

MINUTES OF THE UNIVERSITY SENATE

The September 9, 1997 meeting of the University Senate was called to order by Chairperson Alarcon at 3:15 p.m. in the Alumni Auditorium.

The following Senators were excused from the meeting: Anthony, Ault, Bravo, Carranza, S. Ender, Foltz, Hemby, Jenkins, Johnson, Joyce, Kassulke, Kilwein-Guevera, Luckey, R. Mutchnick, Nunn, Ray, Sanchez.

The following Senators were absent from the meeting: Baker, Barker, Bukartec, Camp, Christensen, Condino, Hulings, Juliette, Krishnan, McClure, McCreary, McDevitt, Nelson, Niebauer, Receski, Ruffner, Sehring, Sommer.

The minutes of the April 29, 1997 senate meeting were ACCEPTED.

Agenda items were APPROVED.

REPORTS AND ANNOUNCEMENTS

PRESIDENT'S REPORT (Dr. Pettit)

President Pettit made the following remarks:

Within a few weeks all of you will be getting a copy of my fall remarks to the faculty so I won't plough the same ground here except to welcome you all back, thank you for your service on the Senate and wish you a very successful year in the Senate. I will also follow our latest custom to use the five minutes allotted to submit to questions and provide responses.

PROVOST'S REPORT (Dr. Staszkievicz)

Provost Staszkievicz make the following remarks:

I am pleased to add my welcome to each of you as we begin another exciting year. I use the term exciting because I truly am more excited about this year than ever before in my sixteen-year tenure at IUP. While the term "infrastructure" may be over-used, shoring up the infrastructure at IUP has been a high priority and it is beginning to pay off. When you look at the infrastructure of a municipality, you have to consider such areas as sewage, roads, utilities, and schools. If these are not adequate to support the community, major problems are created and growth becomes impossible. Quality of life definitely suffers.

At IUP the infrastructure is no less important. We have completely reengineered admissions and registration. We have committed the funds and will soon begin the rewiring of all our buildings. We have added new facilities such as Eberly and McElhaney, we have begun work on Uhler, we are finalizing plans for Clark Hall, and are scheduled to do more renovation in Sutton, Stabley Library, Cogswell, and Keith. We have plans for a new parking structure. We are enhancing recreation facilities at the South Campus. I could go on, but I hope you sense the breadth of the infrastructure changes taking place around us.

Another infrastructure issue has been the area of computing and technology. We have recently announced a major reorganization in what used to be called the Information Systems Communication Center (ISCC). The ISCC as you knew it no longer exists. In its place is the Technology Services Center. The ISCC used to be organized into administrative computing, academic computing, systems and telecommunications, and operations.

The TSC will be headed by Sam Puleio and will be organized into the areas of applications development under the leadership of Bill Balint; technological services, under the leadership of Paul Grieggs; user services, under the leadership of Ed Zimmerman; and Research and Development, under the direction of Dan Yuhas. Other positive changes include the development of an Instructional Design Center with Dr. Dennis Ausel serving as its first director. We have also just received the responses from an RFP to migrate to an entire new administrative system B for all areas such as student records, finance, admissions, and registration and eventually alumni affairs and development. The systems are not mainframe based and will be user-friendly and allow for us to collect the kind of information needed to enhance our concept of shared governance.

Another exciting opportunity for IUP is the development of the Keystone Library Network B a system-wide initiative to provide for more collaboration and cost-sharing across the fourteen campuses' libraries. You may have already heard that Mr. Eric Zeglen, who was responsible for the technological aspects of the library's administrative systems, has been named to head the system-wide technology component of this new network. You may also have heard that IUP has been named to be one of the regional Hub sites. Just recently, Dr. Larry Kroah, Director of the IUP Libraries and Media Services, has agreed to serve as a Special Assistant to the System's Vice Chancellor for Technology to help coordinate the entire conversion to the Keystone Network. While Dr. Kroah will continue to maintain an office at IUP for this effort, 100% of his activities will be the development of the Keystone Network. I am pleased to report that Dr. Ben Rafoth, of the English Department, has agreed to serve as the Interim Dean of the IUP Libraries - effective September 9. Early this semester we will begin the process of searching for a new permanent Dean.

Finally, our new strategic planning process has developed a truly consensus-driven mission statement, vision statement, and set of strategic initiatives that have been transmitted to President Pettit. I have tremendous optimism that the strategic planning process can and will work for IUP.

While all these are very positive, they do not mask the need for more. We continue to work with the State System Office to redefine the funding formula to take into account the unique role of IUP as the only doctoral granting institution in the System B and I am pleased to report that they are not only listening, but willing to make some significant changes. We continue to need to address retention; we continue to need to address the issue of branch campus mission; we continue to need to find better ways to decentralize decision making authority, as well as responsibility. Toward that end, we continue to look at models that will create more incentives such as the incentive model we employed for summer school this past year.

Yes, I am definitely excited about where we are headed and I look forward to working with the Senate to make IUP an even better and more exciting place.

Thank you and may each of you have a wonderfully rewarding semester.

CHAIRPERSON'S REPORT (Dr. Alarcon)

Chairperson Alarcon made the following remarks:

Let me welcome new and returning Senator. I hope you will find your service to IUP through the Senate to be rewarding!

This year's Senate meetings are as follows:

Fall 1997

Sept. 9, 1997

Oct. 7, 1997

Nov. 4, 1997

Dec. 2, 1997

Spring 1998

Feb. 3, 1998

March 3, 1998

April 7, 1998

May 5, 1998 (Reading Day)

I have been informed recently that Terry Ray, the parliamentarian for the Senate, will be on medical leave this semester. Bob Curey has agreed to serve as parliamentarian for the today's meeting.

Last year we approved changes in the Bylaws to precisely determine the process by which changes to the Senate roster would be handled. With regards to the appointment of student senators the following is specified:

The Student Congress Vice-President shall submit to the Senate Secretary an up-to-date list of all Student Senators, both graduate and undergraduate, at least one week prior to each Senate meeting. This list shall include the effective dates of the terms of office for any additions and/or replacement senators, as well as indicate any vacant seats.

This does present a problem for the first Senate meeting of the year, in that students would find it very difficult to make the appointments of senators and report these to the Secretary at least one week in advance. The Rules Committee will need to examine this. The Secretary has received a list of Student Senators a couple of days ago, but not a week ago. So students present at the meeting today will not be recognized as Senators. Please understand that even if you signed your name on the attendance list on your way in, you will be considered a student in attendance but not a Senator and you should abstain from all voting. We certainly all value the student's input and participation, but we must abide by our bylaws! If students want to provide some input at today's meeting we will make motions that will allow them to address the Senate.

OLD BUSINESS (carryover from April 29, 1997 meeting)

There was no old business.

STANDING COMMITTEE REPORTS

RULES COMMITTEE--Chairperson Broad

No report.

CURRICULUM COMMITTEE--Chairperson Kuzneski

Chairperson Kuzneski presented the following for **Senate information**:

1. The UWUCC accepted the following Liberal Studies Committee report:

Revision of item D in LS Course Approval form:

Current language in item D:

If this is an introductory course intended for a general student audience, it should be designed to reflect the reality that it may well be the only formal college instruction these students will have in that discipline, instead of being designed as the first course in a major sequence. That is, it should introduce the discipline to students rather than introduce students into the discipline. If this is such an introductory course, how is it different from what is provided for beginning majors?

Proposed language in item D:

If this is an introductory course, how is it different from what is provided for beginning majors? If this course is an upper level course (i.e., 300 or 400 level), how do you plan to accommodate the different backgrounds of majors, minors, and non-majors? If this is a dual-level course, how do you plan to accommodate the different backgrounds and needs of majors, non-majors, and graduate students?

Rationale: The Liberal Studies Committee is concerned that non-majors might be unduly disadvantaged in upper level and dual-level courses.

2. Course Number Change:

Current: HP 246 Biomechanics

Proposed: HP 315 Biomechanics

Rationale: This new number will provide a better balance in courses between the 200 and 300 levels for students in the Department of Health and Physical Education. In addition, by changing the course sequence and delaying Biomechanics until the junior year, students will be better prepared for this course.

The Senate **APPROVED** the following course revisions:

Current: EL 356 Pedagogy I 3c-01-3sh

Prerequisite: Junior status

Competencies specific to the science of teaching will be introduced in this course. Students will become familiar with the fundamentals of teaching across all content area subject matter at the elementary level. Areas that will be explored include models of teaching, including lesson and unit planning, and creating a classroom environment that is conducive to learning.

Proposed: EL 257 Pedagogy I 3c-01-3sh

Competencies specific to the science of teaching will be introduced in this course. Students will become familiar with the fundamentals of teaching at the elementary level. Areas that will be explored include models of teaching, including lesson and unit planning, and creating a classroom environment that is conducive to learning.

Rationale: It has been determined that students need the content of EL 257, especially unit and lesson planning, to apply to other methods courses prior to the junior year.

The Senate **APPROVED** the following program revision:

Department of Professional Studies in Education
 Program Revision: B.S. Elementary Education

**Elementary Education Majors Seeking Second Certification in
 Early Childhood Education**

Dual Certification

Students majoring in Elementary Education may complete academic requirements for certification in Early Childhood Education by completing the following requirements. Students are advised that completion of requirements for a second certification will take approximately two extra semesters. In certain circumstances, such as for transfer students, students who must repeat courses, or when students take courses out of sequence, earning this second certification may take longer.

Dual Certification--Early Childhood Education for Majors in Elementary Education

EE 200 Introduction to Early Childhood Education (Spring semester-Sophomore Block only)	3sh
EE 315 Development and Learning Through Play (Fall semester)	3sh
EE 310 Integrated Curriculum I (Spring semester-Junior Block only)*	3sh
EE 311 Integrated Curriculum II (Spring semester-Junior Block only)*	3sh
EX 415 Preschool Education for Children with Disabilities (Spring semester)	3sh
ED 421 Student Teaching (Grade K, 1, 2 or 3)**	6sh
Total number of semester hours	21sh

*These are block (field experience) courses. Plan carefully to have time for a field placement. Check with your adviser and the coordinator of the Early Childhood Junior Field Experience.

**Student teaching (12 credits) for the first certification, Elementary Education, in grade 4, 5 or 6 will be completed prior to student teaching for this second certification.

Rationale:

This dual certification provides an opportunity for students in Elementary Education to earn a dual certification in Early Childhood Education.

These dual certification requirements were developed by carefully reviewing requirements for each major so that students could avoid taking duplicate course work and requires 21sh beyond the major program. (Special Electives in the Elementary Education program can be applied to requirements for this dual certification.) Students can take courses in both certification areas simultaneously. Students following the Early Childhood Education Course Sequence take the courses in this sequence: first - EE 200, EE 315; second - EE 310, EE 311, and EX 415, and third - ED 421.

The rationale for providing these opportunities is based on requests from students. Students see this as an opportunity to be more marketable when they apply for teaching positions. Some school districts are placing young children in school buildings that are for primary grade children (pre-kindergarten through third grade) only. For these children, they want to hire teachers that are specially trained in pedagogy that is appropriate for these young children. Districts which emphasize developmentally appropriate practice for primary grade children hire the Early Childhood Education major.

The Elementary Education major with a dual certification in Early Childhood Education will have the credentials necessary to be hired by the district desiring the flexibility of the kindergarten through sixth grade certified teacher or teacher whose specialty is the primary grades.

The Senate **APPROVED** the following program revision:

Department of Professional Studies in Education
Program Revision: B.S. Early Childhood Education

**Early Childhood Education Majors Seeking Second Certification in
Elementary Education**

Dual Certification

Students majoring in Early Childhood Education may complete academic requirements for certification in Elementary Education by completing the following requirements. Students are advised that completion of requirements for a second certification will take approximately two extra semesters. In certain circumstances, such as for transfer students, students who must repeat courses, or when students take courses out of sequence, earning this second certification may take longer.

Dual Certification--Elementary Education for Majors in Early Childhood Education

EL 313 Teaching Mathematics in the Elementary School*	3sh
EL 425 Language Arts Across the Curriculum	3sh
EL 312 Teaching of Elementary Science (Junior Block)	2sh
EL 411 Teaching of Social Studies (Junior Block)	3sh
ED 421 Student Teaching (Grade 4, 5 or 6)**	6sh
Total number of semester hours	17sh

*MA 152 is a prerequisite for EL 313 and should be taken as a Liberal Studies Elective.

**Student teaching (12 credits) for the first certification, Early Childhood Education, in grade K, 1, 2 or 3 will be completed prior to student teaching for this second certification.

Rationale:

This dual certification provides an opportunity for students in Early Childhood Education to earn a dual certification in Elementary Education.

These dual certification requirements were developed by carefully reviewing requirements for each major so that students could avoid taking duplicate course work and requires 17sh beyond the major program. (Electives in the Early Childhood program can be applied to requirements for this dual certification.) Students can take courses in both certification areas simultaneously. Students following the Elementary Education Course Sequence take the courses in this sequence: first - EL 313, and EL 425; second - EL 312 and EL 411, and third - ED 421.

The rationale for providing these opportunities is based on requests from students. Students see this as an opportunity to be more marketable when they apply for teaching positions. Some school districts prefer the K-6 certified teacher because of the flexibility of reassigning a teacher to any grade level based on changing demographics.

The Early Childhood Education major with a dual certification in Elementary Education will have the credentials necessary to be hired by the district seeking the specialty in teaching young children of nursery school through third grade or the flexibility of being able to assume a position in kindergarten through sixth grade.

The Senate **APPROVED** the following program revision:

- Department of Computer Science
- B.A. Computer Science
- B.S. Computer Science

Additions in the program appear in *bold italics*. There are no deletions.

Bachelor of Arts-Computer Science

Liberal Studies: As outlined in Liberal Studies section 55-58
 with the following specifications:
 Mathematics: MA123 (or MA121-MA122 or MA127)
 Liberal Studies electives: MA216 (or MA214 or MA217),
 no courses with CO prefix

Major: 35

Required courses:

CO105	Fundamentals of Computer Science	3sh
CO110	Problem Solving and Structured Programming	3sh
CO220	Applied Computer Programming	3sh
CO300	Assembly Language Programming	3sh
CO310	Data Structures	3sh
CO315	Large File Organization and Access	3sh
CO380	Seminar on the Computer Profession	1sh
CO480	Seminar on Technical Topics	1sh

Controlled electives: Select 9sh (1)

CO201	Internet and Multimedia	3sh
CO250	Introduction to Numerical Methods	3sh
CO319	Software Engineering Concepts	3sh
CO320	Software Engineering Practice	3sh
CO345	Data Communications	3sh
CO355	Computer Graphics	3sh
CO360	IBM Job Control Language	1sh
CO362	UNIX and C	3sh
CO481	Special Topics in Computer Science (as approved for majors)	1-4sh
CO485	Independent Study	1-4sh
CO493	Internship in Computer Science	12sh (2)

Upper-level Electives by Categories 6sh (3)

Computer Architecture: CO410
 Theory of Languages: CO419, CO420, CO424, CO460
 Systems Programming: CO430, CO432
 Numerical Methods: CO450, **CO451**
 Artificial Intelligence: CO405
 Data Base Management: CO441, **CO444**

Other Requirements:

EN322	Technical Writing	3sh
	Foreign Language Intermediate Level	0-6sh (4)
	Additional Mathematics:	3-13sh (5)

6-22 Additional Writing:

- MA123 Calculus for Physics and Chemistry
(MA121 and MA122 or MA127 may be substituted)
- MA216 Probability and Statistics for Natural Sciences
(MA363 and MA364, MA214 and MA417, or MA217 and MA417 may be substituted)
- MA219 Discrete Mathematics

Free Electives: 9-28

Total Degree Requirements: 124

- (1) Select at least 9sh from the list of controlled electives and/or the list of upper-level electives. Note: Only 4sh of CO493 may be counted toward these 9sh.
- (2) CO493 may be selected in either the second semester of the junior year or the first semester of the senior year. If CO493 is selected and approved, CO380 should be taken in the immediately preceding semester.
- (3) Select at least two additional courses, from at least two different categories, from the list of upper-level electives.
- (4) Foreign Language intermediate-level courses are counted as Liberal Studies electives.
- (5) Any of the Mathematics options satisfy the Learning Skill requirement, and one course may be counted as a Liberal Studies elective. The three-credit minimum applies to students who take MA123 and MA216. The thirteen-credit maximum applies to students who take the MA121-MA122 calculus option and the MA363-MA364 statistics option.

Bachelor of Science-
Computer Science/Applied Computer Science Track

Liberal Studies: As outlined in Liberal Studies section 54-58
with the following specifications:

Mathematics: MA123 (or MA121-MA122 or MA127)
Liberal Studies electives: MA216 (or MA214 or MA217),
no courses with CO prefix

Major: 38

Required courses:

- CO105 Fundamentals of Computer Science 3sh
- CO110 Problem Solving and Structured Programming 3sh
- CO220 Applied Computer Programming 3sh
- CO300 Assembly Language Programming 3sh
- CO310 Data Structures 3sh
- CO315 Large File Organization and Access 3sh
- CO319 Software Engineering Concepts 3sh
- CO380 Seminar on the Computer Profession 1sh
- CO441 Data Base Management 3sh

CO480 Seminar on Technical Topics 1sh

Select one of the following two courses:

CO320 Software Engineering Practice 3sh (1)

CO493 Internship in Computer Science 12sh (2)

Controlled electives: Select 6sh (3)

CO201 Internet and Multimedia 3sh

CO250 Introduction to Numerical Methods 3sh

CO345 Data Communications 3sh

CO355 Computer Graphics 3sh

CO360 IBM Job Control Language 1sh

CO362 UNIX and C 3sh

CO481 Special Topics in Computer Science 1-4sh

(only sections approved for majors)

CO485 Independent Study 1-4sh

Upper Level Electives by Categories: Select 3sh (4)

Computer Architecture: CO410

Theory of Languages: CO419, CO420, CO424, CO460

Systems Programming: CO430, CO432

Numerical Methods: CO450, **CO451**

Artificial Intelligence: CO405

Data Base Management: CO444

Other Requirements: 6-22

Additional Writing:

EN322 Technical Writing 3sh

Foreign Language Intermediate Level 0-6sh (5)

Additional Mathematics: 3-13sh (6)

MA123 Calculus I for Physics and Chemistry
(MA121 and MA122 or MA127 may be substituted)

MA216 Probability and Statistics for Natural Sciences
(MA363 and MA364, MA214 and MA417, or MA217 and
MA417 may be substituted)

MA219 Discrete Mathematics

Complete a minor from one of the following areas: 6-18

a) From any department in the College of Natural Sciences
and Mathematics 6-18sh

b) From designated Business courses 18sh

c) From designated Economics courses 15sh

d) From designated Geography courses 15sh

e) **From designated Communications Media courses 18sh**

Free Electives: 0-20

Total Degree Requirements: 124

- (1) Credit for both CO320: Software Engineering Practice and CO493: Internship in Computer Science may be counted toward the degree, but only one will be counted toward the major requirements.
 - (2) CO493 may be selected in either the second semester of the junior year or the first semester of the senior year. If CO493 is selected and approved, CO380 may be taken in the immediately preceding semester.
 - (3) Select at least 6sh from the list of controlled electives and/or the list of upper-level electives.
 - (4) Select at least one additional course from the list of upper-level electives.
 - (5) Foreign Language intermediate-level courses are counted as Liberal Studies electives.
 - (6) Any of the Mathematics options satisfy the Learning Skill requirement, and one course may be counted as a Liberal Studies elective. The three-credit minimum applies to students who take MA123 and MA216. The thirteen-credit maximum applies to students who take the MA121-MA122 calculus option and the MA363-MA364 statistics option.
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Bachelor of Science-
Computer Science/Languages and Systems Track

Liberal Studies: As stated in Liberal Studies Requirements 54-58 with the following specifications:

Mathematics: MA123 or MA127

Liberal Studies electives: MA124, no course with CO prefix

Major:

Required courses:	41
CO105 Fundamentals of Computer Science	3sh
CO110 Problem Solving and Structured Programming	3sh
CO220 Applied Computer Programming	3sh
CO300 Assembly Language Programming	3sh
CO310 Data Structures	3sh
CO315 Large File Organization and Access	3sh
CO319 Software Engineering Concepts	3sh
CO380 Seminar on the Computer Profession	1sh
CO410 Processor Architecture and Micro Programming	3sh
CO420 Modern Programming Languages	3sh
CO432 Introduction to Operating Systems	3sh
CO480 Seminar on Technical Topics	1sh

Controlled electives: Select 9sh (1)

CO201 Internet and Multimedia	3sh
CO250 Introduction to Numerical Methods	3sh
CO320 Software Engineering Practice	3sh (2)
CO345 Data Communications	3sh
CO355 Computer Graphics	3sh
CO360 IBM Job Control Language	1sh

CO362	UNIX and C	3sh
CO405	Artificial Intelligence	3sh
CO419	Software Development and Ada	3sh
CO424	Compiler Construction	3sh
CO430	Introduction to Systems Programming	3sh
CO441	Data Base Management	3sh
CO444	Productivity Tools & 4th Generation Languages	3sh
CO450	Applied Numerical Methods	3sh
CO451	Numerical Methods for Supercomputers	3sh
CO460	Theory of Computation	3sh
CO481	Special Topics in Computer Science (as approved for majors)	1-4sh
CO485	Independent Study	1-4sh
CO493	Internship in Computer Science	12sh (3)

Other Requirements: 13-21 Additional writing:

EN322	Technical Writing	3sh
	Foreign Language Intermediate Level	0-6sh (4)
	Mathematics: A minor in mathematics including the following courses	10-12sh (5) (6)
MA123	Calculus I for Physics and Chemistry (MA127 may be substituted)	
MA124	Calculus II for Physics and Chemistry (MA128 may be substituted)	
MA171	Introduction to Linear Algebra	
MA216	Probability and Statistics for Natural Sciences (MA363 and MA364, MA214 and MA417, or MA217 and MA417 may be substituted)	
MA219	Discrete Mathematics	

Free Electives: 4-22

Total Degree Requirements: 124

- (1) Select at least 9sh from the list of controlled electives. Note: Only 4sh of CO493 may be counted toward these 9sh.
 - (2) Credit for both CO320: Software Engineering Practice and CO493: Internship in Computer Science may be counted toward the degree, but only one will be counted toward the major requirements.
 - (3) CO493 may be selected in either the second semester of the junior year or the first semester of the senior year. If CO493 is selected and approved, CO380 may be taken in the immediately preceding semester.
 - (4) Foreign Language intermediate-level courses are counted as Liberal Studies electives.
 - (5) Credit for MA123/MA127 and MA124/MA128 counted in Liberal Studies.
 - (6) Any of the Mathematics options satisfy the Learning Skill requirement, and one course may be counted as a Liberal Studies elective. The three-credit minimum applies to students who take MA123 and MA216. The thirteen-credit maximum applies to students who take the MA121-MA122 calculus option and the MA363-MA364 statistics option.
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Minor-Computer Science

Minor: 15
Required courses:
CO electives 15sh(1) (2)

- (1) The minor in Computer Science consists of 15 semester hours of CO electives. At least 9 semester hours of the 15 must be from CO courses numbered higher than 200.
- (2) CO101 Microbased Computer Literacy is an appropriate entry course for minors or for students who wish to take only one course.
- (3) See Computer Science minor adviser for suggestions.

Rationale for changes

- a. Add a Communications Media minor to the list of minors approved for a B.S. in the Applied Computer Science track.

Rationale:

Over the past several years, the use of computers has dramatically increased in the field of Communications Media, both in terms of total computer applications and sophistication. The Communications Media department has consequently developed several courses that are useful and appropriate for Computer Science majors. Thus, it makes sense to have a Communications Media minor option for our majors. The minor will consist of 18 sh of courses chosen from the following list (including several computer oriented courses and several core Communications Media courses).

- | | |
|--------|---|
| CM 101 | Communications Media in American Society |
| CM 201 | Internet and Multimedia |
| CM 271 | Beginning Photography |
| CM 330 | Communications Media in Training & Education ¹ |
| CM 335 | Consulting Practices in Communications |
| CM 435 | Organizational Development in Communication Media |
| CM 440 | Communications Graphics |
| CM 441 | Advanced Communications Graphics |

¹ Computer Science students would be exempted from the CM 303 prerequisite for this course.

- b. Add CO 201, Internet and Multimedia, to the lists of Controlled Electives for each degree path.

Rationale:

CO 201 was passed by the Senate during Spring 1996. This course can be of benefit to Computer Science majors, as well as non-majors. Consequently, the catalog entry needs to be updated to include CO 201 as a controlled elective for each of the degree paths.

- c. Add CO 444, Productivity Tools & 4th Generation Languages, to the lists of Upper-level and Controlled Electives.

Rationale:

CO 444 represents an addition to the upper-level courses in the Database Management area. This change is to update the catalog entry to include CO 444 as an elective in the three degree paths. Additional rationale for the creation of the course are provided in the course proposal.

- d. Add CO 451, Numerical Methods for Supercomputers, to the lists of Upper-level and Controlled Electives.

Rationale:

CO 451 represents an addition to the upper-level courses in the Numerical Methods area. It is a course that is dual listed with MA 451. CO 451 has been in the catalog for some time. This change is meant to include it among the specifically listed courses to meet controlled elective and upper-level requirements for Computer Science majors.

The Senate **APPROVED** the following program revision:

Catalog description of the **proposed** program

Bachelor of Science in Education--Elementary Education (*)
 Liberal Studies: As outlined in Liberal Studies section 56-57
 with the following specifications:

Mathematics: MA 151
 Natural Science: SC 101, 102, 103, and 104 (1)
 Social Science: GE 101, GE 102, or GE 104; PC 101
 Liberal Studies electives: MA 152(2); no courses with EL prefix;
 not to include HE 218

College:

	Professional Education sequence	27
CM 301	Technology for Learning and Instruction	3sh
ED 242	Pre-student Teaching Clinical Experience I	1sh
ED 342	Pre-student Teaching Clinical Experience II	1sh
	ED 441 Student Teaching	12sh
	ED 442 School Law	1sh
	EP 202 Educational Psychology	3sh
	EP 377 Educational Tests and Measurements	3sh
	FE 202 American Education in Theory and Practice	3sh

Major: 36

Required courses:

EL 211	Music for the Elementary Grades	2sh
EL 213	Art for the Elementary Grades	2sh
EL 215	Child Development	3sh
EL 221	Children's Literature	3sh
EL 222	Teaching of Reading I	3sh
EL 312	Teaching of Elementary Science	2sh
EL 313	Teaching Mathematics in the Elementary School	3sh
EL 314	Teaching of Health and Physical Education	2sh
EL 257	Pedagogy I (proposed new number)	3sh

EL 357	Pedagogy II	3sh
EL 411	Teaching of Social Studies	3sh
EL 425	Language Arts Across the Curriculum	3sh
ED 499	Multicultural/Multiethnic Education	2sh
EX 300	Education of Students with Disabilities in Inclusive Elementary Classrooms	2sh

Other Requirements: 6

Special Electives from a defined discipline (3)

Total Degree Requirements 125-126

- (*) See requirements leading to teacher certification in the catalog section on Academic Policies, "Admission to Teacher Education."
- (1) This sequence of ten credits fulfills the Liberal Studies natural science requirement.
- (2) For students who test out of MA 152, consult your adviser for suggested math courses.
- (3) More than twenty options are available for groupings in specific departments or cross-departmental areas. This requirement is also fulfilled by completion of an approved specialty as FLISET, math, or reading.
FLISET - see requirements in this catalog

Mathematics: MA317, 420, 456, 457, 458, 459, 471, 483 (math concentration requires 15 credits to include MA 151, 152)

Reading: ED408, EL422, EE220 or 451 (reading concentration requires 15 credits to include EL 221, 222, 425)

Students may select a set of special electives from the list of Liberal Studies electives of non-Western courses that have not been used previously in their program. With permission of the chairperson of Professional Studies in Education and a specific department, a student may be allowed to create an area of specialty other than those listed. See department office for full listing; check prerequisites carefully. Submit plan to adviser for approval.

Summary of Changes

Table comparing old and new programs.

Old

Major: 34
 Required courses:

Other Requirements: 9
 Special electives from a defined discipline (4)
 Education of Exceptional Persons: EX300

Total Degree Requirements 126-127

(3) Special Education Competency Requirement: Revision pending will eliminate exam option and will require EX300 (2sh).

New

Major: 36
 Required courses:

EX 300 Education of Students with Disabilities in 2sh
 Inclusive Elementary Classrooms

Other Requirements 6

Total Degree Requirements 125-126

(3) from program notes is deleted.

There are no associated course changes. However, to accommodate EX 300 (2sh) without additional semester hours to the program, the department has agreed to reduce the number of Special Electives by 3 sh.

Rationale for Change

Elementary classrooms include students with disabilities and teachers need to know how to accommodate them. The Pennsylvania Department of Education is requiring the addition of a course which focuses on education of children with disabilities to maintain program certification.

GRADUATE COMMITTEE--Chairperson Williamson

No report.

LIBRARY AND EDUCATIONAL SERVICES COMMITTEE--Chairperson Jackson

No report.

NON-CREDIT COMMITTEE--Chairperson Nardi

No report.

RESEARCH COMMITTEE--Chairperson Neusius

No report.

STUDENT AFFAIRS COMMITTEE--Chairperson Trump

No report.

UNIVERSITY DEVELOPMENT & FINANCE COMMITTEE--Chairperson Heckroth

No report.

ACADEMIC COMMITTEE--Chairperson Duntley

No report.

AWARDS COMMITTEE--Chairperson Wheat

No report.

NEW BUSINESS

There was no new business.

The Meeting was adjourned at 3:55p.m.

Respectfully submitted,

Ramesh Soni
University Senate