Elaborations and found some minor discrepancies that need to be corrected in NSM documents including:
 - Deadline dates and some other details differ
 - Include email option in addition to “in writing” options
 - Update language to reflect use of Faculty 180 instead of binders / folders
- John P: Who is going to do the revisions?
- John B: Suggestion - we could also make a separate document that lists where we put things and even how to title files, formatting so we have consistency across departments.
- Kathy S: Let’s put together a committee to do this
- Brian A: Do elaborations need to be approved by full faculty?
- Sibylle: If we need a vote by full faculty, we need 2 weeks.
- Kathy S: Aim for discussions / vote in March and if changes needed vote in April.
- Tom Megeath, John Bellizzi, and Qin Shao volunteer

Update on NSM Data Science Degree (John P)

- Decision from upper administration that we will have an inter-disciplinary BS (in NSM) and BA (in Arts and letters) in data science and data analytics
- Had an initial meeting with a committee of faculty to discuss what the core of this major should look like; had to use only existing courses or courses in process of being made
- Needed to utilize Minor in Data Science (in HHS) as the core
- Identified set of classes math, programming, data science to utilize (This is a draft only):
 - Math: Calculus I, II, and III, Elementary Linear Algebra, Statistical Methods I and II, Introduction to Theory of Probability, Introduction to Mathematical Statistics,
 - CSET Courses: Introduction to Computer Science, Data Driven Websites

- Electrical Engineering: Introduction to Programming, Non Linear Data Structures, Linear Data Structures, Discrete Structures
- HHS: Data Science I and II (being currently developed)
- Also Geographic Information Systems, Geographic Information Systems Applications, Econometrics, possibly data ethics course will be put together in Philosophy, Introduction to logic (Philosophy)
- In total about 64 credit hours
- Also want students to take at least 12 credits in a related area in this College.
- Need a department home for this.
- Issue: if interdisciplinary course, who is able to make changes to it? Which statistical packages are used? (R or SAS?). (HHS is involved but if housed in NSM they won't have any input until Faculty Senate level).
- Michael: Is there a way to include input at level below senate?
- John P: I think we can put together a reasonable degree, we just have to figure out a way to get it through the system without getting stuck.
- Qin: R or SAS is an important issue – very different languages, Math / Stats uses R, Social Sciences uses SAS.
 - Students tend to be better at first language they use.
 - SAS very expensive for companies (not for university) so companies trying to get rid of it. We need to prepare our students for the job market with R (or Python) or their opportunities will be limited.
- John P: I'm on the fence – I'm thinking what's more important is to have the general skills with a tool.
 - I'm concerned we'll get bogged down in the details of whether we pick SAS or R, since we'll never get agreement.
 - Maybe having the ability to be trained on a tool will make students more able to transfer that knowledge to another tool.
 - We can't get trapped in problem of not being able to move forward because we can't pick a tool.
- Qin: Not enough time to cover two languages, concerned this will end up being all in SAS
- Brian: Maybe need to have an option within program to go in SAS or R direction at the beginning
- Qin: Resources: if we use SAS need to pay for enough individual licenses. We have enough faculty to teach both. I think R better for students for the job market.
- John P: Problem is the central course, the first course needs to use one or the other – we could have 2 versions of that.
- John B: If you can do the same thing with both software packages, is there a way you could design the course so a student could use either one?
- Qin: Who are the potential students? Our college or the entire university?
- John P: Goal to bring new students who otherwise wouldn't come here want a degree in Data – they will be data scientists first, using their skills in an area of interest.
- Brian: At Berkley Data Science enrollment went from 100 to 1800 in a couple of years in Data Science.

- David: Is there a formal committee for this?
- John P: The larger committee is looking at multiple degrees from multiple colleges, with deans and representatives from multiple colleges

3. University Reports and Proposals

Faculty Senate

David Krantz:

- Flat demographics for Ohio high school graduation going forward
- Early separation plan (retirement plan) saved university 1.6 million dollars last round
- Presentation on programs for student success: enormous gaps between various groups of students

Sibylle Weck-Schwarz:

- 5 course modifications for Biology approved
- Number of credit hours for Biology 124 to 120 approved.
- Rick Francis talked about new software being used (IRB manager) if doing research with human subjects, also will be rolling out software for biosafety and animal subjects.

Graduate Council (Brian Ashburner)

- Beth Schlemper new interim Associate Dean for COGS, Song-Tao Liu will be vice-chair for spring and chair next year.
- Presentation on changes to how state awarding state share of instruction for phd programs (were using enrollment stats from 1994-98); now based 50% on course completion and degree completion, 25% research activity; not going to be a significant change in funding for UT
- Presentation from students on graduate student health insurance costs and comparing across institutions and looking at reducing by possibly combining with multiple institutions (\$2900 per student here, very high as compared to other institutions)
- Graduate Assistant parental leave policy (we don't currently have one) is being worked on by Grad Council Executive Committee at request of Provost.
- Looking at having graduate GA allocations done by end of year so we can make early offers to best students
- Concern that we tend to use all the stipend money, but not all the graduate tuition reimbursements funds. Administration looking at taking it away, but we have to leave a pool because grant proposals need commitments to matching funds for tuition should grants be funded.
 - Michael: Maybe some of these funds can be used for more TA's? More TA support gives more time for research; have to be careful to not lose the ability to have tuition stipends for the grants we write.
 - John B. Is there a solid wall between those 2 funds?
 - Brian: There has been in past but there doesn't have to be
 - John B: Are the tuition waivers real dollars?

- Brian: Yes they are. Now they can be transferred to other areas and can be used. Each college gets an allocation to use for stipends, salaries for staff, etc.; comes from university operating functions.
- Enrolment of grad students is even from this time last year, encourage students in your department to enroll.

4. College Reports and Proposals

NSM Chairs Meeting (Kathy S)

- Remind everyone that every course has to have a syllabus – even independent study courses.

5. Council Committee Reports

Curriculum Committee and Elections committee – nothing to report.

6. New Business

Discussion of Student Mental Health Issues (Rebecca Sturgess)

- Student Government discussing idea of student mental health days: students especially in this college are under substantial pressure; wanted to know your impression on a student missing class to take a mental health day when there's no way to document it (unless they saw a counsellor).
- David: Some students have accommodations through SDS and we are alerted that a student may miss class more than once, but you're talking about the general population?
- Rebecca: yes, that's not common among a lot of students.
- David: And the incidence is rapidly increasing, since 2010 number of students with significant episodes of anxiety, depression etc. is up to as high as 25 or 30%
- Brenda: It depends on the attendance policy for the class – is 100% attendance expected for full credit? Many already still allow full credit as long as most classes attended, unless it's something important like a test which has to be made up; more important question may be how does it apply to specific courses and instructors?
- Kathy F: I think in some way should be worked into the Missed Class Policy so it can be interpreted equivalently across the board, not sure what the wording for that would be. We struggle with having to be fair to all students.
- Brenda: Maybe we have to work with faculty to ensure they build some flexibility into their attendance policies.
- Rebecca: Students often can't get into the Counselling Center when they need to, not enough counsellors right now, so there's not a great way to document a students' need for a mental health day.
- David: Counselling appointments are 4 – 6 weeks out, they don't have the equivalent of an Emergency Room.

- Kathy F: Could our Success Coaches play a role in this? I don't think we're talking about a serious diagnosed clinical condition where students already have professional help. My understanding is that when students are stressed out we should be referring them to their success coaches.
- David: We can look up who their success coach is online since many students don't know who their success coach is. Does the new Starfish help?
- Brenda: The email from Starfish does reference the counselling services and a copy goes to the success coach.
- David: Student Affairs is upgrading their rapid response to traumatic events
- Brian: These are university wide issues, this is not something that can be solved at the college level.
- Rebecca: The reason I bring it up here is that NSM is a big place for students to have mental breakdowns.
- Henry: It should be lenient, and should be in writing.
- Michael: Maybe this can be handled on an individual instructor basis? Maybe even put question on evaluations "did instructor have reasonable policy?" to gather data. It impacts our ability to keep people enrolled and move them successfully through their program.
- Brenda: Success coach gives a "softer way" for a student to seek help yet still be able to document the absence; and if a student is regularly seeking mental health days could potentially be referred to counselling. As a professor I would feel better getting a document from somebody else than deciding myself.
- Michael: What is the ratio between success coaches and students?
- Brian: 700 or 800, total of 20 success coaches
- John B: Benefit of success coaches is they can help determine whether student needs a mental health day or whether they need to drop one of their classes.
- Brenda: And figure out if they need time management help, study skills help, etc. A day off is great but it's not going to fix the long-term problem.
- Michael: And If we found out the success coaches are being over-utilized then maybe we need more success coaches.
- Kristi: In NSM 1000 we tell our students about their success coaches, but I think the majority felt that they don't really need them.
- Kathy S: We need as a university to be better about putting their success coaches (and academic advisors) in front of them so they know to go see them. In terms of the idea of a Mental Health Day I don't know how to resolve that.
- Kathy F: Could there be some sort of black and policy that says professors are not allowed to penalize students if they attended a certain minimum percentage of class?
- John P: Courses with biggest resistance will be the Lab courses. Difficult to make up because of safety limits on numbers in a lab.
- Brenda: Courses with group projects and group activities are a big issue also. If you're absent your group is penalized from your absence.
- Kathy S: This is not something we can solve today.

7. Meeting Adjourned 4:58 pm.