

SOS Spring Faculty Assembly meeting

Faculty Present: Dean Bart Ng, Dean Pam Crowell, Dean Andy Gavrin, Steve Randall, Jane Williams, David Stocum, James Murphy, Jyoti Sarkar, Kathy Johnson, Andy Barth, Yao Liang, Kathy Marrs, Gary Bond, Martin Bard, Sapna Deo, Robert Minto, Pat Clark, Richard Li, Silvia Bigatti, Barry Muhoberac, John Watson, Kathy Licht, Soren Svanum, Stephanie Sen, John Kremer, Bonnie Blazer-Yost, , Snehasis Mukhopadhyay

Monday, April 28 - 10- 11:am

- 1) President Steve Randall called the meeting to order at 10:05 am. After noting one change to the Feb 4th faculty assembly minutes, the previous meeting minutes were approved. The agenda was also approved.
- 2) Dean Ng provided his comments related to the state of the school. First he wanted to thank everyone for their well wishes. He also expressed his thanks to Bill Bosron for the wonderful position that he left the School of Science in. To date Bart Ng has met with about 65 faculty from the School of Science and he will meet with the rest over the next several weeks.
- 3) Dean Ng provided some data from the Delaware project that shows fairly clearly how the School is being differentially supported compared to others (Liberal Arts and Engineering). He noted how the stability of the budget is striking and suggested that RCM is not operating as intended. The goal is for the University to identify targets for budgeting the SOS in the next few years.
- 4) Some specific issues he is looking at in the School are graduate student funding, lab fee distribution, ICR distribution, the schools return on start up costs, and long term funding of centers. He was and expects the faculty to play a central role in the budget process and will create a budgetary affairs committee within the school.
- 5) Dean Ng has asked chairs to identify peer departments that we can use as benchmarks to evaluate ourselves and to use as goals. They are collecting baseline data on these departments (# of faculty, graduate students, etc.).
- 6) As part of the master planning process, Dean Ng, the Associate Deans, Chairs and faculty reps will visit the Bloomington campus on May 19th and 20th. The goal will be to infuse our thinking about how to create research space in the new Innovation Center.
- 7) A short discussion was held on why the SOS has historically not been funded at the level of other schools.
- 8) Dean Ng announced that the replacement for Dean Pam Crowell is ongoing and that it should be finished shortly so that there will be some overlap between Dean Crowell and her replacement. Bart took this time to publicly thank Pam for her strong work over the last 3 years and noted how improved the school is under her leadership.
- 9) Dean Crowell provided a report from her office External funding is up 30% above where we were last year at this time. This is notable given we have a quarter to go in the year and we have fewer faculty. Two new signature centers have been funded within the school : Assertive Community Treat (ACT) Center Michelle Salyers (Psychology) and the Membrane Biosciences Center. The research committee met last week and Anna Malkova (Biology) was awarded the research award. Winners of the Summer PRF awards will be announced soon. And 6 of the 7 International Travel Awards have been given. A call will go out for the last award. The NSF K-12 grant will fund 11 graduate students (half from medicine, half from science). These students will conduct research and will go out into the communities to work within the school systems. Two formal degree programs are making progress to the IHEC the PhD in Biostatistics and the MS in Forensic Sciences.
- 10) Dean Gavrin provided a report from his office. Credit hours are up in both the graduate and undergraduate areas about 1000 hrs. total. The school has admitted 551 students (22% higher than last year) the quality of the students is quite high. It is uncertain of course how many of these students will actually come to IUPUI .Graduation is coming up on Sunday, May 11th, the IUPUI ceremony will be at 3 pm and the SOS ceremony will be at 5 pm.
- 11) Steve Randall talked for a minute about the letter that the Faculty endorsed and sent to the Faculty Council. He felt that it is having an impact and is part of the backdrop of a lot of the current conversations. He announced that Jyoti Sarkar will be the next SOS Faculty Secretary.
- 12) Kathy reviewed the committee report for the Undergraduate Education Committee (see attached).
- 13) The meeting was adjourned at 11:27 a.m.

Report of the Nominations and Awards Committee

SOS Faculty Assembly

April 28, 2008

David L. Stocum, Chairman

The Nominations and Awards Committee met in October, 2007, to formulate its plan of action, and in January and March, 2008, to select student and faculty awardees. ♦ The student awards at the level of the SOS were given out at the Spring Honors Convocation in April, 2008. ♦ Faculty awards will be given out at the Fall Convocation, 2008.

The Committee took up two issues during its deliberations. ♦ One was how to accommodate students who were part of non-departmental programs in the selection process. ♦ This issue was resolved by simply treating those students as part of the same application pool as departmental students, while noting that they would be evaluated by a Committee composed entirely of departmental representatives. ♦ The issue of whether or not to add faculty representatives from interdisciplinary programs must be addressed at a bylaws change level.

The second issue involved the Faculty Research Award. ♦ There is only one award, and it is difficult at times to decide between a more senior investigator who has a record of steady research contributions over the years, and a younger investigator (Assistant Professor level) who is making major contributions to the development of a ♦ hot ♦ new research area. The Committee recommended that this be resolved in the future by recommending to the dean the establishment of two Research Awards, one for senior investigators (Associate and Full Professor level) and junior investigators (Assistant Professor level). ♦

**School of Science
Educational Policy Committee Report
(Undergraduate Education Committee*)
Academic Year 2007-2008
Kathleen A. Marrs**

April 28, 2008

The Educational Policy Committee (Undergraduate Education Committee*) has the primary responsibility over the curriculum and academic standards for the School of Science. ♦ Among its responsibilities this committee shall:

- i) receive, review, initiate, or make recommendations to the Faculty concerning matters related to academic policy within the School of Science,
- ii) approve or disapprove of all courses to be added, dropped or significantly changed by any Department in the School of Science and report such action to the Faculty in a timely fashion,
- iii) conduct a continuing review of the educational policies of the School of Science in relation to the policies of other units of the university and the university as a whole.

**It is to be noted that a name change to this committee took effect during the academic year. Further discussion is requested to approve a name more consistent with the committee's charge.*

Committee members, 2007-2008 Academic Year:

Phil Fastenau, Psychology

Kathy Marrs, Biology (Committee Chair)

Barry Muhoberac, Chemistry and Chemical Biology

Mihran Tuceryan, Computer and Information Science

Mike Penna, Mathematical Sciences

Jeff Swope, Earth Sciences

Steve Wassall, Physics

Non-voting committee members and staff aide:

Andy Gavrin, Dean's Office

Pam Crowell, Graduate Affairs, Dean's Office

Joseph Thompson, Staff Aide to the Committee, Dean's Office

Approved New Course Request (Summer 2007)

CSCI 549 *Intelligent Systems*. Course previously approved in the IU system, but not the PU system.

Approved New Course Requests (Academic Year 2007-2008)

1. CSCI-C591 *Research Seminar for First Year Graduate Students*.
2. FIS 250 *Photography at a Crime Scene I*.
3. FIS 251 *Photography at a Crime Scene II*.
4. FIS 260 *Scientific Digital Imaging I*.
5. FIS 261 *Scientific Digital Imaging II*.
6. FIS 415 *Forensic Science and the Law*.
7. GEOL-G116 *Our Planet and its Future* - A matching course request to an existing course taught at IU Bloomington
8. GEOL-G250 *Water and Environmental Issues in Earth Sciences*.
9. MATH 165 *Analytical Geometry and Calculus I*
10. MATH-S165 *Honors Analytic Geometry & Calculus I*
11. MATH 166 *Analytical Geometry and Calculus II*
12. MATH-S166 *Honors Analytic Geometry & Calculus II*
13. MATH 171 *Multidimensional Mathematics*
14. MATH 266 *Ordinary Differential Equations*

Note: Areas where the additions and changes to MATH 165, 166, 171, 261, and 266 change programs are listed below under Approved Program / Degree changes.

Approved Course Changes (Academic Year 2007-2008)

1. CHEM-C310 *Analytical Chemistry* and CHEM-C311 *Analytical Chemistry Laboratory*. Change the variable credit hours currently at 3-5 to 2-5. The lecture will be 2 credit hours. Reduction in credit hours for the Lab, from 2 credit hours to 1 credit hour.
2. CSCI 230 *Computing I* no longer requires calculus. By removing MATH 163 as a prerequisite, this will allow more flexibility in course scheduling sequences.
3. CSCI 340 *Discrete Computational Structures* change in prerequisites from CSCI 240 to CSCI 230.
4. MATH 261 *Multivariate Calculus* Changes better reflect new prerequisites, sequencing of courses and course content
5. FIS 490 *Forensic Science Capstone* change in variable credit hours from 1-4 to 1-5 to accommodate accreditation requirements. (Siegel)

Approved Program / Degree Changes (Effective Spring 2008)

Forensic and Investigative Sciences: To meet current Accreditation Standards, the Forensic and Investigative Sciences (FIS) program will make the following changes to their program:

1. Two Tracks (formerly concentrations) will be offered: Biology and Chemistry. Formerly, students could choose from 7 different concentrations.
2. The Chemistry Track will eliminate FIS 402 *Forensic Biology I*, substituting CHEM-C360 *Introductory Physical Chemistry*.
3. The Biology Track will eliminate FIS 401 *Forensic Chemistry I*, substituting BIOL-K338 and BIOL-K339 *Introductory Immunology and Laboratory*.

FIS minimum GPA requirement change in Area IIIC, IIID, IVA (FIS courses) - No grade below C will be accepted in any FIS course. This corresponds to Area IV A and reflects a similar policy followed by the Department of Chemistry and Chemical Biology.

Chemistry and Chemical Biology. Change in chemistry credit hour requirement for the B.A. and B.S. degrees in chemistry. ♦

1. With the above addition of CHEM-C310 *Analytical Chemistry* and a reduction in CHEM-C311 *Analytical Chemistry Lab* from 2 credit hours to 1 credit hour, the total net chemistry courses credit hours required for a B.A. degree will increase from 32 to 33.
2. With the above addition of CHEM-C310 *Analytical Chemistry* and a reduction in CHEM-C311 *Analytical Chemistry Lab* from 2 credit hours to 1 credit hour, the total net chemistry courses credit hours required for a B.S. ACS Certified degree will increase from 45 to 46.
3. Change in chemistry credit hour requirement for the B.A. and B.S. degrees in chemistry. (Muhoberac)
 - a) B.A. Chemistry degree change. (1) Dropping the CHEM-C325 *Introductory Instrumental Analysis* course and substituting in its place CHEM-C410/CHEM-C411 *Principles of Chemical Instrumentation with Lab*. (2) Dropping the CHEM-C495 *Capstone in Chemistry*, but still requiring CHEM-C494 *Introduction to Capstone*. ♦ The B.S. ACS Certified will still require both C494 and C495.
 - b) With the above addition of CHEM-C310 *Analytical Chemistry* and a reduction in CHEM-C311 *Analytical Chemistry Lab* from 2 credit hours to 1 credit hour, AND with the deletion of the CHEM-C495 requirement, the net chemistry credit hour change for the B.A. degree is zero (0).
- c) With the above addition of CHEM-C310 *Analytical Chemistry* and a reduction in CHEM-C311 *Analytical Chemistry Lab* from 2 credit hours to 1 credit hour, the total net chemistry courses credit hours required for a B.S. ACS Certified degree will increase from 45 to 46.

Mathematics: Areas where the additions and changes to MATH 165, 166, 171, 261, and 266 change programs:

- a) Program changes with the reduction in credit hours for MATH 165 and MATH 166 are in Geology B.S., Mathematical Science B.S., and Physics B.S.
- b) Biotechnology B.S., Chemistry B.A., Environmental Science B.S., Forensic Science B.S., require MATH 221 and MATH 222, both at 3 credit hours. ♦ Though MATH 165 and MATH 166 will satisfy these requirements, there is no net credit hour change in the programs.
- c) Program changes with the inclusion of MATH 171 are in the Chemistry B.S. ACS, Computer Science B.S., Mathematical Science B.S., and Physics B.S.

Discontinued Course (Summer 2007)

MATH 361 *Introduction to Ordinary Differential Equations*; course no longer justified.

Approved New Policies

The Committee supported replacing the undergraduate admission ♦s class rank criterion with a 3.0 grade point average requirement, as fewer high schools supply class rank.

GEOL-G135 *Indiana Geology* and GEOL-G136 *Indiana Geology Laboratory* was approved as an option with laboratory in Area IIIC Physical and Biological Sciences for science majors outside the Department of Earth Sciences.

GEOL-G116 *Our Planet and its Future* will not count towards Area IIIC Physical and Biological Sciences.

GEOL-G250 *Water and Environmental Issues in Earth Sciences* was approved to count as a lecture only in Area IIIC Physical and Biological Sciences for science majors outside the Department of Earth Sciences.

PHST-P330 *Philanthropy, Calling, and Community* was not approved as an exception course applicable to the List H Humanities or List Social Sciences requirement.

PHYS 200 *Physical Environment* will not be allowed to count towards Area IIIC Physical and Biological Sciences, but may be used as a general elective.

Policies and Pending Items under discussion

A review of advising processes throughout the School of Science.

A review of the Jr Sr Integrator course options across departments in the School of Science

Internship opportunities, as the campus is moving to a more unified system of posting opportunities on the Web.

Science teacher education programs and plans of study in Biology Education, Chemistry Education, Earth Science Education and Physics Education.

Effect of increasing enrollments on advising and Windows on Science sections

There was a recommendation that the charge of the Educational Policy Committee be changed to reflect only undergraduate course requests and policies. ♦ It was recommended that the Graduate Affairs Committee review and approve graduate course requests, program changes, and policies. ♦ The two Committees would jointly review requests that span both undergraduate and graduate affairs. ♦ A name change to the ♦ Undergraduate Education Committee ♦ was approved by the faculty.

Upon discussion, there was a unanimous vote by the 7 voting members of the Educational Policy Committee to request a change the name to the ♦ Undergraduate Educational Policy Committee ♦ to accurately reflect its mission. ♦ The steering committee will be consulted to act upon this request.

Meeting Dates

Meeting dates for the fall 2007 semester were September 26, October 1, November 5, and November 26. The Meetings for the winter/spring semester were March 4, March 28 and April 3 with an additional date pending.

Prepared by

Kathleen A. Marrs (Chair) and Joseph L. Thompson (Staff Aide)

April 28, 2008

Technology Committee Report Spring 2008

Presented 4/28/08

A. Gavrin, Chair

Purpose: To make recommendations to the Dean for the use of student technology fee money, and to discuss and recommend technology strategies for the School of Science

As reported last Fall, the Student Technology Fee (STF) Budget is being handled significantly differently than it has in the past. The decision to undertake these changes was made by Interim Dean Bosron, in consultation with Associate Dean Gavrin, the members of the Technology Committee, and the department chairs. The purpose of the changes are

1. Increased transparency
2. Bringing STF spending priorities into line with practices common to other IUPUI units
3. Protecting the STF funds from being ♦ swept ♦ into deficit reduction as occurred in 2006-07 Details of the changes were given in the Fall report. As a result of these

Changes, ♦ the work of the committee was rather different than it has been in recent years, particularly regarding the timing of decisions. The work of the committee since Fall was approve the structure of the budget, and to solicit proposals for the use of STF funds by individual departments and other subunits of the school. A summary of the final budget is attached. Also attached is a comparison of SoS spending by category to average spending by other units on campus. Campus spending data is based on reports to IMIR by the individual units.

A. Student Tech Fee Allocation (Estimate) \$648,000

B. Carryover from Prior Year 0

C. Total Spendable Allocation (A+B) \$648,000

D. Department Budgets \$80,000

Per Department = \$11,429

E. General Maintenance School Items \$9,500
F. Tech Support Salaries and Benefits \$257,730
G. Software licenses \$23,011
H. SL 070, LD225 Computer clusters and testing center \$156,399
I. Lifecycle costs (outside SL070, LD225) \$24,000
J. Total Preapproved Items (sum D-I) \$550,641
K. Amount held until Spring 2008 \$32,000
L. Amount initially available for allocation (C-J-K) \$65,359
M. Funded Proposals (round 1) \$46,789
N. Amount available for Spring Allocation (K+L-M) \$50,570
Spring O. Spring Allocations \$28,400
C. Total Spendable Allocation (A+B) \$648,000
P. Projects total (M+O) \$75,189
J. Fixed Cost Total \$550,641
Q. Total Expenditures \$625,830
R. Fund Balance \$22,170

Income Annual Summary

School of Science Student Tech Fee Budget - 2007-2008

Draft 7/11/07

Costs: Fall allocation Fall Summary

Cost percent of total	Cost percent of total
Discipline-specific hardware and software \$98,200 15.2%	\$442,585 10.6%
Computer workstations, servers, networks, printers, etc. for the (STCs) \$92,740 14.3%	\$640,360 15.3%
Paper and other supplies for the STCs \$3,000 0.5%	\$102,022 2.4%
STC consultants and other personnel \$317,548 49.0%	\$1,670,522 40.0%
Video, audio, graphic, and other equipment and supplies \$0 0.0%	\$104,403 2.5%
Classroom or general AV equipment \$0 0.0%	\$123,978 3.0%
Field labs and experiences \$0 0.0%	\$17,099 0.4%
Maintenance and repair of student-used equipment \$94,500 14.6%	\$151,027 3.6%
STC and other facility improvements (including furniture) \$0 0.0%	\$90,000 2.2%
Training (and support) for faculty and students \$0 0.0%	\$69,838 1.7%
Contractual obligations for shared \$600 0.1%	\$484,304 11.6%
Administration, contingencies, reserves \$0 0.0%	\$182,441 4.4%
Other (Please Describe) (space assessment) \$19,241 3.0%	\$96,779 2.3%
carryover to next year \$22,170 3.4%	?
total \$648,000	\$4,175,357

School of Science 2007-08 IUPUI 2006-07 Averages

Library Committee

The SOS Library Committee met several times this year to respond to the problem of inflated serial/journal prices, and to determine the allocation of book (monograph) money to departments. Although the SOS initially was charged with cutting \$150,000 from the serials budget, in Spring, 2008 Dean Sukhatme intervened and requested that the University Library utilize funds in its reserve account to prevent these cuts from being made. In April, the Library Committee voted NOT to make cuts this year, although several departments may choose to cut a subset of their titles in order to, a) initiate new subscriptions, and/or b) pay for an electronic access upgrade with the Elsevier publishing company. The committee also voted to continued using the standard algorithm for book funds, even though the book budget was cut approximately in half since last year. This algorithm sets 50% of the available budget as base and then allocates the remainder of funds based on the number of faculty in each department, and the numbers of credit hours taught at the 300, 400, and graduate levels.

Assessment Progress Table for School of Science Departments

Created by Drew Appleby, Chair of the School of Science Assessment Committee

As the Chair of the School of Science Assessment Committee, my aspiration for the 2007-2008 school year is to accomplish the following three

goals.

1. To have the representatives of the eight academic units determine where their departments currently exist in the six-stage assessment process presented in the left column of the table below. Progress should be indicated with an **A** for Accomplished, a **P** for In-the-Process of Accomplishing, and an **N** for Not-Yet-Accomplished.
2. To have each department accomplish at least the next stage in this process during the 2007-2008 school year.
3. To have each department write its 2007-2008 Annual Assessment Report by describing (a) the stages it has accomplished in the past and during the 2007-2008 school year, (b) how it will use what it learned from these activities to increase student learning, and (b) how it plans to accomplish the next stage during the 2008-2009 school year.

	Biology	Chemistry	Computer Science	Earth Science	Forensic Science	Mathematics	Physics	Psychology
Stage #1 Identify student learning outcomes (SLOs) of the department or program.	A	N	A	A/P	N	A	A	A
Stage #2 Link the SLOs to specific components in the curriculum (i.e., curricular or extracurricular activities).	A/P	N	A/P	A/P	N	P	N	A
Stage #3 Identify existing methods or create new methods to measure the SLOs.	P	N	P	N	N	P	N	A
Stage #4 Collect empirical data to determine if the SLOs are being accomplished successfully	P	N	N	N	N	N	N	P
Stage #5 Use the data from Step #4 to make data-informed curricular and extracurricular changes.	N	N	N	N	N	N	N	P
Stage #6 Repeat Stage #4 to see if the changes were effective.	N	N	N	N	N	N	N	N

1. The first stage in assessment for an academic program is to determine what it wants its students to know (i.e., knowledge) and to be able to do (i.e., skills) as a result of successfully completing its program. This knowledge and these skills will be referred to as student learning outcomes (SLOs).
2. The second stage is to identify specific assignments in the department's curriculum (i.e., set of required classes) where the degree of accomplishment of the SLOs can be measured.
3. The third stage is to identify existing methods or to create new methods to determine if students are accomplishing the SLOs.
4. The fourth stage is to collect data within these classes and from other sources (e.g., alumni surveys, student satisfaction surveys, etc.) that can be used to determine if the SLOs are being achieved.
5. The fifth stage is to use the information collected during the fourth step to make data-informed changes to the curriculum where these changes are deemed necessary.
6. The sixth stage is to return to the fourth stage and collect data again (after a reasonable amount of time has elapsed for the effects of the changes to become apparent) to see if these changes have produced their desired impact.

The shaded box(es) represent(s) the stage(s) that each department will be working on to accomplish by the end of the 2007-08 school year.