College of Natural Sciences and Mathematics Council Meeting October 19, 2021, 3:30 pm – 5:00 pm via WebEx

NSM Council meeting called to order (Bellizzi)

- 1. Roll call by attendee list from WebEx
  - Jim Anderson, Brian Ashburner, Bruce Bamber, John Bellizzi, Xunming Deng, Daryl Dwyer, Kathy Fisher, Sally Harmych, David Krantz, Malathi Krishnamurthy, Rong Liu, James Martin-Hayden, Anne Medling, Kristi Mock, John Plenefisch, Aniruddha Ray, Sonmez Sahutoglu, Eli Visbal, Wei Li, student representatives McKenzie Arquette and Tanner Schultz, and guests David Giovannucci, and Nik Podraza
- Approval of Minutes Sept. 21, 2021: With 2 corrections: spelling of Krishnamurthy and Sahutoglu. Other corrections? None. With no objections, approved by unanimous consent. No objections, approved by unanimous consent

**Motion** to move Adam Hintz up in the agenda by Bamberg with second from Krantz, **Motion** carried by unanimous consent. No discussion or objections.

3. Adam Hintz, Director of Student Services. Adam is also the COVID liaison and deals with how to handle students who are sick or quarantined. Hintz, as COVID liaison, conveys info on COVID procedure and other info. The Office of Provost communications page has FAQ on COVID procedures for instructors and faculty in the classroom. The information which has been updated for Fall 2021:

https://www.utoledo.edu/offices/provost/covid-19-response-information.html https://www.utoledo.edu/offices/provost/docs/covid-19/UTOLEDO-COVID-FAQ-Fall2021.pdf

What does an instructor do when a student calls and says they tested positive? Reply to student, cc student affairs: <a href="mailto:studentaffairs@utoledo.edu">studentaffairs@utoledo.edu</a> We have the ok from legal. That connects them to Student Advocacy and gets the communications started.

Questions: What do we do about students who say they need to have recordings and who want them provided to whole class? Expectation is not to provide recordings to whole class. It is expected that students attend class if it is scheduled as face-to-face. At a Graduate Affairs Committee meeting we were told to provide the recordings to all students. Others heard that we are not required to provide recorded lectures to everyone. Right now, there is a consensus that we should make recordings available. How about international students who cannot make it to U.S.? Provost was requesting but not requiring recording of lectures. Related question, notices from the Office of Student Advocacy that we should provide online testing. Online testing is more difficult, e.g., Blackboard is tricky to use for math tests. When you received that notice did it say it is for the rest of the semester? Yes. A possibility is to have the student switch to an online section if that is an option. A secondary option is for the student to take an incomplete for the Fall and sit in on an online section in the Spring. In the Add-Drop period that would be easier. Adam is happy to help get the students get in touch with the right person and help them with their schedule. Adam will follow up regarding issues on recording of classes.

**Timing of curriculum modifications**, whole-year registration: We need to get course and program modifications done right away so they will be ready for next year's whole-year registration. The rule is that you cannot make changes in program changes or classes if students are registered for that class or program. Adam recommends we make changes in programs or courses by the end of the year, i.e., December.

## 4. Standing Committee Reports

- a. Curriculum Committee (Bruce Bamber) A new program BS-NSCI, four new courses with that new program, program modification, and two course modifications.
  - i. NSCI: new course/program proposals for Neuroscience

Curriculum Committee of NSM Council on BS in Neuroscience, Bruce Bamber: Dr. David Giovannucci in neuroscience will be joining us, cosponsor with Bruce on the BS in Neurosciences. BS-NSCI is a new program and a truly unique and interdisciplinary program between two colleges, NSM and College of Med. Life Sci., and two depts. BIOL-NERS and NERS. Justification for the new program: Neurosci. Is a growing field, there is currently no neuroscience major at UT. This will help with undergraduate recruitment, e.g., premed. students. OSU, with ~800 students, and Wright State has seen exponential growth of their neuroscience program to hundreds of students. In their programs there is lot of biology and chemistry with an emphasis on neuroscience. Similar to our Bio. BS, the third term begins the neuroscience courses with new courses in Fundamentals of Neuroscience and Cell Biology of Neurons.

**Courses**: The program includes the usual premed. courses, with Bioinformatics, geared toward neuroscience for premeds. who want to take biochem. Why is biochem. not required? It depends on the direction they take, e.g., if students are not premed. they won't need biochem., e.g., a student in cognitive neurosciences might want to take Psychology courses. Psychology did not want to be an active participant in the program but we will leave the door open for collaboration. How closely does it match up with OSU? We did not have access to OSU's plan but we did use Wright State for inspiration and they were very helpful while we were putting the program together. OSU's program has 800 students. They have split it into 3 tracks: cognitive, computational, and cellular/molecular biology. Our program would also have 3 tracks: cell bio. molecular track, medical neurosci. for premeds., and neuroinformatics track which would be unique; this a growing field. In our area there are no other programs that make use of the medical school as well as science and mathematics. BGSU has a neurosciences program that focuses on psychology and biology. Where might students go with this degree, professional schools, med. school or to MS and PhD programs? There are employment opportunities for BS students. We talked about a Co-Op program to give students employment experience in the field. If we wanted to move that forward, funding may be available for a coordinator for a co-op program. In order to get the program rolling, we did not do that at first. A co-op program will set students up for more technical positions at companies in Ohio. Working with Bio Ohio to develop a Co-Op program. Suggestion: Do Calc. 1 in the first semester and Calc. for Life Sciences in the second term so they don't languish during the summer term. The course schedule is not

final so the committee will consider. The Budgeting has been thought through and intended to be transparent. Bellizzi proposed a vote to approve the new BS in Neuroscience.

**Motion** from NSM Curriculum Committee (this came out of committee so requires no further motion) to approve the new program, BS in Neuroscience: All were in favor (16 yes, 0 no), **Motion passes**.

Catalog descriptions were presented (Bamber): Fundamentals of Neuroscience 1, Fundamentals of Neuroscience 2, Neuroscience Laboratory, and Cell Biology of Neurons of Glia. There has been a great deal of input from the neuroscience faculty. All these courses are cross-listed with the Dept. of Biological Sciences so these courses will also count toward the upper division electives for the Biology degree. Have the cross-listed versions of the courses been submitted for approval? We should have the cross-listing approved. How are these courses going to relate to the current Bios courses Current bio course will be 4250 will replaced with two other courses and 4250 will be retired. 4250 bites off a lot and students would benefit from a more gradual presentation of the material. Cross-listing, NSCI designation and BIOL designation. Make sure the cross-listings are submitted as course proposals. It may be easier to do a program modification on the BIOL courses but NSCI will count as bio classes. Makes more sense to do the cross listing so we don't open a can of worms. The cross-listed courses are in the NSCI course proposals but there is not a proposal for example BIOL 3050. Vote was called to approve these four courses:

**Motion** from NSM Curriculum Committee to approve the four courses for BS in Neuroscience: All were in favor (14 yes, 0 no), **Motion passes**.

## ii. Program modification, PHYS Photovoltaics PSM

SM-PHYS-MS in Physics Photovoltaics, Nik Podraza: Clean up 2015-16 modifications. In 2011 the first students entered the program. After a few years, students were allowed to choose two courses from a list of 9 electives and no new courses were developed, i.e., 2015 revisions. There was also business and engineering electives expanded to a choice of three from a list of 13 courses. The goal was to allow students to tailor their program. The revisions were never implemented. Nik took over 2020. Any questions about previous changes? Has this been voted on by NSM Council? All of this has been previously approved by NSM Council.

New changes: More lab research needed, reduction of business component, i.e, reduce three electives to two, and replace with three extra credits of PV lab research. The original had 2cr of Journal Seminar which was removed. We are evaluating courses to be offered online. This is still a member of the NPSMA program and still meets the requirements, e.g., nine hours of the transferable "plus" courses. National Professional Science Masters Assoc. NPSMA is an affiliation that allows us to use the PSM logo and our program appears on their site. As a PSM this is equivalent of a non-thesis MS degree. It has a required internship component, use to be an MBA for scientist to fulfill the need for communication between scientists and businesspeople. There is a reduction of the credit hours for the business component and increase in MS level material. Do you have another course name that doesn't have "thesis" in it? This seems to indicate the requirement of a thesis. The thesis title comes from the CIM system. Students learn the basics of PV research. In the fall semester of their second year they prepare a short report for their research advisor. This will help them toward their industrial internship. Proposed dropping 2cr of Physics Journal seminar, allowing 3cr of PV lab research to replace 3cr of Business and engineering electives. **Motion** from NSM Curriculum Committee to approve the Photovoltaics program modification: All were in favor (14 yes, 0 no), **Motion passes**.

## iii. Course Modifications, two from Environmental Science

Tim Fisher of the Dept. of Environmental Sci. proposed adding a prereq. of EEES 1020 (Phys. Geol. Lab) to EEES 3100, Surficial Processes. Map skills from 1020 are needed for 3100 a core course for Geology and Environmental Sciences.

**Motion** from NSM Curriculum Committee to approve the EEES 3100 course modification: All were in favor (14 yes, 0 no), **Motion passes**.

Von Sigler proposes modifying EEES 4540 Microbial Ecology: three adv. labs are required but there are not enough lab courses, so 4540 (lecture course) will be streamlined from 3cr to 2cr, with 1cr as lab to provide another advanced lab course. Topics are being added to modernize the course. This maintains same contact hours and expands the lab to be 2 contact hours per week. 1cr of lab work is equivalent to 2cr of lab contact hours.

**Motion** from NSM Curriculum Committee to approve the EEES 4540 course modification: All were in favor (14 yes, 0 no), **Motion passes**.

5. Old Business

Workload Guidelines: Draft document needs to be put in a form that can be voted on by NSM Council. Previous committees have made guidelines, so we need to reconstitute the committee. We will need a representative from Physics and Astronomy and if anyone else would like to serve, let John Bellizzi know.

- 6. University Reports
  - a. Faculty Senate (Jim Anderson, Sally Harmych, David Krantz): There are details in notes from Krantz. One critically important issue: spike in suicide attempts by college students. Talk to your classes about resources and pay attention to the mental health of your students.
  - b. Graduate Council (Brian Ashburner): Nothing new to report
- 7. College Reports
  - a. Chair's Meeting (John Bellizzi) Request for proposals for graduate funding TA lines and tuition waivers so COGS can budget better as we head into RCM budgeting. They were committing funds to limited numbers of students. COGS is gathering info on current student, justification for teaching assistants and responsibilities for funding in the future.
- 8. New Business
  - a. College-level budget committee: As we move to RCM budgeting, we will have a committee of faculty, chairs, staff, and Assoc. Dean. Stakeholders in the college will have feedback. We, NSM Council, need to start a discussion as to who on our council should

populate the college-level budget committee. We will talk about it in detail during our Nov. meeting.

Discussion: Concern with overrepresentation of departments. The committee should have representation from chairs and faculty from each dept. and is evenly distributed. It is an advisory committee. The Dean is ultimately responsible for the make-up of the committee. Keep in mind people to nominate to serve on this committee.

- 9. Upcoming Topics of Discussion: Guest at Nov. NSM Council meeting, Silvia Goioechea Chair of NSM Council on Diversity and Inclusion. Think of issues that will are important regarding diversity and inclusion to bring up at our Nov. meeting.
- 10. Adjournment: Daryl D. moved to adjourn. Sonmez seconded motion to adjourn 5:03.