

NEXT MEETING: 4:10 PM 3 May 2004, University Center 308.  
Refreshments at 3:30 in the Faculty Lounge

**Lehigh University**

**MINUTES OF THE FACULTY MEETING**

**29 March 2004**

Presiding: Gregory Farrington (Sinclair Auditorium)

President Farrington called the meeting to order at 4:10 PM

1. **Minutes.** The minutes of the December 8, 2003 faculty meeting were APPROVED.
2. **Memorial Resolutions.** Professor Barbara Traister read a tribute to Albert E. Hartung, late Distinguished Professor Emeritus of English, who then MOVED that her remarks be incorporated in these minutes [see Attachment 1] and that a copy be sent to the family. The President declared the motion APPROVED by acclamation and the faculty STOOD for a moment of silence in memory of Albert E. Hartung

Professor Barbara Malt read a tribute to Josef M. Brozek, late Research Professor Emeritus of Psychology, who then MOVED that her remarks be incorporated in these minutes [see Attachment 2] and that a copy be sent to the family. The President declared the motion APPROVED by acclamation and the faculty STOOD for a moment of silence in memory of Josef M. Brozek.

Professor Jack Paul read a tribute to Brian G. Brockway, late Dean Emeritus of the College of Business and Economics, and Distinguished Professor Emeritus of Law, who then MOVED that his remarks be incorporated in these minutes [see Attachment 3] and that a copy be sent to the family. The President declared the motion APPROVED by acclamation and the faculty STOOD for a moment of silence in memory of Brian G. Brockway.

Professor Steven Krawiec read a tribute to John W. Hunt, late Dean Emeritus of the College of Arts and Sciences, and University Service Professor Emeritus of English, who then MOVED that his remarks be incorporated in these minutes [see Attachment 4] and that a copy be sent to the family. The President declared the motion APPROVED by acclamation and the faculty STOOD for a moment of silence in memory of John W. Hunt

3. **Committee Motions.** Professor Barbara Traister, on behalf of the Educational Policy Committee, MOVED to adopt course and curriculum changes in the P.C. Rossin College of Engineering and Applied Science. [See the binder, dated March 29, 2004, which is housed in the faculty secretary's office. This binder will subsequently be referred to as "The Binder".] The motion was SECONDED and PASSED.

Professor Traister then MOVED adoption of an honors program in the College of Business and Economics, and a course change to BIS 331 [see "The Binder"]. The motion was SECONDED and PASSED.

Professor Traister then MOVED to adopt course and curriculum changes in the College of Arts and Sciences [see "The Binder"]. The motion was SECONDED and PASSED.

Professor Traister then MOVED to waive the '10-Day Rule' for the purpose of considering adoption of a Bachelor of Arts degree in Environmental Studies in the College of Arts and Sciences. The motion was SECONDED and PASSED.

Professor Traister then MOVED to adopt a Bachelor of Arts degree in Environmental Studies in the College of Arts and Sciences [see "The Binder"]. The motion was SECONDED.

Professor Paul asked if all concerns with respect to the proposed degree program had been satisfied. Professor Traister indicated that all concerns would be satisfied in writing in a forthcoming memorandum.

Professor Frank Gunter asked if ECO 1 was given consideration as a degree requirement. Professor Sharon Friedman said students would be encouraged to take ECO 1.

The motion PASSED.

Professor Traister then MOVED a revision to R&P 3.11.1 to change the requirements for graduation honors [see "The Binder"]. The motion was SECONDED.

Professor Roger Simon asked which class would first be affected by the proposed change. Professor Traister replied that the change would be effective with the Class of 2008.

Professor Ed Kay noted that based on current grade distributions, approximately 7-8% of students would achieve "Highest Honors"; another 6-7% would achieve "High Honors"; and an additional 10% would achieve "Honors."

Professor Traister responded to questions about having a fixed percentage of students achieving various levels of honors by noting that the students were almost universally opposed to a "quota" preferring, overwhelmingly for a fixed GPA cutoff

Professor Traister concluded by advising the faculty that a revision to the university's overload policy would be forthcoming, and encouraged faculty to forward proposed amendments to the draft revision [see "The Binder"] to the committee.

Professor George White, on behalf of the Graduate and Research Committee, MOVED curriculum and program additions and changes in the College of Business and Economics [see Attachment 5 and "The Binder"] The motion was SECONDED and PASSED.

Professor White then MOVED to waive the '10-Day Rule' for the purpose of considering adoption of course and curriculum additions and changes in the College of Arts and Sciences. The motion was SECONDED and PASSED.

Professor White then MOVED curriculum and program additions and changes in the College of Arts and Sciences [see Attachment 5 and "The Binder"]. The motion was SECONDED and PASSED.

Professor White then MOVED curriculum and program additions and changes in the College of Education [see Attachment 5 and "The Binder"]. The new course - EdT 482 is no longer part of the motion, and, EdT 477 is 1-3 credit hours The motion was SECONDED and PASSED.

Professor White then MOVED curriculum and program additions and changes in the PC Rossin College of Engineering and Applied Sciences itemized as 'Pre-A' through "F" [see Attachment 5 and "The Binder"] The motion was SECONDED and PASSED.

Professor White then MOVED two interdisciplinary degree programs itemized as 'G' in Attachment 5 [see "The Binder"]. The motion was SECONDED and PASSED.

Marley McDermott and Michael d Alessio, on behalf of the Student Senate, read the senate's statement on academic integrity. The faculty applauded the statement

4. **Unfinished Business.** None.
5. **New Business.** None.

- 6 **Committee Reports.** None.
7. **President's Report.** President Farrington addressed a variety of physical plant improvement issues both off-campus and on-campus.

The railroad right-of-way between 3<sup>rd</sup> and 4<sup>th</sup> Streets will become green space. The Johnson Machinery Building will be converted to apartments.

The Sasaki Associates' Master Plan for the campus is now focused on reducing the opportunity for pedestrians to be run over by motor vehicles. Among the possibilities: substantially limit vehicular traffic in the center of campus; reconnect Brodhead Road to the upper campus; and construct a parking garage behind the Alumni Memorial Building.

Planning has begun for the renovation of Linderman Library to include a Center for Humanities. A year's worth of planning is expected.

President Farrington applauded the Greek Life Task Force for its work and recommendations. He noted the strong support from alumni

The Larry Fink art exhibit in Maginnes has generated a large volume of mail to trustees.

Acceptance letters for the Class of 2008 were all sent by last Friday. This will be the most competitive class in Lehigh history.

The meeting stood adjourned at 5:33 PM

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## Memorial resolution for Albert E. Hartung

The department of English and the larger Lehigh community note with sorrow the death of Professor Albert E. Hartung on January 31, 2003 at age 80. Al Hartung was one of Lehigh's very own. He earned all three degrees here at Lehigh—the B.A. in 1947, the M.A. in 1949, and the Ph.D. in 1957. He was then invited to stay on as a professor. He quickly worked his way up through the ranks and in 1975 he was named Distinguished Professor, the rank at which he retired, twenty years later, in 1995.

Al was always a fine teacher. He was one of those who could teach with compassion, with rigor, and with genial good humor at all levels, from first-year writing, to sophomore-level surveys of British literature, to general-interest courses in the fairy tale, to graduate courses in his specialties in medieval literature—Chaucer, Arthurian legends, and the Middle English romances.

Al was an active and involved member of the department and the wider university community. He was, for example, a member of that most important Committee on Coeducation that recommended more than thirty years ago, that Lehigh cease being an all-male university and admit women. He also served the department in various ways. For more than a dozen years he served as the director of the freshman writing program and after that served two terms as chair of the department of English. As director of the writing program Al helped to train a generation of English teachers. George Keiser, one of the young men Al trained both as a medievalist and as a teacher of writing, is now a near-retirement professor in Kansas. He says of Al Hartung, "He taught me not only how to read and comment on student papers but, more important, that students are themselves works in progress, deserving of help, respect, goodwill, patience—in short, the best I can give them."

Al interrupted his undergraduate work at Lehigh to become a soldier in World War II. Because of his knowledge of German, he worked as a cryptanalyst during the war. He told me once, with that characteristic sparkle in his eye, that his work as a cryptanalyst trying to guess at future German troop movements was excellent training for reading freshman papers back at Lehigh, figuring out where the students were trying to go.

Al Hartung's name, and with it Lehigh University's, is known nationally by almost every serious professor and student of British medieval literature. Not only did he turn out a steady stream of lucid articles but he also served as general editor of the monumental *A Manual of the Writings in Middle English 1050-1500*. That multi-volume work is available in virtually every research library in the world and is consulted by every scholar working on the four-and-a-half

centuries of Middle English writings. The *Manual* was begun by Lehigh medievalist J. Burke Severs, who began the project with the first two volumes before his retirement in 1969. In his tenure as general editor Al won several research grants from the National Endowment for the Humanities to continue the *Manual*. He then personally shepherded into print no fewer than eight volumes of the *Manual*. He worked on it after the grants ran out and on into his retirement; indeed, he was working on volume 11 of the projected twelve volumes right up to his death.

In part on the basis of his work on the *Manual*, Al was named Distinguished Professor of English in 1975, and in 1986 was given the Joseph F. and Eleanor R. Libsch Research award, the first humanities faculty member to be so honored.

Al was a deeply learned man, not only in medieval literature but also in various branches of human knowledge that had nothing to do with his research field. He took positive delight in learning all sorts of things. He knew as much about birds, for example, as many professional ornithologists knew, and he was an expert on finding, and then cooking, the morci mushroom. When he was still in good health he was an enthusiastic kite flier with a thorough knowledge of the aerodynamic advantages and disadvantages of the various kite designs. He was an eager surf fisherman and an aficionado of dogs, particularly whippets. He went through a period of reading everything he could find about trains and could tell you, if you asked him, the manufacturers and horsepower ratings of every locomotive that came through Bethlehem—and that was back in the days when lots of them did. He loved the opera and made many trips to New York to attend. He also read widely in mystery novels and could tell you the plots of most Nero Wolfe mysteries and why the early Eric Amblers were better than the later ones.

Al was a devoted member of his church and a loyal family man who took continual joy in the companionship of his wife Ruth until her death in 1995, after their 50 years of marriage, and in his two daughters Susan and Judith, his sons-in-law, his three grandsons, and his two step-grandchildren.

We move that these remarks be entered into the minutes and that copies be sent to his daughters.

Respectfully submitted

Peter G. Beidler, Barbara H. Traister, and Edward J. Gallagher

Resolution in Remembrance of Professor Josef Brozek  
March 29, 2004

The Department of Psychology reports with sadness the passing of Josef M. Brozek, Professor Emeritus of Psychology, on January 18, 2004, at the age of 90.

Josef Brozek was born on August 14, 1913, in Melnik, Bohemia, then a province of the Austro-Hungarian empire. He spent part of his childhood under adverse conditions in Siberia. At the time of World War I, his father, although a non-combatant, was taken prisoner by the Russian army, and he and his young family were forcibly moved to Russia.

Josef Brozek received his Ph.D. at Charles University in Prague, the Czech Republic, in 1937. His doctoral dissertation was entitled Memory, Its Measurement and Structure: A Psychotechnological Study -- this at a time when behaviorism held sway in American psychology and studies of the mind were off limits. Thirty years later, memory research would become a centerpiece of modern cognitive psychology.

Dr. Brozek emigrated to the United States in 1939 and became a naturalized citizen in 1945. In the fall of 1941 he joined the newly established Laboratory of Physiological Hygiene at the University of Minnesota, where he would remain for 17 years.

From 1941 through 1958, Dr. Brozek advanced through a succession of posts in the Laboratory of Physiological Hygiene, University of Minnesota, ending as a full professor. His research at Minnesota dealt with malnutrition and behavior, visual illumination and performance, and aging. During this phase of his career, Dr. Brozek is perhaps best known for his work with the Minnesota Semistarvation-Nutritional Rehabilitation Study, carried out in 1944-1946. A two-volume account of the study was published under the title, The Biology of Human Starvation with Dr. Brozek as second author (Keys, Brozek, Henschel, Mickelsen, & Taylor, 1950).

Every student of psychology in the 1950s and 60s was expected to know something about the famous Minnesota Starvation Study. One textbook of the day, Principles of General Psychology, 2nd ed. (Kimble & Garmezy, 1963) said the following of this work:

A study performed during World War II at the University of Minnesota... was conducted with conscientious objectors who voluntarily submitted to a six-month period of semistarvation. During this time, the subjects in the experiment lived on a very restricted diet. Their weight dropped from an average of about 155 pounds to less than 120 pounds, and their daily existence became dominated by a preoccupation with food. Favorite topics of conversation were food and eating, and cookbooks were fascinating reading material. Activities other than those concerned with food lost their meaning. As starvation progressed, the men became silent and immobile; they never indulged in

unnecessary activities; many complained of feeling old. Their sexual urges declined; romances collapsed; dancing was too much work. Socially, the men built up tremendous in-group feelings and regarded outsiders with great suspicion. Their sense of humor waned; jokes were not funny; their whole lives were dominated by the need for food. Many of the men were bothered with vivid dreams of breaking the diet. One man expressed his craving for food symbolically by stealing cups from a coffee shop. (pp. 377-378)

A major career move came in January of 1959 when Dr. Brozek began a stint as full professor and chair of the Psychology Department at Lehigh University. He held this position for four years and then was given the title of Research Professor, making him one of only two people at Lehigh University at the time to hold that post. The new position of Research Professor allowed Dr. Brozek to throw himself head-long into an area that had always interested him, the history of science and history of psychology. Moves were under way in the 1960s to recognize the History of Psychology as a major area of study. One step toward formal recognition was creation of a History of Psychology division within the American Psychological Association in 1965. Dr. Brozek organized the Division's first scientific program in 1966 and served as Division president from 1973-1974. The second step was the creation of Ph.D. programs where a student could specialize in the History of Psychology. Josef Brozek's name featured prominently in this endeavor.

On the teaching and training front, Dr. Brozek considered his greatest contributions to be the two Summer Institutes on the History of Psychology which he organized and directed. The institutes, each six weeks long and funded by the National Science Foundation, were designed to train college teachers in the history of psychology. The first summer institute was held in 1968 at the University of New Hampshire. The second was held at Lehigh University in 1971. Dr. Brozek chose the motto for the first institute, borrowing from the thoughts and words of John Amos Comenius, the great 17th-century Moravian educator and theologian: "Historia scientiam valide auget" -- 'history effectively enhances science.'

Another one of Dr. Brozek's passions was bringing the work of psychologists from around the world to the attention of an English speaking audience. Over the years he translated into English many works originally published in Dutch, French, Czech, Spanish, and Russian. He was an avid reader of psychology journals from Russia and other Slavic lands, producing two chapters on Soviet psychology for the Annual Review of Psychology (Brozek, 1962, 1964). Dr. Brozek visited and conducted archival research in many countries including Holland, Bohemia, Hungary, Italy, Croatia, and Slovenia. His last work (Brozek, 2003), published just a few months before his death, was an examination of psychology in Brazil.

During his career Dr. Brozek published over 160 books and articles. In addition, he served as nutrition adviser to the World Health Organization and on study sections concerned with nutrition and malnutrition at the National Institutes of Health, and he was a member of the board of directors of the Archives of the History of American Psychology at the University of Akron.

In addition to his scholarship, Dr. Brozek had two avocations that he loved. One was mycology, or the study of fungi and the hobby of mushrooming. On these topics he had a large

library in several different languages. He became a personal friend of Professor Emeritus of Art and Architecture Richard Redd through mushrooms. Professor Redd recounts that "to a midwestern provincial like myself, all mushrooms except those in the grocery were toadstools. On a fine May morning in 1962, Jaschka (as he was known to his friends) asked me if I wanted to go hunting for morels. It was apple blossom time. I didn't know what a morel was, but I was an eager learner. Jaschka had his favorite morel hunting grounds staked out in Saucon Valley where there were overgrown and abandoned apple orchards. There were fields and woods there then and luxurious vines of poison ivy covering the apple trees. We found an ample cache of morels and *verpa bohemica*, took them home and fried them in butter and ate them. We neither of us got poison ivy. I was hooked on wild mushrooms, and I still am. My first book on wild mushrooms was in Czech. I couldn't read it, but it had great pictures. Jaschka Brozek touched my life. He was a kind and generous friend."

Professor Redd notes also that poison ivy had, at an earlier time, saved the life of Dr. Brozek, who in 1942 was slated to leave the University of Minnesota with an expeditionary force heading behind the enemy lines into Czechoslovakia. He came down with a virulent rash of poison ivy and could not leave with his group. None of the rest of this force returned alive.

Dr. Brozek's other great love was music, through which he became a friend and fan of Professor of Music Paul Salerni. Professor Salerni recalls that Jaschka played the violin and cello and had a wonderful collection of Czech music, both scores and records, which he later donated to Lehigh's Music Department. Jaschka was passionate not just about the masterpieces of the past but also about music newly written. He was one of the rare faculty members who came to all the LUVME (Lehigh University Very Modern Ensemble) concerts, even those of student composers. When he moved back to Minnesota in 2002, he gave Professor Salerni a desk that he reported to have been Asa Packer's.

Dr. Brozek's wife Eunice preceded her husband in death on December 19, 2002. Josef and Eunice are survived by their three children, Josef, Peter, and Margaret Maria Caliandro, along with three grandchildren, Veronika and Diana Brozek and Nino Caliandro. We offer our condolences to his children and grandchildren.

Respectfully submitted

Laurence Upton, Visiting Professor of Psychology

Richard Redd, Professor Emeritus of Art and Architecture

Paul Salerni, Professor of Music

**Memorial For  
University Distinguished Professor  
Brian C. Brockway of Bluffton, SC**

Brian Brockway hired me into the College of Business and Economics in 1978 when he was dean of the College. Brian was both a very witty and extremely caring individual. I always had the greatest admiration and respect for him.

Brian C. Brockway, 70, a retired Dean and University Distinguished Professor at Lehigh University, died December 31, 2003 at his home in Bluffton, SC. He had pancreatic cancer.

Professor Brockway grew up in Grand Rapids, MI and graduated from Catholic Central H.S. in 1951. He served in the army and was stationed in Okinawa during the Korean War. Following his military service, he graduated from Northwestern University in Evanston, IL and went on to complete his J.D. and LL.M. degrees from Georgetown University in Washington, DC.

Professor Brockway spent most of the next 30 years teaching and administrating at Lehigh University interspersed with some visiting professorships at the University of Detroit and the University of Dayton. Professor Brockway's professional focus was on effective teaching, combined with a personal interest in his students. In recognition of his success in these areas he received many teaching awards, among them the:

- Student Body Outstanding Teaching Award.
- Senior Lindback Teaching Award and the
- Lehigh Alumni award.

In addition, Professor Brockway was, at different times, the chair of two different departments at Lehigh, [he was] the Dean of the College of Business and Economics for eight years, and a University Distinguished Professor of Law for 15 years.

He also served as Dean of the Law School at the University of Detroit from 1969-1971, at which time he was the youngest dean of a law school in the country.

Survivors include:

- his wife of 19 years, Mary McShane Brockway;
- three children from his first marriage: Matthew, Marie, and Gregory Brockway;
- seven children from his wife's first marriage;
- two brothers; and
- 16 grandchildren.

Respectfully submitted,

Jack W. Paul  
Professor of Accounting

The faculty of Lehigh University records with sorrow the death on March 8, 2004 of John Wesley Hunt, Jr., Dean *Emeritus* of the College of Arts and Sciences and Professor *Emeritus* in the Department of English. A revered teacher and scholar of modern American literature, Dean John Hunt led the college from 1972 to 1987 to national and international prominence and left behind a legacy of intellectual energy, honesty and diversity.

John is remembered as an extraordinary administrator who skillfully and gently bound together the sometimes disparate elements of Arts and Sciences and directed significant growth of the College and, with it, Lehigh's evolution into a balanced university.

John was born January 19, 1927 in Tulsa, Oklahoma, where he spent his childhood. After service during World War II in the Naval reserve, he earned in 1949 a B. A. from the University of Oklahoma and in 1961 a Ph. D. in theology and literature from the University of Chicago. John began his highly successful academic career at Earlham College where he excelled both as a teacher and a scholar. At Earlham he received the E. Harris Harbison Award for Distinguished Teaching. He began publishing numerous insightful, scholarly articles on modern American literature, particularly focused on the works of William Faulkner, Ken Kesey, Joseph Heller and Thomas Pynchon. His book William Faulkner: Art in Theological Tension remains an often cited and classic study of the novelist. John moved to Lehigh in 1972 to become Dean of the College of Arts and Sciences, a position he held for fifteen years. For the next five years he taught in the Department of English.

A litany of John's achievements is surely informative, but such an accounting does not capture the character of this wonderful person. John was the personification of high standards. A deeply reflective intellectual, he always founded his perspectives on principles he easily and eloquently articulated. Accordingly, he seemed comfortable and at ease in all circumstances, both those that were difficult and those that were ordinary. John epitomized his beloved William Faulkner's ideas about the qualities needed to be a great poet or writer: "courage and honor and hope and pride and compassion and pity and sacrifice. In all efforts, John revealed a genuine joy for achievement, whether it was his own or that of others. He insisted on thinking about the College of Arts and Sciences as an intellectually vibrant part of a true university, a community that helped faculty and students build caring, creative, and productive lives. John's gracious academic demeanor, his delightful wit, and his optimistic perspective combined to produce a respected leader who encouraged and inspired the development of the College and celebrated its success.

No testimony is an adequate testament to John Hunt. He was truly a magnificent person, a gentle giant. His death leaves a void in our community that will inevitably fill with wonderful memories of this marvelous man and his many contributions.

Mr. President: On behalf of the Department of English and the College of Arts and Sciences I ask that this memorial statement be incorporated as part of the permanent

record of this faculty and that copies be shared with his widow, Marjorie his wife of nearly 52 years, and with their three children, Stuart, Susan and Emily and with his sisters, Joyce and Virginia Lee and his brother, Franklin.

Respectfully submitted  
Peter Beidler  
Steven Krawiec  
Rosemary Mundhenk

**GRC Curriculum and Program Additions and Changes  
Recommendations for Approval at  
Faculty Meeting March 29, 2004**

**College of Business and Economics**

1. Add a new course MACC 401 Professional Issues in Accounting (3)—this new course consists of three modules; business cases, negotiations, & ethics. This course will replace MACC 447 Negotiations as a core course in the MSAIA curriculum. This course is open only to MSAIA students.
2. Drop MACC 447 Negotiations—this is a cross listed course with GBUS 477. GBUS 447 is to remain but MSAIA students will not be permitted to register for it.
3. Change credits from 1 to 2 and course description for MBA 401 Intro to Organization and its Environment—a communications module will be integrated into the strategic management concepts and skills taught in this course. Change will reduce the required electives for MBA/Engineering and MBA/Ed Leadership from 6 credits to 5 credits. The change has been approved by both colleges.
4. Change in credits from 1-4 credits to 3 credits and course description for MBA 406 Integrative Experience—this course will merge the previously required non-credit Cross Core Project into the capstone course thus ensuring the integration of knowledge and skill. The Cross Core Project requirement will be eliminated for MBA/Ed Leadership and the course number for the Practicum would change from MBA 406 to GBUS 496 Field Studies. These changes have been approved by the College of Ed.
5. New Graduate Certificate Program in Organizational Leadership—designed to meet the needs of department heads and other middle managers including technical personnel who want to improve their ability to lead and to positions of increasing responsibility and decision making. The program requires 12 credits, 6 credits required GBUS 447 Negotiations and GBUS 459 Survey of Project Management both existing courses and 6 credits of GBUS 492 Special Topics. No additional faculty or resources beyond what the College of Business and Economics can address are required.

**College of Arts and Science**

**A. Bio Science**

1. Change program description in course for the Integrative Biology program—the proposed changes update the catalog to include courses offered by new faculty members. It improves upon the current curriculum to provide the broad interdisciplinary training intended for students in the Integrative Biology program.

2. Change course description for BioS 409 Evolutionary and Functional Morphology by changing the prerequisites from BioS 134 to BioS 234 and elimination of EES 361. Also change course description for BioS 429 Advances in Herpetology by eliminating the requirement for the field trip during spring break

3. Add three new courses BioS 401 Professional Skills for Biological Sciences Graduate Students; BioS 416 Neurophysiology and Memory; and, BioS 450 Developmental Neurobiology. No new faculty or resource requirements exist for this program beyond what the department can address

## **B. English**

1. The addition of 3 credits to the Master of Arts Program in English-- The added course will provide a stronger generalist training at the MA level and serve as a foundation for a more focused "specialist" Ph.D exam. The additional course will create a solid two-year MA program. As it is now MA students in their fourth semester often begin taking courses which count toward the Ph.D. before completing the MA because their fourth semester requires only 3 or 6 hours of MA course work. This new requirement will make it logical for all students newly accepted into our Ph.D. program, whether they received their MA from Lehigh or elsewhere, to begin together in the fall semester.

## **C. Earth & Environmental Sciences**

1. Change course description of EES 473 Aqueous Geochemistry—adds new topics and eliminates computer programming prerequisites and requires graduate standing in EES. Also the course may now be repeated for credit

2. Addition of new course EES 4xx Advanced Topics in Geochemistry (1-6)—Intensive study of geochemical processes not covered in more general courses. May be repeated for credit. No new faculty or resources are required beyond what the department can address

## **D. History**

1. Change course credits for Hist 438 Techniques in Public History from 2 credits to 2-3 credits—this change will permit the department to allocate the appropriate time and credits to specific offerings of this course. For example archival management may require a full semester while other may only require a partial semester

## **E. Mathematics**

1. Change titles and /or course descriptions for

- Stat 412 Computational Statistics to Stat 412 Statistical Computing and Applications.
- Stat 438 Regression Analysis to Stat 438 Linear Models in Statistics

- Math 404 Mathematical Logic to Math 404 Topics in Mathematical Logic (now requires consent of the department chair for admission and it may be repeated for credit)
- Math 467 Financial Calculus I—change course description and changing the prerequisites from Math 23, 43, 205, 12 to Math 231 or Math 309 or consent of instructor
- Math 468 Financial Calculus II—change course description and changing the prerequisites from Math 402 or Math 463 and 467 or consent of instructor to Math 467.

### **G. Political Science**

1. Drop six courses from catalog; PolS 407, 411, 463, 469, 470, 471—these courses have not been taught during the previous two years and are no longer required for the program.
2. Add PolS 468 Political Economy (3) and PolS 4xx Legal Problems (3)— no new faculty or resources are required beyond what the department can address.

### **H. Sociology & Anthropology**

1. Add SSP 4xx Organizing Community and Power (3)--no new faculty or resources are required beyond what the department can address

### **College of Education**

1. Drop EdI/TBTE 401 Technology-Based Teaching and Learning I & EdI/TBTE 402 Technology-Based Teaching and Learning 2—elimination of a shared core between programs because it has not worked as designed.
2. Add EdI 401 Foundations of Educational Technology (3), TBTE 406 Tool for k-12 Teaching and Learning (3) and TBTE 407 Designing for K-12 Teaching and Learning (3)—the additional courses will replace the shared core and will provide the focus required of the two different populations. No new faculty or resources are required beyond what the department can address
3. Drop EdI 406 Advanced Multimedia Programming (3), EdI 418 Desktop Publishing (3), EdT 420 Media Production for Instructional Programming (3), and EdT 428 Advanced Interactive Computing and Telecommunications—courses no longer meet the needs of the program
4. Change course numbering, titles and descriptions throughout the Ed Tech program. The following table captures these changes:

<b>Present Course</b>	<b>Becomes</b>
EdT 404. Interactive Multimedia Programming (3)	EdT 435. Development II: Interactive Multimedia Programming for Learning (3).
EdT 405. Website & Resource Development (3)	EdT 432. Development I: Website & Resource Development for Learning (3)
EdT 407. Advanced Website & Resource Development (3)	EdT 438. Development III: Advanced Development of Instructional Resources and Technologies: [subtitle] (3) May be repeated for credit under different subtitle.
EdT 433. Instructional Design (3)	EdT 422. Design I: The Systematic Design of Instruction (3)
EdT 443. Principles of Interface Design (3)	EdT 425. Design II: Applied Instructional and Interface Design Principles (3)
EdT 428. Advanced Interactive Computing & Telecommunications (3) EdT 453. Advanced Instructional Design (3)	EdT 428. Design III: Advanced Instructional Design (3)
EdT 455. Vygotsky's Theories Applied to Educational Technology (3)	EdT 408. Advanced Learning Theories Applied to Educational Technology: [subtitle] (3) May be repeated for credit under different subtitle.
EdT 458. Integrating Experience in Educational Technology (3)	EdT 490. Integrating Experience in Instructional Design and Development (3)
EdT 477. Research Topics in Educational Technology [subtitle] (3)	EdT 415. Topics in Educational Technology [subtitle] (1.5) May be repeated for credit under different subtitle. (1-3)
EdT 478. Applied Research in Educational Technology (4)	EdT 485. Applied Research in Educational Technology (3).
New course	EdT 482. Critical Reading and Writing in Educational Technology (3)

5. Change EdT 415 Topics in Ed Technology [subtitle] and EdT 408 Advanced Learning Theories Applied to Educational Technology [subtitle] so they can be repeated for credit under different subtitle. Each course will be for 1-3 credits.

6. Change description and requirements of Instructional Design and Development and Educational Technology masters programs to reflect the changes listed above. No new faculty or resources are required beyond what the department can address.

Rossin College of Engineering and Applied Science

Pre-A

Changes in M. S. in Management Science

- Streamline and reduce to 9 courses the core course listing, a student must take 5 courses from the approved 9 courses listed. Students who satisfy one or more of the core requirements from previous coursework may substitute for the core by taking additional courses from the declared area of concentration. Up to 9 credit hours may be substituted.
- No more than 9 credit hours may be taken from the College of Business and Economics
- Restructure areas of concentration to avoid overlap with M.S. in Analytical Finance and M. S. in Information and Systems Engineering
- Addition of two new courses IE 426 Optimization Models and Applications (3) and IE 429 Stochastic Models and Applications (3) No additional resources or faculty are required beyond what can be addressed by the department

**A. Information Science and Engineering**

1. Change prerequisite for IE 412 Quantitative Models of Supply Chain Management (3)—new prerequisite will be IE 362 and IE 362 or IE 406 or equivalent
2. Change prerequisite for IE 419 Sequencing and Scheduling (3)—new prerequisite will be IE362 and IE 316 or IE 406 or equivalent.
3. Change in course title for and removal of cross listing for IE 425 (MSE 425) Production Planning and Resource Allocation (3) to IE 425 Inventory Management and Production Planning (3)—addition of prerequisite IE 362.
4. New program description of MS in Information and Systems Engineering and M. Eng in Information and Systems Engineering to reflect the addition IE 362 Logistics and Supply Chain Management

**B. Manufacturing Systems Engineering**

- 1 Add MSE 362 Logistics and Supply Chain Management (3) and drop MSE 425 Production Planning and Resource Allocation (3)

**C. Computer Science and Engineering**

1. Add CSE 445 WWW Search Engines (3)—no additional faculty or resources will be required

#### **D. Electrical and Computer Engineering**

1. The addition of five new courses: ECS 438 Turbo Codes and Iterative Decoding (3); ECE 449 Semiconductor Lasers I (3); ECE 459 Semiconductor Lasers II (3); ECE 458 Quantum Electronics (3); ECE 445 Fundamentals of Wireless Communications (3); ECE 446 RF Power Amplifiers for Wireless Communications (3)—all of these courses have been taught in previous years under a special topics number. No additional faculty or resources will be required.

#### **E. Material Science and Engineering**

1. New Graduate Certificate Program in Nanomaterials—a 12 credit program requiring two core courses and two electives from a list of approved electives. All courses currently exist and no new faculty or resources are required.

#### **F. ME/MECH**

1. Change in course title and description for ME 442 Analytical Methods in Engineering I (3) to ME 442 (ChE 461, Engr 452) Mathematical Methods in Engineering (3).

#### **G. Interdisciplinary**

1. New M. S. degree in Wireless and Networking Engineering—this is an interdisciplinary program from ECS, CSE and ISE departments. All core courses have been previously taught. All departments involved have agreed to share responsibility for resource needs in conjunction with the library.

2. New M. S. degree in Analytical Finance—an interdisciplinary program from Perella Department of Finance and Department of Industrial & Systems Engineering with support from the Department of Mathematics. Two new courses are required as part of this proposal. IE 441 Financial Engineering Projects (3) is a capstone course. The financial responsibility for this course will be borne by the ISE department and by CBE. IE 447 Stochastic Programming and Portfolio Analysis (3) will serve as a core course in the program. The financial responsibility for this course will be borne by the ISE department.