

**New Mexico Institute of Mining and Technology
Council of Chairs
Noon, Wednesday, March 5, 2014
Speare 113**

MINUTES

The New Mexico Tech Council of Chairs convened at 12:11 p.m., with Chair Mary Dezember presiding. Others present were Ivan Avramidi, Andrei Zagrai, Barbara Bonnekessen, Kevin Wedeward, George Becker, Lisa Majkowski, Hamdy Solimon, Shari Montazeri, Lorie Liebrock, Iver Davidson, Navid Mojtabai, Bill Stone, Jordana George, Lisa Beinhoff, Tom Engler, Gary Axen, Corey LeClerc, Frank Reinow, Michelle Creech-Eackman, Sara Grijalva, Snezna Rogelj, and Valerie Kimble, recording secretary (temporary).

1. **Call to Order.** Dr. Dezember called the meeting to order at 12:11 p.m.
2. **Approval of Minutes. (Action item)** Dr. Dezember called for a motion to approve the Minutes from the Feb. 18 meeting, and announced the following corrections: Under Announcements, it was noted that the Council of Chairs will meet two times per month, rather than three; and under Old Business, to change the reference from HLC to HED. Two other corrections pertained to information being listed under an incorrect category. The revised minutes then were unanimously approved.
3. **Announcements**
Academic Affairs. Dr. Dezember asked members to keep in mind that the Office for Academic Affairs is working with a “bare bones” staff, which is why she is behind in responding to emails, but will catch up in time. Former department secretary Ann Hewitt came out of retirement to work part-time, thereby requiring that Dr. Dezember assume extra duties herself, such as the work involved in preparing for faculty meetings. “There are only three of us” to handle all VPAA duties, she said, suggesting that faculty needing an immediate response from the office contact Ms. Hewitt.

Convocation – Lillian Armijo. Postponed.

Special Topic – The Severity of Elsevier and Other Concerns. Library Director Lisa Beinhoff’s presentation highlighted issues regarding Elsevier, the largest center for online journal access – and the most costly, comprising IOP, SIAM, GeoRef and IEEE and many others. “A lot of content never appears in print,” said Beinhoff, who said the contract with Elsevier costs the University about \$300,000 annually. “If I bought *ala carte*,” she said, the cost would be closer to \$3 million at a price of \$120 per article. Adding to the problem is that Elsevier now owns a lot of major journals in most fields. “At this point, we really don’t know how to pay for it,” said Dr. Dezember, adding that Dr. Beinhoff has tried to negotiate with the company. If the University cancels its subscription to Elsevier, “we’ll have no access to (many) journals,” Dr. Dezember said, which primarily are used for graduate research. Dr. Axen reiterated the need to join a consortium, an option Dr. Beinhoff said she has explored to no avail. “Texas doesn’t want us, Colorado doesn’t

want us, Arizona doesn't want us . . ." she said. During discussion, Dr. Beinhoff said that both UNM and NMSU had cancelled their Elsevier subscriptions. Dr. Zagrai agreed that "it a serious problem," adding that the most common suggestion is to channel the cost into overhead return. Dr. Axen again suggested that the University either join a consortium or raise undergraduate tuition to cover the cost. Cancelling Elsevier, he said, "will kill (our) ability to do research." Dr. Dezember said the discussion will continue when R&ED V.P. Van Romero can attend a Council of Chairs meeting.

Other. Shari Montazeri forwarded to the Council a suggestion from Payroll that department chairs assume signature authority for their employee time cards, as the department moves to electronic compliance in Banner. The response from faculty was an emphatic rejection of the suggestion. "It's insane; it would double the workload," said Dr. Axen. Dr. Stone suggested a work-flow solution. Ms. Montazeri said she would forward responses to Payroll.

4. Old Business

Faculty/Teaching/Research Data. *(This item was moved to later in the meeting.)* Dr. Dezember distributed statistical tables including department enrollments, degree-seeking enrollments by fall term and major, data on transfer students and graduation rates. "This is a start," she said. "At least we've got some data." Dr. Dezember said she wanted to research persistence and the University's 49 percent, six-year graduation rate, and found that even though credit-hour requirements for some engineering programs are higher than for non-engineering programs, "In fact, more engineering students are graduating sooner," she said. "We want to protect the rigor, but not keep students here forever." Dr. Engler noted that the comparisons were not apples to apples, among other comments, including Dr. Liebrock citing "major data problems with Banner" for graduate students. "We're going through every single file," she said. Dr. Dezember noted that the University will include collected data in evidence files being prepared for the upcoming HLC reaccreditation visit. "I hope people read it and enjoy it," she said, referring to the HLC reports. "We are very different – I'm so proud of who we are."

5. New Business – Curricular Change Proposals.

Physics 8 cr. hrs. of additional Laboratory Science.

Eight hours (with associated labs) from the disciplines of: Biology, Earth Science, Engineering, Computer Science Engineering, or PHYS 189. Not fewer than 8 credits are required in the lecture/lab pairs. If a lecture/lab pair is taken worth fewer than 4 credits, more than two pairs will need to be taken to satisfy the requirement. Michelle Creech-Eakman moved to approve the new requirement for the department and to add two new courses to maintain the "old-style breadth" requirement. Dr. Wedeward seconded the motion. During discussion, Dr. Dezember suggested a more general wording to anticipate future needs. Dr. Creech-Eakman said the description was not meant to be exclusive. The motion passed unanimously.

Electrical Engineering #1. Remove the depth requirement in humanities and social sciences.

EE #2 a, b. Mathematics core: a. Remove Math 332 (Vector Analysis). b. Add Math 335 (Ordinary Differential Equations) and an upper-level math elective. Math elective will replace free elective.

EE#3 a, b, c, d, e. Electrical Engineering Core: a. Allow EE 211 (Circuits and Signals I) or ES 332 (Electrical Engineering); pilot combined EE 211/ES 332 course(s) over the next year. c. Change EE 33's (Electricity and Magnetism's) prerequisite from "PHYS 122" to "PHYS 122 and MATH 231," and remove EE 333's co-requisite of MATH 332. d. Change EE 341's (Signals and Linear Systems)'s prerequisite from "EE 212 and MATH 254" to "EE 212 and MATH 335." e. Incorporating existing laboratories into corresponding core courses (combine grades, 0-credit labs) instead of listing separately.

EE#4 a. Change "EE 211" to "EE 211 or ES 332."

EE#6. Change in course description for EE 451:

EE 451, Digital Signal Processing, 4 cr, 3 cl hrs, 3 lab hrs.

Prerequisites: EE 308 and EE 341

Principles of digital signal processing. Infinite and finite impulse response filters, discrete and fast Fourier transforms, multirate processing, spectral estimation, quantization effects, system design. Implementation of real-time DSP algorithms on state-of-the-art hardware. Principles discussed in class will be demonstrated with real applications. Labs include design and implementation of infinite and finite impulse response filters, and applications such as communication systems, sound processing, and ~~other applications~~ image processing. The items were treated as a group. Dr. Wedeward moved to approve the changes. Dr. Axen seconded the motion. During discussion on EE#3 a, to "Allow EE 211 (Circuits and Signals I) or ES 332 (Electrical Engineering); pilot combined EE 211/ES 332 course(s) over the next year," Dr. Engler noted that as a pilot offering, the 300-level class would not be accepted as a graduate course; which, said Dr. Liebrock, she would not object to as Graduate Dean. On item EE#3 e, "Incorporating existing laboratories into corresponding core courses (combine grades, 0-credit labs) instead of listing separately," Ms. Grijalva said it was important that the lab and lecture grade be averaged and reported as one grade for both components. The motion passed unanimously.

Chemical Engineering, ChE 327, ChE 371. New courses: ChE 327, Principles of Chemical Engineering II, 3 cr, 3 cl hrs; and ChE 371, Solution Methods for Chemical Engineers, 3 cr, 3 cl hrs. ChE 326. Proposed name change: ChE 326, Principles of Chemical Engineering I, 3 cr, 3 cl hrs. Dr. LeClerc moved to approve the addition of two courses and a course name change. Dr. Wedeward seconded the motion, and it passed unanimously.

Degree Requirements. Remove ES 111 and ES 316 from the curriculum and add ChE 327 and ChE 371.

ChE 443. Remove MATH 335 and ChE 326 and add ChE 371.

ChE Minor Requirements. Replace "Two of: ES 216 (3), ES 347 (3), ES 350 (3)" with "Three of: ES 216 (3), ES 347 (3), ES 350 (3), ChE 349 (3), ChE 371 (3)." Dr. LeClerc moved to approve the changes. Dr. Wedeward seconded the motion and it passed unanimously.

Materials Engineering MATE 420/520. Postponed until next meeting.

Engineering Science ES 302, ES 303, ES 347. Dr. Engler noted that with the new Chemical Engineering course changes, engineering chairs agreed to remove program requirements entirely. He moved for approval. Dr. LeClerc seconded the motion and it passed unanimously.

Community Education 2 to 1 cr. hr. Dr. Dezember noted that the request is based on a federal compliance aspect that credit hours be equalized. “Basically, (these courses) need to be one credit hour so we can make them valid,” she said, with Jordana George noting that no funds will be lost over the change. Dr. Zagrai said that the typical transfer student comes to tech with a full package in the humanities, but often don’t have a sufficient background in math. Ms. Grijalva noted that under a recent change, transfer students need to place into Math 103 to be admitted. Dr. Dezember said discussion would continue on the issue.

Communication, Liberal Arts, Social Sciences. Dr. Dezember noted that New Mexico Tech’s technical writing course, ENGL 341, is very different from technical writing taught everywhere else in the state. Proposed changes to the course are being reviewed by Dr. Maggie Griffin; in the meantime, transfer credit will be accepted.

- 6. Adjourn.** The meeting was adjourned at 1:55 p.m. on a motion by Dr. Engler and a second by Dr. Wedeward.

Respectfully submitted, Valerie Kimble