

Bernard Gillis
Provost

TO: FULL-SERVICE FACULTY, ADMINISTRATION, AND STUDENT GOVERNMENT
FROM: VIRGINIA PHILLIPS, SECRETARY, THE ACADEMIC SENATE
RE: MEETING OF THE ACADEMIC SENATE
WEDNESDAY, MAY 6, 1987
ARTS AND SCIENCES AUDITORIUM, ROOM 132, DEBARTOLO HALL
4:00 P.M.

AGENDA

1. Call to Order.
2. Approval of Minutes of Academic Senate of April 1, 1987.
3. Charter and Bylaws Committee.
Results of Charter Vote, April 27, 1987.
4. Senate Executive Committee, Report by Duane Rost.
5. Elections and Balloting Committee.
Results of Elections to date.
6. Reports of Other Senate Committees.
 - 867-12 Computer Services Committee--Policy Proposal.
 - 867-13 Academic Planning Committee--Scheduling Policy.
 - 867-14 Honors and I.C.P. Subcommittee--Honors in Psychology Program.
 - 867-15 Academic Programs and Curriculum Committee, Curriculum Division--Course Proposals.
 - 867-16 Academic Programs and Curriculum Committee, Programs Division--Program Changes**.
 - 867-17 Academic Programs and Curriculum Committee, Programs Division--Report.
 - 867-18 Academic Programs and Curriculum Committee, Programs Division--MIS Program.
 - 867-19 Student Academic Affairs Committee--Report on High Risk Students.
7. Unfinished Business.
8. New Business.
9. Adjournment.

**867-16 Academic Programs and Curriculum Committee, Programs Division--Program Changes. The proposals are available for review from the Chairman of the Senate and will be included in the Senate files. They are not copied with this Agenda to conserve expenses.

RECEIVED

OFFICE OF THE PROVOST

COVER SHEET TO BE ATTACHED TO ALL REPORTS SUBMITTED TO THE ACADEMIC SENATE

Date March 17, 1987 Report Number (For Senate Use Only) 867-12

Name of Committee Submitting Report Computer Services Committee

Committee Status: (elected chartered, appointed chartered, ad hoc, etc.) _____

Appointed Chartered

Names of Committee members: J. Buoni, T. Chrobak, L. DiRusso, M. L. Friend, J. Granito,
A. Messuri, L. Peters, D. Robinson, L. Slivinske, T. Doctor, G. Sutton, E. Nordtvedt,
P. Munro.

Please write a brief summary of the report which the Committee is submitting to the Senate: (attach complete report)

The Committee has reviewed and revised a proposed "Policy on User-Supplied Software" submitted to it by the YSU Computer Center. This policy outlines the responsibilities of both the Computer Center and the user with respect to software purchased and supplied by departments for use on the mainframe or PC-network systems. The final two-page policy is attached for your consideration. The third page is presented for your information only.

Do you anticipate making a formal motion relative to the report? Yes

If so, state the motion: Motion to approve this policy for use by the Computer Center.

If there are substantive changes made from the floor in your committee recommendation, would the committee prefer that the matter be sent back to committee for further consideration? Yes.

Other relevant data: _____

P. Munro 
Chairman

Youngstown State University
Computer Center
Policy on User-Supplied Software

The following services will be provided by the Computer Center staff and the user for those software packages which are acquired and funded by user departments directly from a third party vendor and are to be installed on the mainframe CPU or the Waterloo Port PC Network in Meshel Hall. In order to obtain and maintain these services without interruption, the user must provide detailed and specific information to the Computer Center staff in support of the software package as long as it remains in operation at YSU.

Responsibilities of the Computer Center

The Computer Center will ...

1. determine if the software package is executable on the mainframe or Waterloo operating system;
2. work with the user to evaluate the requested package in terms of resources required;
3. make a recommendation to the user regarding the installation of the software package based on this preliminary evaluation;
4. schedule and perform the initial installation of the requested software package;
5. schedule and apply user-supplied maintenance upgrades and fixes;
6. following initial installation or the application of maintenance, execute user-supplied validation tests;
7. provide access instructions to the user for the installed package;
8. assist the user by communicating future system changes in a timely manner and by indicating possible compatibility problems; and
9. remove the package from the system when no user is assigned ongoing responsibility for the software by the purchasing, or by another, department. Before removing the package, the Computer Center will make every effort to be sure that it is not needed by the purchasing, or by another, department.

CSC Revision: 3-11-87

Youngstown State University
Computer Center
Policy on User-Supplied Software

Responsibilities of the User

The user will ...

1. provide the Computer Center with the documentation necessary to obtain a product overview of computer resources required;
2. provide the Computer Center with comprehensive installation documentation and all necessary installation media (e.g., tape(s), disk(s));
3. act as the primary contact between the software supplier and the Computer Center relative to problem determination;
4. supply maintenance and upgrades to the Computer Center;
5. perform system assurance tests following the initial installation and the application of maintenance and upgrades;
6. provide education on product usage to the Computer Center staff when requested;
7. determine the product's compatibility with future software enhancements and upgrades as announced by the Computer Center;
8. obtain necessary modifications or identify alternative software package(s) in the event that the software package becomes inoperable due to enhancements or upgrades to the mainframe CPU or PC Network and/or its operating system software and utilities; and
9. ensure that all user modifications applied to the software package are in direct accordance with published IBM System/370 coding conventions or Port BIOS, as appropriate, and that use of the package will be free of hardware dependencies.

CSC Revision: 3-11-87

Youngstown State University
Computer Center
Policy on User-Supplied Software

By signing this policy statement, we agree to comply with the responsibilities described above. The user understands that failure to do so can result in removal of the software package from the system.

_____	_____
User's Signature	Date
_____	_____
Dept. Head or Chairman	Date
_____	_____
Computer Center Director	Date

_____ Installation Details _____

Software Package (Name)

Software Package (Function)

Supplier (Name, Address, Phone)

Acquisition Cost

Ongoing Cost

Date Installed

Asst. Dir. for Systems Software

Operating System (and Release)

Distribution: All parties named above.

Prepared: 02-04-87

COVER SHEET TO BE ATTACHED TO ALL REPORTS SUBMITTED TO THE ACADEMIC SENATE

Date March 19, 1987. Report Number (For Senate Use Only) 867-13

Name of Committee Submitting Report ACADEMIC PLANNING COMMITTEE

Committee Status: (elected chartered, appointed chartered, ad hoc, etc.) _____

APPOINTED CHARTERED

Names of Committee members: J. ALAM, F. BARGER, F. CASTRONOVO, J. ELIAS, B. GILLIS, R. KRISHNAN (CHAIR), T. MARAFFA, G. TRIBBLE, D. RUGGLES, T. SLAWECKI, AND B. YOZWIAK

Please write a brief summary of the report which the Committee is submitting to the Senate: (attach complete report) SCHEDULING POLICY FOR UNDERGRADUATE CLASSES

The Academic Planning Committee, after reviewing the comments from Chairpersons, Deans and the Registrar, has finalised its report on Scheduling Policy for Undergraduate Classes. The report is submitted herewith.

Do you anticipate making a formal motion relative to the report? YES

If so, state the motion: The Scheduling Policy, as recommended by the Academic Planning Committee, be approved as the scheduling guidelines for University undergraduate classes.

If there are substantive changes made from the floor in your committee recommendation, would the committee prefer that the matter be sent back to committee for further consideration? _____

Other relevant data: _____



Chairman

SCHEDULING POLICY FOR UNDERGRADUATE DAY CLASSES

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- I. All regular courses shall be scheduled within one hour blocks or two hour blocks. Those scheduled within one hour block (e.g. 40 min., 50 min., etc.) will begin on the hour. Those scheduled within two hour blocks (e.g. 1 hr.15 min., 1hr. 30 min., 1hr. 40 min., etc.) will begin on even numbered hours only. These restrictions apply to all undergraduate classes which have fixed scheduled times with the exceptions indicated below. For all courses in this section, the number of contact hours equals the number of credit hours. Where the credit hours and contact hours are not the same, see section IV.

FOLLOWING THE ABOVE POLICY,

- a) all one cr. hr. courses shall be scheduled one day a week starting at any hour;
 - b) all 2 cr. hr. courses shall be scheduled either one day a week starting at even hours or two days a week starting at any hour;
 - c) all 3 cr. hr. courses shall be scheduled either MWF starting at any hour, OR MW, MF, WF or TTh starting at even hours;
 - d) all 4 cr. hr. courses shall be scheduled either for four days starting at any hour (see II.b. below also) OR MW, MF, WF or TTh starting at even hours;
 - e) all 5 cr. hr. courses shall be scheduled for five days starting at any hour, OR MWF starting at even hours OR TTh from 14.00 - 16.15.
 - f) All classes should end at least 10 minutes before the hour.
- II.a) If multiple sections of the same course are offered, for each section of a course offered within two hour blocks between 10.00 - 14.00 hrs., serious effort should be made to offer a corresponding section within one hour block OR one within two hour block time between 8.00 - 10.00 or 14.00 - 16.00 hours.
- b) Departments scheduling classes four days per week should, when possible, schedule at least 1/3 of these on MTWF and at least 1/3 on MWThF. Remaining classes can be scheduled in any four day combinations.

- III. Conference courses, independent studies, field based courses, clinical courses and theses may be scheduled by conference between the Instructor and the enrolled students.
- IV. Laboratory courses and courses combining lecture and laboratory should be scheduled to utilize the laboratory facilities most effectively. Where possible, the guidelines in (I) above should be followed.
- V. Each school shall maintain a list of courses which will be exceptions to the above scheduling guidelines. All exceptions must have specific advance approval of the appropriate academic dean. If some departments require additional flexibility, they should obtain such clearance from their Dean on a standing order basis to obviate the necessity of obtaining approval on each course offering.
- VI. Scheduling policy should be evaluated and necessary modifications made once every three years by an appropriate Senate Committee.

SCHEDULING POLICY FOR UNDERGRADUATE EVENING CLASSES **

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1. All classes should be scheduled such that they do not use or overlap the 7:30 - 7:40 p.m. time period.
2. A three credit-hour class
 - a) should meet twice each week on M-W, T-Th, M-F, or W-F at any of the following times: 4:50-6:05; 6:15-7:30 or 7:40-8:55; 9:05-10:20 p.m.
 - b) should meet one day each week at either 4:50-7:30 or 7:40-10:20 p.m.
3. A four credit-hour class should meet on M-W, T-Th, M-F or W-F at either 5:40-7:30 or 7:40-9:30 p.m.
4. A five credit-hour class should meet on M-F, T-Th, M-F or W-F at 5:15-7:30 or 7:40-9:55 p.m..
5. A six credit-hour class should meet on M-W or T-Th at 4:50-7:30 or 7:40-10:20 p.m.

** No changes have been made in these guidelines, which were established in March, 1983.

SATURDAY CLASSES MAY BE SCHEDULED, AS NECESSARY.

COVER SHEET TO BE ATTACHED TO ALL REPORTS SUBMITTED TO THE ACADEMIC SENATE

Date 3/18/87 Report Number (For Senate Use Only) 867-14

Name of Committee Submitting Report Honors and I.C.P. Subcommittee

Committee Status: (elected chartered, appointed chartered, ad hoc, etc.) _____

Appointed chartered

Names of Committee members: Violet Boggess, Joseph Kirschner (Chair), Kathleen Koughl,
Ahalya Krishnan, Bari Lateef, Gordon Mapley, Anne McMahon, Lester Smith, George
Sutton, Fred Viehe, John Yemma, Eric Conka

Please write a brief summary of the report which the Committee is submitting to the
Senate: (attach complete report)

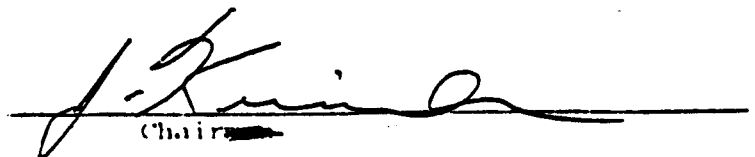
To establish an Honors in Psychology Program within the Psychology Department.
complete with an honors thesis. Successful completion adds "Honors in
Psychology" to transcript.

Do you anticipate making a formal motion relative to the report? Yes

If so, state the motion: Move that the Senate approve the Honors in Psychology Program
as submitted by this committee.

If there are substantive changes made from the floor in your committee recommendation,
would the committee prefer that the matter be sent back to committee for further
consideration? Yes

Other relevant data: _____


Chair

ADMISSION TO THE HONORS IN PSYCHOLOGY PROGRAM

1. REQUIREMENTS:

- A. The student shall have completed and earned a GPA of at least 3.46 in the psychology "core" courses; namely 560, 613, 614 and 615.
 - B. The student shall have and maintain a comprehensive GPA of at least 3.4 and shall have completed 45 quarter hours at the Youngstown State University.
 - C. The student shall have submitted a formal application.
2. The catalog would indicate that the core courses be completed preferably by the end of the sophomore year but must be completed by the end of the junior year, giving sufficient time for the student to complete the honors program.
 3. The successful completion of the honors program in psychology would be indicated on the transcript.

CONTENT OF THE HONORS PROGRAM IN PSYCHOLOGY

1. HONORS THESIS:

- A. The honors student shall register for Psych. 891 which shall consist of an approved study or project under the guidance of an honors advisor, culminating in an honors thesis. One copy of the thesis will remain on file in the department. This course will carry 1-4 q.h. each quarter, repeatable up to 3 consecutive quarters, but not exceeding 6 q.hs. overall.
- B. Prerequisites for this course sequence shall be:
 1. Admission to the honors program in psychology
 2. Consent of the honors advisor
- C. The student shall defend the thesis before a committee*. The committee shall consist of the honors advisor, one faculty member designated by the student, and one faculty member designated by the honors advisor. The vote of these three shall be binding. Any member of the psychology faculty may attend the defense of the project or thesis, but only members of the committee may vote.
 1. An honors student who fails (obtaining a letter grade of C or below) the defense of the thesis shall be given 2 options
 - A. One opportunity to redefend the thesis
 - B. To accept the grade assigned by the honors advisor and to lose the honors designation on the transcript
 2. An honors student who passes the defense of the thesis and completes all other requirements of the honors program shall have the designation "Honors in Psychology" indicated on the transcript and will accept a grade for the Theses (Psych. 891) assigned by the the honors advisor.

(*) This would be a new Departmental committee, appointed by the chairperson.

COVER SHEET TO BE ATTACHED TO ALL REPORTS SUBMITTED TO THE ACADEMIC SENATE .

Date 4-23-87

Report Number (For Senate Use Only) 867-15

Name of Committee Submitting Report Academic Programs and Curriculum Committee--
Curriculum Division

Committee Status: (elected chartered, appointed chartered, ad hoc, etc.) _____

Appointed Chartered

Names of Committee members: G. Claypool, J. Feist, L. Hugenberg (chair),
D. Maguire, H. Mehri, E. Moran, E. Usip, and H. Yiannaki

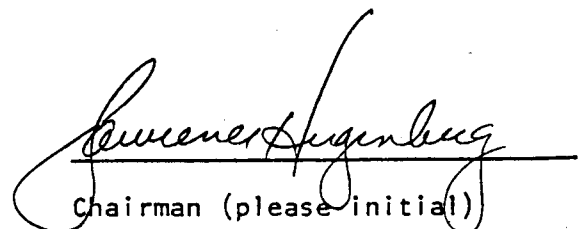
Please write a brief summary of the report which the Committee is submitting to the Senate: (attach complete report) The attached curriculum proposals have been approved by the UCD, circulated to the various deans and departments, and are being presented to the University Senate: 87-69 to 87-266, 87-268, and 87-269 and 87-267.

Do you anticipate making a formal motion relative to the report? NO

If so, state the motion: _____

If there are substantive changes made from the floor in your committee recommendation, would the committee prefer that the matter be sent back to committee for further consideration? _____

Other relevant data: _____


Chairman (please initial)

LIST PREPARED BY CURRICULUM COMMITTEE

87-69 Special Education (Add)
829. Supervised Student Teaching: Severe Behavior Handicapped Children.

To be taken concurrently with Ed. 869. Prereq: Ed. 705, 708, 710, 828, 828L, 835, 852, 853; senior status and approval of the Chairman of the Special Education Department. See requirements for student teaching under School of Education.

6-15 q.h.

87-70 Special Education (Change)
836. Education of Multiply-Handicapped Individuals.

Identification and intervention in critical areas of development for individuals with physical handicaps, sensory deficits, or communication disorders. Developing objectives, planning and implementing adapted curricula in consultation with interdisciplinary specialists. To be taken concurrently with Ed. 836L. Prereq: Ed. 833, 835.

4 q.h.

87-71 Special Education (Add)
836L. Practicum in Education of Multihandicapped Individuals.

Application of assessment, habilitation, and rehabilitation techniques in an education and/or vocational setting. Includes alternative modes of communication and advanced behavior management strategies including aggressive client training. To be taken concurrently with Ed. 836. Prereq: Ed. 833, 835.

2 q.h.

87-72 Special Education (Change)
839. Supervised Student Teaching: Multiply Handicapped Children.

To be taken concurrently with Ed. 869. Prereq: Ed. 705, 708, 710, 833, 834, 835, 836, 836L; senior status and approval of the Chairman of the Special Education Department. See requirements for student teaching under School of Education.

6-15 q.h.

87-73 Special Education (Change)
848. Supervised Student Teaching: Developmentally Handicapped Children.

To be taken concurrently with Ed. 869. Prereq: Ed. 705, 708, 710, 833, 835, 851, 852, 853; senior status and approval of the Chairman of the Special Education Department. See requirements for student teaching under School of Education.

6-15 q.h.

87-74 Special Education (Change)

849. Supervised Student Teaching: Specific Learning Disabled Children.

To be taken concurrently with Ed. 869. Prereq: Ed. 705, 708, 710, 835, 852, 853, 863, 866, 867; senior status and approval of the Chairman of the Special Education Department. See requirements for student teaching under School of Education.

6-15 q.h.

87-75 Special Education (Change)

853. Arithmetic Methods in Special Education.

Principles, practices, materials, and aids for teaching arithmetic in Special Education. Diagnostic and evaluation procedures; individualized instructional techniques; observation, tutoring and participation. Prereq: Ed. 802.

4 q.h.

87-76 Special Education (Change)

864. Communication and Consultation Skills in Special Education.

Designed to enable teachers of exceptional individuals to gain the cooperation and involvement of professionals, parents, and children. Students will assume the role of child advocate and explore methods of facilitating educational placements and programming designed to best meet handicapped children's unique needs. Prereq: Ed. 802.

4 q.h.

87-77 Counseling (Add)

Counseling 874. Principles of Interaction With Special Needs Students.

Principles and methods of interaction with students, parents and other professionals in behalf of students with special needs. A team approach and the use of community resources will be emphasized. Prereq: Ed. 864.

3 q.h.

87-77a Special Education (Add)

Education 874. Principles of Interaction With Special Needs Students.

Principles and methods of interaction with students, parents and other professionals in behalf of students with special needs. A team approach and the use of community resources will be emphasized. Prereq: Ed. 864.

3 q.h.

87-78 Special Education

(Change)

852. Language Arts Methods in Special Education.

Principles, practices, materials, and aids for teaching language arts in Special Education. Diagnostic and evaluation procedures; individual problems; techniques, curriculum units, guidance, planning; tutoring and participation. Prereq: Ed. 812, 802.

4 q.h.

87-79 Special Education

(Change)

855. Career and Vocational Education for Handicapped Individuals.

Emphasis on lifelong career orientation and the development and implementation of K-12 prevocational/vocational curriculum. How to integrate practical experiences in the classroom, home and community. Prereq: Six hours of special education methods or equivalent.

4 q.h.

87-80 Special Education

(Change)

863. Learning Disabilities.

Description, classification, development, and academic and social adjustment of children with learning disabilities. Relates the contribution of diverse disciplines to theory and practice. A developmental approach to motor, perceptual, cognitive, language, and social-emotional functioning within and educational context. Prereq: Admission to the School of Education.

4 q.h.

87-81 Special Education

(Change)

866. Clinical Teaching of Children with Specific Learning Disabilities.

A variety of assessment procedures are explored for the purpose of placing SLD children and designing appropriate educational programs for them. Emphases are upon disorders of motor, perceptual, cognitive, and language functioning and learning styles. Prereq. or concur. with Ed. 863.

4 q.h.

87-82 Special Education

(Change)

867. Practicum in Specific Learning Disabilities.

Diagnostic procedures are used to develop a comprehensive assessment of a child's current functioning. Emphases are upon those areas explored in Ed. 866. An individualized education program (IEP) will be developed and partially implemented. Prereq: Ed. 852, 853, 863, 866.

4-6 q.h.

87-83 Special Education (Add)

869. Student Teaching Seminar - Special Education.

To be taken with student teaching. Reflective teaching techniques will be explored with emphasis on daily lessons and student teachers' interactions with children, teachers and administrators. Prereq: Admission to student teaching in Special Education.

1 q.h.

87-84 Special Education (Add)

828L. Education of Children with Severe Behavioral Handicaps Lab.

A sixty clock hour clinical/field experience. Assessment of severe behavior disorders and development of intervention plans with children in local SBH units. Students are assigned to field sites 6-8 hours per week. To be taken concurrently with Ed. 828.

2 q.h.

87-85 Special Education (Add)

828. Education of Children With Severe Behavioral Handicaps.

Advanced behavior management procedures are employed within an educational/clinical setting. Explores multidisciplinary theories, techniques and strategies. Included are rule setting, instructional and home management, assessment, multi-level reinforcement, crisis prevention and intervention, and handling aggressive behaviors. To be taken concurrently with Ed. 828L. Prereq: Ed. 835, 854, Psych. 702.

3 q.h.

87-86 Biological Sciences (Change)

790. Molecular Biology of the Gene.

Physical and chemical structure of nucleic acids, DNA replication, transcription, translation, recombinant DNA and genetic engineering and regulation of gene activity in prokaryotes and eukaryotes. Two hours lecture a week. Prereq: Biol. 506, 507, and 508; or admission to the NEOUCOM-YSU program or consent of instructor.

2 q.h.

87-87 Biological Sciences (Change)

790L. Molecular Biology of the Gene Laboratory.

The quantitative determination of protein, deoxyribonucleic acid and ribonucleic acid in cultures of microorganisms subjected to various antibiotic treatments. Four hours laboratory a week. Prereq. or concur.: Biol. 790.

2 q.h.

87-88 Biological Sciences

(Change)

836. Molecular Biology of the Cell.

Relationship of eukaryotic cell structure to function, integrating the biochemical dynamics of biomembrane systems including receptors, bioenergetics and the physiochemical environment. Two hours lecture a week. Prereq: Biol. 790 or admission to the NEOUCOM-YSU program or consent of instructor.

2 q.h.

87-89 Biological Sciences

(Add)

836L. Molecular Biology of the Cell Laboratory.

Current techniques involved in isolation, observation, and characterization of eukaryotic cells and their components. Four hours laboratory a week. Prereq. or concur.: Biol. 836.

2 q.h.

87-90 Health & Physical Education

(Delete)

701. Pre-Professional Laboratory Experience in Health Education.

Students assist in a YSU Health Education course under faculty supervision. The students must attend regularly and teach small groups or parts of lessons when appropriate. Prereq: HPE 690 and consent of instructor.

1 q.h.

87-91 Health & Physical Education

(Add)

606L. Pre-Professional Experience.

Students participate in an approved school health or a community health education program under faculty supervision. The students observe and assist in the organization and/or teaching of programs. Prereq: HPE 596.

1 q.h.

87-92 Health & Physical Education

(Add)

792. Community Health Planning.

Designed to provide the health educator with the fundamental techniques for developing community health programs. Includes needs assessments, methods and materials, implementation and evaluation. One hour lecture and two hours lab. Prereq: HPE 606L, 791, 690, or 730.

2 q.h.

87-93 Health & Physical Education

(Change)

799. Health Promotion in the Community Setting.

The application of the fundamental techniques of planning specific programs in the workplace, hospital, or community settings. Two hours lecture, two hours lab. Prereq: HPE 792.

3 q.h.

87-94 Health & Physical Education (Change)

891. Community Health Internship.

Supervised experience designed to provide an opportunity to plan, implement and evaluate a program in an approved community health setting. Approximately 35 hours per week. Prereq: Completion of all required health education courses in the Bachelor of Arts degree program.

12 q.h.

87-95 Health & Physical Education (Change)

892. The Teaching of Controversial Topics in Health Education.

To prepare educators to teach in such areas as human sexuality, alcohol, drugs, and values. Two hours lecture and two hours lab. Prereq: Any educational methods course or HPE 792.

3 q.h.

87-96 Allied Health (Change)

502. Medical Laboratory Methodology I.

Theory and techniques in the chemical analysis of urine. Prereq: Biol. 506, 507, and MLT 501. Taken concurrently with MLT 502L.

2 q.h.

87-97 Allied Health (Change)

502L. Medical Laboratory Methodology I Lab.

Chemical and microscopic examination of urine with emphasis on formed elements and abnormal substances. Three hours of laboratory a week. Taken concurrently with MLT 502.

1 q.h.

87-98 Allied Health (Add)

503. Medical Laboratory Methodology II.

The fundamental theories and techniques of immunohematology. Prereq: Biol. 506, 507 and MLT 501. Taken concurrently with MLT 503L.

2 q.h.

87-99 Allied Health (Add)

503L. Medical Laboratory Methodology II Lab.

ABO and Rh typing, antibody screening and compatibility testing. Three hours of laboratory per week. Taken concurrently with MLT 503.

1 q.h.

87-100 Allied Health (Change)

601. Medical Laboratory Methodology III.

Theoretical and practical knowledge related to chemistry in the medical laboratory, with emphasis on quality control and instrumentation. Prereq: Chem. 517 and MLT 502 and 503. Must be taken concurrently with 601L.

3 q.h.

87-101 Allied Health (change)

601L. Medical Laboratory Methodology III Laboratory.

Test procedures include titrimetric, colorimetric and spectrophotometric methods and various automated equipment to perform glucose, bilirubins, and electrolytes. Three hours of laboratory per week. Taken concurrently with MLT 601.

1 q.h.

87-102 Allied Health (Add)

602. Medical Laboratory Techniques.

The study of various human body fluids, including composition, normal and abnormal states and relevance in diagnosis of disease. Prereq: Chem. 517, Biol. 508 and MLT 601.

2 q.h.

87-103 Allied Health (Change)

705L. Clinical Laboratory.

Twenty one hours per week of practical application of skills learned in previous courses under the constant supervision of a medical technologist. The laboratory to be taken concurrently with MLT 706. Prereq: Successful completion of the previous six quarters of MLT courses.

7 q.h.

87-104 Engineering Technology (Change)

613. Electronic & Elect. CAD.

The basic principles and drafting techniques used to design and represent electrical building systems and electronic systems. Layout of PC boards including integrated circuits. Application of techniques on a computer aided drafting installation. Two hours lecture; four hours lab per week. Prereq: ME 500 or equivalent or consent of instructor.

4 q.h.

87-105 Nursing (Delete)

700. Maintaining Homeostasis.

In-depth view of selected major health problems, with implications for nursing assessment; analysis of the aging process. Prereq: Registered nurses only.

4 q.h.

87-106 Nursing (Delete)

701. Advanced Nursing Process I.

Expanded treatment of the nursing process with emphasis on assessment and nursing diagnosis with individuals experiencing maximum health at various stages of the life cycle. Beginning understanding nursing research. Leadership - emerging roles identified. Prereq: For registered nurses only, upon satisfactory completion of validation tests. To be taken concurrently with Nursing 701L.

6 q.h.

87-107 Nursing

(Delete)

701L. Advanced Nursing Process I Laboratory.

Selected clinical experiences provide an opportunity for application of the nursing process to healthy individuals at various stages of the life cycle. Six hours of laboratory per week. To be taken concurrently with Nursing 701.

2 q.h.

87-108 Nursing

(Delete)

702. Advanced Nursing Process II.

Expanded treatment of the nursing process continued with emphasis on planning, implementing, and evaluating with individuals experiencing maximum health at various stages of the life cycle. Understanding of nursing research is continued. Coordination role in nursing leadership explored. Prereq: Nursing 701 and 701L. To be taken concurrently with 702L.

6 q.h.

87-109 Nursing

(Delete)

702L. Advanced Nursing Process II Laboratory.

Selected clinical experiences provide an opportunity for application of the nursing process to healthy individuals at various stages of the life cycle (a continuation of nursing 701L). Six hours of laboratory per week. To be taken concurrently with Nursing 702.

2 q.h.

87-110 Nursing

(Delete)

703. Advanced Nursing I.

Utilization of the nursing process with individuals/families experiencing acutely diminished health at various stages of the life cycle. Healthy family functioning explored. Collaborative role in nursing leadership explored. Prereq: Nursing 702 and 702L. To be taken concurrently with Nursing 703L.

5 q.h.

87-111 Nursing

(Delete)

703L. Advanced Nursing I Laboratory.

Selected clinical experiences provide an opportunity for application of the nursing process to individuals/families experiencing acutely diminished health at various stages of the life cycle. Collaborative nursing role applied. Six hours of laboratory per week. To be taken concurrently with Nursing 703.

2 q.h.

87-112 Nursing (Delete)
704. Nursing and the Social Order.
Current trends, issues, and problems in professional nursing practice are considered within a historical perspective. Includes introduction to the emerging nursing roles. Prereq: Registered nurses only.
4 q.h.

87-113 Nursing (Delete)
808. Advanced Nursing II.
Utilization of the nursing process with individuals/families experiencing chronically diminished health at various stages of the life cycle. Dysfunctional family explored. Continued study of collaborative nursing leadership role. Prereq: Nursing 703 and 703L. To be taken concurrently with 808L. (F)
5 q.h.

87-114 Nursing (Delete)
808L. Advanced Nursing II Laboratory.
Selected clinical experiences provide an opportunity for application of the nursing process to individuals/families experiencing chronically diminished health at various stages of the life cycle. Collaborative nursing role applied. Six hours of laboratory per week. To be taken concurrently with Nursing 808. (F)
2 q.h.

87-115 Nursing (Delete)
809. Advanced Nursing III.
Utilization of the nursing process with individuals/families experiencing depleted health at various stages of the life cycle. Appropriate nursing research explored. Group dynamics and process explored. Consultant role in nursing leadership examined. Prereq: Nursing 808 and 808L. To be taken concurrently with Nursing 809L. (W)
6 q.h.

87-116 Nursing (Delete)
809L. Advanced Nursing III Laboratory.
Selected clinical experiences provide an opportunity for application of the nursing process to individuals/families experiencing depleted health at various stages of the life cycle; includes a group of clients. Consultant nursing role applied. Research findings utilized. Six hours of laboratory per week. To be taken concurrently with Nursing 809. (W)
2 q.h.

- 87-117 Nursing (Delete)
 810. Advanced Nursing IV.
 Utilization of the nursing process with the community. Appropriate research applied. Change agent, client advocate and facilitator nursing roles explored. Prereq: Nursing 809 and 809L. To be taken concurrently with Nursing 810L. (S)
 6 q.h.
- 87-118 Nursing (Delete)
 810L. Advanced Nursing IV Laboratory.
 Selected clinical experiences provide an opportunity for application of the nursing process to the health care needs of a community. Leadership roles of facilitator, change agent, and patient advocate applied. Existing research findings utilized. Six hours of laboratory per week. To be taken concurrently with Nursing 810. (S)
 2 q.h.
- 87-119 Nursing (Delete)
 812. Nursing Research Seminar.
 Research strategies and methodologies are explored through the identification and development of a researchable problem. Prereq: Nursing 809 and 809L. (or permit). (S)
 3 q.h.
- 87-120 Home Economics (Change)
 759L. Normal Nutrition II Laboratory.
 Selected clinical experiences providing opportunities for developing an understanding and working knowledge of the nutritional care process with focus on problems encountered in normal nutrition. Three hours of laboratory and one hour of lecture per week. Taken concurrently with HE 759.
 2 q.h.
- 87-121 Home Economics (Change)
 760L. Clinical Nutrition Laboratory.
 Selected clinical experiences providing opportunities for application of the nutritional care process to individuals exhibiting special nutritional needs. Six hours of laboratory per week. Taken concurrently with HE 760.
 2 q.h.
- 87-122 Home Economics (Change)
 801. Nutrition in Clinical Care.
 Interdisciplinary activities in applied nutrition are incorporated into the clinical preparation of students in medicine, nursing, dietetics, and other allied health professions. Two hours of lecture and four hours of laboratory per week. Prereq: Junior standing and enrollment in Dietetics, Medicine, Nursing or other Allied Health program.
 4 q.h.

87-123 Home Economics

(Change)

810. Experimental Foods.

Advanced study of food science as well as the application of scientific principles and experimental procedures to cooking processes. Three hours of lecture and three hours laboratory per week. Prereq: Chem. 503, HE 601, and a minimum of 20 hours of Home Economics credit.

4 q.h.

87-124 Home Economics

(Change)

858L. Food Service Systems Management Laboratory.

Selected clinical experiences providing application of the management process to the institutional food service system. Thirty hours of clinical experience and one hour of lecture per week. Taken concurrently with HE 858.

7 q.h.

87-125 Home Economics

(Change)

862. Cultural Foods.

Food practices of selected world cultures. Evaluation of these practices in meeting dietary needs with consideration of the existing social, economic and environmental conditions. Prereq: Anthr. 602.

3 q.h.

87-126 Home Economics

(Add)

862L. Cultural Foods Laboratory.

Must be taken concurrently with HE 862. Three hours laboratory weekly.

1 q.h.

87-127 Home Economics

(Change)

872L. Maternal and Child Nutrition Laboratory.

Selected clinical experiences providing opportunities for application of nutritional care process to the maternal and child population. Five hours of clinical experience and one hour of lecture per week. Taken concurrently with HE 872.

2 q.h.

87-128 Home Economics

(Change)

874L. Community Nutrition Laboratory.

Selected clinical experiences providing opportunities for application of the nutritional care process to individuals in the community setting. Five hours of clinical experience and one hour of lecture per week. Taken concurrently with HE 874.

2 q.h.

87-129 Home Economics

(Change)

763. Technology in the Home.

Household equipment in residential design; includes planning of kitchen, laundry and home computer centers. Three hours of lecture and two hours of laboratory per week. Prereq: HE 550 or Art 502 or HE/Mktg 525.

4 q.h.

87-130 Home Economics

(Change)

764. Family Housing.

Planning the home environment to meet family needs and resources; consumer decisions in selection of residences, floor plans, color schemes and furnishings. Three hours of lecture and two hours of laboratory per week. Prereq: Psych 560 and Art 502.

4 q.h.

87-131 Home Economics

(Change)

780. Consumer Economics.

Managing the family's economic resources through use of the decision-making process. Current consumer issues and sources of information for consumers. Prereq: Econ. 520 or Econ. 510.

4 q.h.

87-132 Home Economics

(Change)

853. Family Management Experience.

Participation, observation and consultation in consumer and homemaking activities of families. One hour seminar and four or more hours of field experience per week (4 hours experience per week equals one credit hour). Prereq: HE 618 and 852.

2-6 q.h.

87-133 Allied Health

(Change)

611L. Clinical Procedures Lab.

Techniques of patient interviewing and history taking, performance of patient assessment, application of principles of body mechanics and instructions for examinations and diagnostic procedures. Three hour lab. Prereq: MA 501 and 502.

1 q.h.

87-134 Allied Health

(Change)

620. Advanced Clinical Procedures.

Orientation to minor surgical and specialized examination techniques, physical examinations, preparation and administration of medication, performing electrocardiograms, application of physical therapy, and x-ray techniques including maintaining medical supplies and inventory. Prereq: MA 610, 611L, Bio. 552 and concurrently with MA 620L.

3 q.h.

87-135 Allied Health (Change)
680. Laboratory Procedures for the Medical Office.
An introduction to diagnostic laboratory procedures performed in the physician's office. Principles and techniques of laboratory procedures are studied. Prereq: MA 610 and 611L and Bio. 560 or taken concurrently.

2 q.h.

87-136 Allied Health (Delete)
502. Emergency Medical Technology Orientation.
Introduction to the duties, legal and ethical responsibilities, and job opportunities for emergency medical technicians. Emphasis is on the individual's relationship with the patient, community, and co-workers.

4 q.h.

87-137 Allied Health (Delete)
510. Emergency Medical Conditions I.
A study of the most common medical emergencies normally encountered with emphasis on pathophysiology and etiology.

4 q.h.

87-138 Allied Health (Delete)
511. Emergency Medical Techniques I.
A study of techniques necessary to treat emergency conditions introduced in EMT 510.

3 q.h.

87-139 Allied Health (Delete)
511L. Emergency Medical Techniques Laboratory I.
Laboratory includes simulated emergency situations and an actual hospital setting with ambulance service. Three hour laboratory. Four hour clinical. Must be taken concurrently with EMT 511.

2 q.h.

87-140 Allied Health (Delete)
512 and 512L. Rescue Squad Experience and Laboratory.
Clinical experience with an approved paramedic squad under supervision of trained EMT personnel. Two hours of lecture, five hours of clinic a week.

3 q.h.

- 87-141 Allied Health (Delete)
 520. Emergency Medical Conditions II.
 Intense emergency coronary and respiratory care, including artery disease, myocardial infarction, angina pectoris, congestive heart failure, and pulmonary dysfunction, and their pathophysiology and symptomology. Four hours of lecture a week. Prereq: EMT 510.
 To be taken concurrently with EMT 521.
 4 q.h.
- 87-142 Allied Health (Delete)
 521. Emergency Medical Techniques II.
 Techniques for treating coronary and respiratory emergencies. To be taken concurrently with EMT 521L.
 3 q.h.
- 87-143 Allied Health (Delete)
 521L. Emergency Medical Techniques Laboratory II.
 Simulated coronary and respiratory emergency situations: Three-hour laboratory, four-hour clinic.
 2 q.h.
- 87-144 Allied Health (Delete)
 523. Communication Systems and Defensive Driving.
 Regulations, limitations, and maintenance of communication systems; principles of defensive driving, particularly for ambulance operation under emergency conditions.
 2 q.h.
- 87-145 Allied Health (Delete)
 523L. Communication Systems and Defensive Driving Laboratory.
 Practice in utilization of various communication systems and demonstration of defensive techniques in emergency vehicles. Three hours of laboratory a week.
 1 q.h.
- 87-146 Allied Health (Delete)
 600. Emergency Vehicle Experience.
 Practical experience with an emergency vehicle squad to observe and perform emergency duties under supervision. Prereq: EMT 520. Sixteen clinical hours and one hour seminar a week.
 4 q.h.

87-147 Allied Health

(Delete)

615. Emergency Medical Conditions III.

A study of pediatric, psychiatric, and obstetrical medical and surgical emergencies, focused on the pathophysiology, symptomatology, and treatment of problems unique to these special-care areas. Prereq: EMT 520 and 521L. To be taken concurrently with EMT 615L.

3 q.h.

87-148 Allied Health

(Delete)

615L. Emergency Medical Conditions III Laboratory.

Practical experience in pediatric, psychiatric, and obstetrical medical and surgical emergencies. Five hour clinic. Prereq: EMT 520 and 521. To be taken concurrently with EMT 615.

1 q.h.

87-149 Allied Health

(Add)

506. Principles of Trauma.

Study of traumatic emergencies normally encountered with emphasis on pathophysiology, etiology, and symptomatology. Prereq: Admission to EMT Program or permission of instructor.

4 q.h.

87-150 Allied Health

(Add)

507. Emergency Medical Techniques I.

Study of techniques necessary to treat the traumatic emergency conditions introduced in EMT 506. Must be taken concurrently with EMT 506 and 507L.

2 q.h.

87-151 Allied Health

(Add)

507L. Emergency Medical Techniques I Lab.

Laboratory includes simulated emergency traumatic situations and actual patient contact emphasizing physical assessment, patient interviewing, and management techniques. Six hours of combined departmental and clinical laboratory per week. Must be taken concurrently with EMT 506 and 507.

2 q.h.

87-152 Allied Health

(Add)

509. Introduction to Emergency Medical Technology.

Introduction to the roles, responsibilities, EMS Systems, medical and legal considerations of the EMS profession. Prereq: Admission to EMT Program or permission of instructor.

2 q.h.

87-153 Allied Health (Add)

515. Medical Conditions and Management Techniques.

Study of pathophysiology, symptomatology, etiology, and management techniques of commonly encountered medical emergencies. Prereq: EMT 506 and 507. Concurrent with EMT 515L.

4 q.h.

87-154 Allied Health (Add)

515L. Emergency Medical Techniques II Lab.

Simulated situations and actual patient contact emphasizing performance of emergency medical techniques utilized to manage common medical emergencies. Nine hours of combined departmental and clinical hours per week. Must be taken concurrently with EMT 515.

3 q.h.

87-155 Allied Health (Add)

522. Cardiovascular Emergencies.

Intense study of the pathophysiology and symptomatology of cardiovascular conditions including vascular disease, myocardial infarction, angina pectoris, congestive heart failure, and congenital myocardial problems. Also includes electrophysiology and EKG interpretation. Prereq: EMT 515 or Admission to EMT Program or permission of instructor.

4 q.h.

87-156 Allied Health (Add)

524. Emergency Cardiovascular Techniques.

Pharmacologic therapy and mechanical techniques utilized to manage the cardiovascular emergencies discussed in EMT 522. Prereq: Admission to EMT Program or permission of instructor. Must be taken concurrently with EMT 522, 525 and 526L

4 q.h.

87-157 Allied Health (Add)

525. Pulmonary Emergencies.

Study of pathophysiology, symptomatology and treatment techniques of respiratory conditions and emergencies. Prereq: Admission to EMT Program or permission of instructor. Concurrent with EMT 524 and 526L.

2 q.h.

87-158 Allied Health (Add)

526L. Cardiovascular/Pulmonary Techniques Lab.

Performance of fundamental techniques employed in the management of the cardiovascular and/or respiratory emergency. Three hours of laboratory a week. Must be taken concurrently with EMT 524, 525, and 527.

1 q.h.

- 87-159 Allied Health (Add)
527. Clinical Experience I.
Hospital clinical experience to include practical management of the airway, endotracheal intubation, physical assessment and patient interviewing in critical care situations. Eight hours of clinical a week. Must be taken concurrently with EMT 526L.
2 q.h.
- 87-160 Allied Health (Add)
528. ALS Field Internship I.
Clinical experience with an approved advanced life support unit under the direct supervision of a selected paramedic field preceptor. Ten hours of clinic a week. Prereq: EMT 515 and 515L.
2 q.h.
- 87-161 Allied Health (Add)
530. Emergency Rescue Techniques.
Introduction to common rescue tools and techniques utilized in basic victim disentanglement and extrication. Prereq: Admission to EMT Program or permission of instructor.
2 q.h.
- 87-162 Allied Health (Add)
605. Emergency Medical Special Topics.
Examination of obstetrical/gynecological, pediatric, neonatal, geriatric, and psychiatric emergencies to include pathophysiology, symptomatology, and management techniques. Prereq: EMT 522, 524, and 525 or permission of instructor. Concurrent with EMT 605L.
4 q.h.
- 87-163 Allied Health (Add)
605L. Emergency Medical Special Topics Lab.
Techniques necessary to effectively manage conditions in EMT 605. Three hours of laboratory a week. Must be taken concurrently with EMT 605.
1 q.h.
- 87-164 Allied Health (Add)
606. Clinical Experience II.
Practical experience in obstetric/gynecologic, pediatric, neonatal, and psychiatric emergencies. Eight hours of clinical a week. Must be taken concurrently with EMT 605.
2 q.h.

87-165 Allied Health

(Add)

608. ALS Field Internship II.

Performance of advanced life support procedures in the pre-hospital setting under the direct supervision of a selected paramedic field preceptor. Prereq: EMT 528. Twenty hours of clinical a week.

4 q.h.

87-166 Allied Health

(Add)

610L. Cardiopulmonary Diagnostics Lab.

Theory and practice in setting up and evaluating EKGs. Basic and advanced dysrhythmia identification and recommended pharmaceutical interventions will also be discussed. Experience with 12 lead EKGs, telemetry, and hardware monitoring equipment is included. Three hours laboratory. Prereq: RT 606 or permission of instructor.

1 q.h.

87-167 Chemical Engineering

(Delete)

884. Process and Plant Design I.

Engineering economic analysis. Cost estimation. Profitability. Optimum design. Materials and site selections. General and specialized design techniques. Prereq: Senior standing in Chemical or Metallurgical Engineering.

4 q.h.

87-168 Chemical Engineering

(Add)

887. Process and Plant Design I.

An examination of engineering economic analysis to include: cost estimation, profitability, optimum design, principles of fixed and operating costs, materials and site selection, and general and specialized design techniques. Prereq: Senior standing in Engineering.

4 q.h.

87-169 Chemical Engineering

(Add)

888. Process and Plant Design II.

The application of chemical engineering and cost principles to the component design and selection of process equipment. Prereq: ChE 788, 880, and 887.

4 q.h.

87-170 Chemical Engineering

(Delete)

885. Process and Plant Design II.

The application of chemical engineering and cost principles to the design of chemical plants and processes. Societal, aesthetic and environmental considerations. Prereq: ChE 884.

4 q.h.

87-171 Chemical Engineering (Add)
889. Process and Plant Design III.
The application of chemical engineering and cost principles to the design of chemical plants and processes including societal aesthetic, environmental, and safety considerations. Prereq: ChE 888.
4 q.h.

87-172 Chemical Engineering (Add)
821. Fundamentals of Polymer Science.
Survey of polymerization, its mechanisms, structure-property relationships, transport properties, and flammability of polymers, as well as related plasticizers and solvents. Prereq: ChE 721 or Chem 824.
3 q.h.

87-173 Civil Engineering (Change)
837. Environmental Engineering II.
A study of the elements of water purification systems and sewage treatment plants. The course includes an actual design of a treatment plant. Three hours lecture and three hours laboratory per week. Prereq: CE 836 and an unrecalculated GPA of 2.0 or better for all CE (major) courses.
4 q.h.

87-174 Civil Engineering (Change)
716. Fluid Mechanics.
A study of the laws of fluid mechanics and their application as applied to incompressible flow; properties of fluids; fluid statics; kinematics and kinetics of one dimensional flow; impulse-momentum; and viscous flow in pipes. Prereq: CE 602.
3 q.h.

87-175 Electrical Engineering (Change)
704. Electromagnetic Fields I.
The study of Coulomb's law and electric field intensity, electric flux density, Gauss' Law and divergence, energy and potential, conductors, dielectrics and capacitance, the steady magnetic field. Must be taken concurrently with EE 704L. Prereq: EE 603, 613, Physics 611, 611L, CE 601, ME 501, and IE 642. Prereq or concurrent with Math 706.
3 q.h.

87-176 Electrical Engineering (Change)
705. Electromagnetic Fields II.
The study of Poisson's and Laplace's equations, magnetic forces, magnetic materials, inductance, time-varying electric and magnetic fields and Maxwell's equations. Must be taken concurrently with EE 705L. Prereq: EE 704 and 704L.
3 q.h.

- 87-177 Electrical Engineering (Change)
 706. Transmission and Microwave Principles.
 The uniform plane wave, transmission lines, waveguides and resonators, antennas and radiation. Must be taken concurrently with EE 706L.
 Prereq: EE 705 and 705L.
 3 q.h.
- 87-178 Electrical Engineering (Change)
 704L. Electromagnetic Fields Laboratory I.
 Laboratory experiments and exercises to demonstrate and verify theories by a variety of methods including graphical and numerical methods using digital computation. Three hours of lab per week. Must be taken concurrently with EE 704.
 1 q.h.
- 87-179 Electrical Engineering (Change)
 705L. Electromagnetic Fields Laboratory II.
 Laboratory experiments and exercises to demonstrate and verify theories by a variety of methods including numerical methods with an emphasis on finite element analysis using digital computation. Three hours of lab per week. Must be taken concurrently with EE 705.
 1 q.h.
- 87-180 Electrical Engineering (Change)
 706L. Transmission and Microwave Principles Laboratory.
 Waveguide/transmission-line experiments and exercises to demonstrate and verify theories by a variety of methods including numerical methods with an emphasis on finite element analysis using digital computation. Research project and presentation. Three hours of lab per week. Must be taken concurrently with EE 706.
 1 q.h.
- 87-181 Electrical Engineering (Delete)
 815R. Energy Radiation and Propagation.
 Dipole, loop, aperture, reflector, lens, surface wave, and other antennas; array theory; radiation resistance, directivity, and input impedance traveling wave antennas. Prereq: EE 706.
 4 q.h.
- 87-182 Electrical Engineering (Add)
 860. Energy Radiation and Propagation.
 Examination of dipole, loop aperture, reflector, lens, surface wave, traveling wave, and other antennas; array theory; radiation resistance, directivity, and input impedance. Investigation of theoretical and practical applications of fiber optics. Prereq: EE 706.
 4 q.h.

87-184 Industrial Engineering

(Change)

710. Production Planning and Control.

The fundamentals and techniques required in the design of production control systems, to include forecasting techniques, aggregate planning, material requirement planning, scheduling and machine assignment and inventory and process control. Prereq: IE 620.

4 q.h.

87-186 Industrial Engineering

(Change)

825. Advanced Engineering Economy.

An extension of the topics in engineering economy. Analysis of rationale and norm of decision making, risk and uncertainty models, utility theory, measurement of productivity; and advanced project comparison methods. Prereq: IE 724.

4 q.h.

87-187 Industrial Engineering

(Add)

830. Human Factors Engineering.

Various aspects of human factors in the design of man-machine systems and environments. Study of human sensory, perceptual, mental, psychomotor, and other characteristics; techniques of measuring human capabilities, limitations, safety, comfort, and productivity. Prereq: IE 620.

4 q.h.

87-188 Industrial Engineering

(Add)

840. Reliability Engineering.

Introduction to reliability as a probabilistic concept, including: measurement, control, maintenance, repair and replacement, and life testing. Prereq: Math 705.

4 q.h.

87-189 Industrial Engineering

(Change)

851. Linear Programming.

Formulation and solution of engineering problems using linear programming. Model formulation, the primal, dual and transportation simplex methods, duality theory, and sensitivity analysis. Prereq: Math 674 and senior standing.

4 q.h.

87-190 Industrial Engineering

(Add)

870. Robotics.

Introduction to robotics including: manipulator kinematics, robot dynamics and programming, sensors and machine vision, machine intelligence and robot planning. Prereq: Math 705.

4 q.h.

87-191 and 193 Materials Engineering (Delete)
620, 621. Chemical Principles of Materials Science I, II.
Discussion of the application of physiochemical principles to
mettallurgical or materials problems. Prereq: Chem. 515 or consent
of instuctor.

3+3 q.h.

87-192 and 194 Materials Engineering (Delete)
620L, 621L. Chemical Principles Materials Science Lab.
Laboratory experiments to illustrate the theoretical concepts dis-
cussed in MetE 620 and 621, respectively or concurrent.

1+1 q.h.

87-195 Materials Engineering (Delete)
650R. Atomic and Molecular Structure of Materials.
Discussion of the atomic structure and molecular structures of
materials with particular emphasis on the energy levels and material
properties. Nuclear materials and alloy structures and their atomic
structure changes in the alloy state. Prereq: Chem. 515, Math 673,
or consent of instructor.

4 q.h.

87-196 Materials Engineering
840. Modern Research Techniques.
The aim of this course is to familiarize the students with the "tools"
of experimental metallurgy. Prereq: MetE 793.

1 q.h.

87-197 Materials Engineering (Delete)
890. Metallurgy and Materials Colloquium.
Review of current metallurgical and materials research papers. Prereq:
Consent of instructor. (May be repeated up to a maximum of 4 q.h.)

1 q.h.

87-198 Materials Engineering (Change)
730, 731, 732. Metallography, Heat Treatment, & Pyrometry I, II, III.
Laboratory experiments to determine the effects of heat treatment on
structure, physical, and mechanical properties of ferrous and non-
ferrous alloys. One hour lecture and six hours lab in each course.
Prereq: MetE 603.

3+3+3 q.h.

87-199 Materials Engineering (Delete)
863. Thermodynamics of Materials I.
Principles of thermodynamics and their applications to materials,
metallurgical systems, processes, and alloys. Prereq: ChE 771 or
consent of instructor.

3 q.h.

87-200 Materials Engineering (Add)
763. Thermodynamics of Materials I.
Principles of thermodynamics and their applications to materials, metallurgical systems, processes, and alloys. Prereq: Math 674 and ChE 771.
3 q.h.

87-201 Mechanical Engineering (Change)
500. Drawing Fundamentals.
Introduction to drafting instruments, blueprint reading, freehand sketching, orthographic projection, auxiliary and sectional views, conventions, pictorial drawing, and dimensioning. Intended for students who have not had at least one year of high school drawing or the equivalent in drafting experience. Not available for credit toward the Bachelor of Engineering degree. Six hours combined lecture and laboratory each week.
4 q.h.

87-202 Mechanical Engineering (Change)
501. Engineering Drawing.
Applications of orthographic projection, auxiliary and sectional views, pictorial drawing: fasteners, dimensioning: tolerances; detail and assembly drawings. Introduction to computer graphics utilizing commercially available software. Two hours lecture and three hours laboratory per week. Prereq: ME 500 or equivalent.
3 q.h.

87-205 Mathematical & Computer Sciences (Add)
875. Computer Assisted Instruction (CAI).
Introduction to CAI components: questioning episodes, formal answer processing, types of responses, types of trials, analysis of algorithms, and a description of authoring languages. Prereq: CS 705 or permission of instructor.
4 q.h.

87-206 Biology (Add)
840. Pathogenic Bacteriology.
Biology, epidemiology and pathology of the medically important bacteria. Two hours lecture and four hours laboratory per week. Prereq: Biol. 702.
4 q.h.

87-207 Physics & Astronomy (Delete)
706. Electronics Laboratory.
The course is designed to promote a working familiarity with electronic devices and circuits. Analysis of circuits is emphasized rather than their design. Course material includes amplifiers, oscillators, pulse and digital circuits and measurement circuits. One hour lecture and six hours of laboratory a week. Prereq: junior standing in Physics Department or consent of instructor.
4 q.h.

87-208 Physics & Astronomy

(Change)

805. Undergraduate Physics Research.

Research conducted under the direction of a faculty member. May be repeated to a maximum of 6 q.h. Prereq: Physics 702, 705, 730 and senior standing.

2 q.h.

87-183 Electrical Engineering

(Change)

844L & 845L. Electromagnetic Energy Conversion Laboratory I & II.

Required experimental work designed to accompany the corresponding lecture courses. In addition to experiments for EE 844L: Research project and presentation. Must be taken concurrently with EE 844, 845 respectively. Three hours of lab each week.

1+1 q.h.

87-203 Mathematical & Computer Sciences

(Add)

885. Evaluation of Educational Software and Hardware I.

A critical analysis of educational software in various academic disciplines and grade levels. The use of evaluative forms and the study of existing review criteria. Analysis and evaluation of hardware alternatives, peripheral devices, networking, and hardware expansions in an educational setting. Prereq: CS 705 or consent of instructor.

5 q.h.

87-204 Mathematical & Computer Sciences

(Add)

886. Evaluation of Educational Software and Hardware II.

A continuation of the analysis and evaluation of educational software and hardware begun in CS 885. The emphasis in this course will be on equipment used in grades K-6. Prereq: CS 885.

4 q.h.

87-209 Art

(Change)

550. Computer Graphics for the Artist.

To provide a fundamental understanding of microcomputer hardware and software in a two-dimensional design context. Students will be expected to operate a computer and its peripheral devices to generate visual images. Eight hours lab per week. Prereq: Art 503

4 q.h.

87-210 Art

(Change)

600. Theory of Art.

The theories and philosophical implications of form in the visual arts, with emphasis on contemporary thought. Prereq: Art 513 or 514.

3 q.h.

87-211 Art (Change)
601. Drawing II.
Continuation of Drawing 501, with greater emphasis on the expressive use of the basic elements of drawing and the role they play in composition. Six hours lab per week. Prereq: Art 501 and 502.
3 q.h.

87-212 Art (Change)
602. Drawing Techniques.
An exploration of the expressive and organizational functions of the elements of drawing through varied media and techniques. Six hours lab per week. Prereq: Art 503.
3 q.h.

87-213 Art (Change)
623. Graphic Design I.
Introduction to art in advertising, such as trademarks, symbols, letterheads, logotypes, posters, billboards, magazine ads, packaging, illustrations, and television commercials. Creative thinking emphasized along with techniques and media necessary for producing ideas visually. One hour of lecture; five hours of lab per week. The student is advised to take Art 611. Prereq: Art 503.
3 q.h.

87-214 Art (Change)
716, 717. Interior Design I & II.
Study of furnishings, new designs, and textiles. Application of these and experiences from Art 503 to rooms and other interiors. Six hours of lab per week. Prereq: Art 503. Art 716 is Prerequisite to Art 717.
3+3 q.h.

87-215 Art (Delete)
720. Etching/Engraving.
Concentrated experiments with metal printmaking techniques. Eight hours of lab. Prereq: Art 501.
4 q.h.

87-216 Art (Change)
725. Ceramics I.
Introduction to handbuilding methods, low-fire glaze application, pit-firing, and firing procedures. Six hours of lab per week. Prereq: Art 504, 601.
3 q.h.

- 87-217 Art (Change)
 730. Sculpture I.
 Problems dealing with form in space. Experiments with wood, plaster, or stone techniques. Eight hours of lab per week. Prereq: Art 504.
 4 q.h.
- 87-218 Art (Change)
 731. Sculpture II.
 Problems dealing with form in space. Experiments with metal techniques. Ten hours of lab per week. Prereq: Art 730.
 5 q.h.
- 87-219 Art (Add)
 734. Woodblock & Mono Printing II.
 Continued experimentation with relief and monotype printmaking techniques. Eight hours of lab per week. Prereq: Art 611.
 4 q.h.
- 87-220 Art (Add)
 735. Silk Screen II.
 Continues experimentation using various silk screen techniques. Eight hours of lab per week. Prereq: Art 612.
 4 q.h.
- 87-221 Art (Delete)
 750, 751. Architectural Design I, II.
 Basic drafting-room practice; conventional representation, geometric construction, orthographic and oblique projection, sectioning, isometric drawing, and house plans. For the prospective art teacher. Not accepted for credit toward the Bachelor of Engineering degree. Six hours of lab.
 3+3 q.h.
- 87-222 Art (Change)
 770. Jewelry I.
 The basic methods of fabrication used in the creation of jewelry. Design as applied to the hand processes in the shaping of various metals. Eight hours of lab per week. Prereq: Art 504.
 4 q.h.
- 87-223 Art (Change)
 771. Jewelry II.
 The casting process used in the creation of jewelry. Eight hours of lab per week. Prereq: Art 504.
 4 q.h.

- 87-224 Art (Change)
 790. Special Topics in Studio Art.
 Study in one of the many areas of the visual arts. May be taken three times for credit if topic is not repeated. Prereq: Art 503 and/or 504, or consent of instructor.
 2-4 q.h.
- 87-225 Art (Change)
 870. Advanced Printmaking.
 Advanced methods in a selected printmaking discipline. Methods in a selected printmaking discipline. May be repeated for a maximum of eight hours of credit. Eight hours of lab per week. Prereq: Art 734 or 735 or Art 821 or 824.
 1-8 q.h.
- 87-226 Electrical Engineering (Change)
 714. Circuits and Electronics.
 Basic circuit elements and laws: DC and AC circuit analysis, operational amplifiers, sinusoidal analysis, circuit and system concepts. Electronics: diodes, transistors, amplifiers, electronic circuits and applications. Prereq. or concur. Math 674.
 4 q.h.
- 87-227 Electrical Engineering (Change)
 715. Electrical Devices.
 Digital devices and applications: digital logic, devices, circuits, and systems. Electromagnetic devices: magnetics, transformers, circuit models. Electromechanical devices: transducers, generators, and motors. Prereq: EE 714.
 4 q.h.
- 87-228 Political Science and Social Science (Add)
 510. Introduction to Social Science I.
 An approach to the study of human society by integrating the general viewpoints of the various social science disciplines, focusing on the nature of culture and society as well as the basic institutions and processes which form the bases for social interaction.
 4 q.h.
- 87-229 Political Science and Social Science (Add)
 511. Introduction to Social Science II.
 A continuation of Social Science I with a focus on the political and economic subsystems of society as they have developed and are continued by the culture and society of which they are an integral part. Prereq: Social Science 510.
 4 q.h.

87-230 Political Science and Social Science (Delete)

501. Introduction to the Social Sciences.

A scientific approach to the study of human individual and group behavior. The object is to familiarize the student with the contemporary approach to the various social studies, emphasizing anthropology, psychology, and sociology; to develop critical and analytical skills useful in philosophy; and to accumulate valid knowledge in other fields. (For certification and transfer purposes, this is regarded as a course in Introductory Sociology.)

3 q.h.

87-231 Political Science and Social Science (Delete)

502. Introduction to Economics.

A continuation of Social Science 501, with emphasis on the allocation of economics resources in response to human needs and wants, and on the institutions through which such allocation is made. (For certification and transfer purposes Social Science 502 is regarded as a course in Introductory Economics.) Prereq: Social Science 501.

3 q.h.

87-232 Political Science and Social Science (Delete)

503. Introduction to Political Science.

A continuation of Social Science 502, with emphasis on the application of elementary principles of political science. Attention is given the problems of regulating and controlling human behavior, social control functions of formal and informal groups, and control exerted on the international level by government institutions. (For certification and transfer purposes Social Science 503 is regarded as a course in Introductory Political Science.) Prereq: Social Science 501.

3 q.h.

87-233 Geology (Change)

506. Introduction to Historical Geology.

A chronological overview of the physical development of the earth and the history of its life forms as evidenced by the rock and fossil record. Contemporary understanding of topics such as dinosaur extinction, origin of ancient glaciations, and plate tectonics are introduced where appropriate.

4 q.h.

87-234 Geology (Change)

607. Geology Laboratory.

Identification of minerals, rocks, and fossils, and the use of topographic and geologic maps plus outside work on geologic techniques. Four hours of laboratory and two hours of lecture a week. Prereq. or concur.: Geol. 505 and 506.

4 q.h.

87-235 Mathematical & Computer Sciences (Change)

512. Intermediate Algebra.

Relations and functions with emphasis on graphing by algebraic techniques; exponential and logarithmic functions with graphs and applications; selected topics. Prereq: One unit of high school algebra or Mathematics 508 or 510 and one unit of high school geometry or Mathematics 511.

5 q.h.

87-236 Mathematical & Computer Sciences (Add)

513. Intensive Intermediate Algebra.

A faster paced version of Mathematics 512. This course is intended primarily for Engineering Technology. Credit will not be given for both Mathematics 512 and 513. Prereq: One unit of high school algebra or Mathematics 508 or 510 and one unit of high school geometry or Mathematics 511.

4 q.h.

87-237 Mathematical & Computer Sciences (Change)

760. Numerical Analysis I.

The theory and techniques of numerical computation. The solution of a single equation, interpolation methods, numerical differentiation and integration, direct methods for solving linear systems. Prereq: Mathematics 725 and Computer Science 610 or permission of instructor.

4 q.h.

87-238 Mathematical & Computer Sciences (Change)

861. Numerical Analysis II.

Numerical methods of initial-value problems, eigenvalue problems, iterative methods for linear and nonlinear systems of equations, and methods involving least squares, orthogonal polynomials, and fast Fourier transforms. Prereq: Mathematics 674 and 760 or permission of instructor.

4 q.h.

87-239 Mathematical & Computer Sciences (Change)

810. Computer Graphics.

An introduction to the algorithms of computer graphics. Topics include two and three dimensional representation techniques, clipping and windowing, hidden line and surface removal, and curve smoothing. Prereq: Computer Science 620, Mathematics 674 and 760 or permission of instructor.

4 q.h.

87-240 Mathematical & Computer Sciences (Change)

770. Survey of Programming Languages.

A survey of several programming languages. Languages surveyed may include Ada, Modula-2, C, LISP, and SNOBOL. Prereq: Computer Science 705 and 710.

4 q.h.

87-241 English (Delete)
783. Milton.
A study of Paradise Lost, Paradise Regained, Samson Agonistes,
minor poems, and selected prose. 4 q.h.

87-242 English (Add)
883. Milton.
Poetry and selected prose, with emphasis on Paradise Lost. 4 q.h.

87-243 Elementary Education and Reading (Add)
841A. Elementary Education Seminar.
A seminar intended to give student teachers a better understanding
of the basic elements of teaching, and to help develop an under-
standing of one's own role on a professional education team. Com-
pletion of the TEC requirement, senior status, and approval of the
Chairperson of the Elementary Education Department; must be taken
concurrently with Ed. 841. 1-4 q.h.

87-244 Administration and Secondary Education (Change)
800G. Special Methods.
A study of the problems involved in the teaching of different high
school subjects. Each student specializes in the subject of main
interest. Observation of teaching in secondary schools, reports,
and term paper may be required. This course is prerequisite to
ED 842, Student Teaching. Prereq: Education 702, 704, 706, 706L,
708 and 710. 3 q.h.

87-245 Elementary Education and Reading (Delete)
723. Career Education - Elementary School.
A study of philosophy and objectives of elementary career education
curriculum with emphasis on a review of the State Department Voca-
tional Education's World of Work Model Programs, Kindergarten
Through Grade Six. Students will be required to spend a portion of
class time observing the World of Work Program in a school setting.
An examination of how World of Work is integrated in social studies
education will be conducted. The development of simulation games
and individualized learning materials relevant to the World of Work
curriculum may be required. May be applied to the social studies
elementary concentration area. 3 q.h.

87-246 Counseling Department

(Change)

761. Human Relations and Guidance Skills for Teachers.

Approaches to improving the interpersonal aspects of the learning climate within the classroom. Primary focus is on the application of human relations principles. Consideration is also given to amelioration and prevention of behavior problems. Prereq: Ed. 705.

3 q.h.

87-247 Elementary Education and Reading

(Delete)

612. Reading Laboratory.

Designed for adult readers who wish to improve their reading rates, skills, comprehension, vocabulary, and study skills. Emphasis will be on the reading of technical materials and the utilization of contemporary reading machines to increase speed in reading.

3 q.h.

87-248 Elementary Education and Reading

(Add)

705K. Professional Lab Experience: Kindergarten.

Observational and participatory experiences in actual Kindergarten situation under the direct supervision of regular school teachers and administrative personnel. Students work as teacher aides in assigned schools for the equivalent of one full school day. In addition, one hour of campus conference is required weekly. Required of all candidates seeking Kindergarten validation. Course shall precede or be taken concurrently with Ed. 630, 830, 831, and/or 832.

3 q.h.

87-249 Elementary Education and Reading

(Change)

841. Supervised Student Teaching: Elementary.

Student teaching consists of a twenty week assignment in a Kindergarten, and/or Elementary and/or Middle School. May be repeated up to twenty hours. Prereq: Completion of the TEC requirement, senior status and approval of the Chairperson.

1-20 q.h.

87-250 Elementary Education and Reading

(Change)

814. Language Arts III.

An advanced course in unconventional teaching strategies with emphasis on non-textbook approaches. May include field experiences. Prereq: Ed. 812.

3 q.h.

87-251 Elementary Education and Reading

(Add)

817. Corrective Techniques in Secondary Reading.

A study of reading difficulties, administration and evaluation of reading assessment instruments. Prereq: Ed. 700.

4 q.h.

87-252 Elementary Education and Reading (Add)
818. Developmental and Content Reading in Secondary School.
Investigation of comprehension skills, study skills and areas relevant
to specific content areas. Prereq: Ed. 700.
4 q.h.

87-185 Industrial Engineering (Add)
745. Accounting for Engineers.
Fundamentals of financial and cost accounting as applied to engineering.
4 q.h.

87-253 Nursing (Change)
742. Nursing Systems III.
Nursing assistive actions and the system of nursing care are studied
as they apply to acutely ill adults. This course focuses upon health
deviation requisites as well as other therapeutic self-care requisites
within partly compensatory and educative-supportive situations. To
be taken concurrently with N742L. Prereq: N740, N741.
4 q.h.

87-254 Nursing (Change)
748. Nursing Systems IV.
Nursing assistive actions and the system of nursing care are studied
as they relate to acutely ill adults. This course focuses upon health
deviation requisites as well as other therapeutic self-care requisites
in wholly compensatory systems. To be taken concurrently with N748L.
Prereq: N742 and N743.
4 q.h.

87-255 Civil Engineering (Add)
612. Computer Methods in Civil Engineering.
Introduction to the application software packages STAAD-3, AUTOCAD,
and LOTUS 1,2,3. Computer programs using mainframe subroutines will
be developed for civil engineering applications. Use of MSDOS and
VM/SP operating systems will also be covered. Two lecture hours and
three laboratory hours per week. Prereq: IE642, CE602 or concurrent.
3 q.h.

87-256 Home Economics (Change)
635. Fashion Experience.
A practical view of the fashion industry through lecture, library
research, interviews with fashion industry professionals, and field
trips. Two hours of lecture and three hours laboratory. Prereq:
HE525, MKTG 625. Identical with MKTG 635.
3 q.h.

87-257 Marketing

(Add)

635. Fashion Experience.

A practical view of the fashion industry through lecture, library research, interviews with fashion industry professionals, and field trips. Two hours of lecture and three hours laboratory. Prereq: HE 525, MKTG 625. Identical with HE 635.

3 q.h.

87-258 Art

(Add)

517. Introduction to Music and Art.

An introduction to and survey of the elements in musical and artistic genre and the influences on philosophy, religion, politics, etc. Particular examples will be drawn from various periods, styles, and movements within the historical framework of art and music. Materials for the course will include slides, field trips, recordings, performances, and lectures. Will not fulfill music literature requirement for the music major or art history requirement for the art major. Cross listed with Music 517.

4 q.h.

87-259 Music

(Add)

517. Introduction to Music and Art.

An introduction to and survey of the elements in musical and artistic genre and the influences on philosophy, religion, politics, etc. Particular examples will be drawn from various periods, styles, and movements within the historical framework of art and music. Materials for the course will include slides, field trips, recordings, performances, and lectures. Will not fulfill music literature requirement for the music major or art history requirement for the art major. Cross listed with Art 517.

4 q.h.

87-260 Sociology

(Change)

744. Social Deviance.

Problems of drug abuse, sexual deviation, crime, and other forms of deviance. Theoretical approaches to deviant behavior; etiologies and methods of social control. Prereq: Soc. 500.

4 q.h.

87-261 Sociology

(Change)

742. Small Group Processes.

A study of small group behavior; influence, attitudes, and values of social microsystems. Prereq: Soc. 500.

4 q.h.

87-262 Sociology (Change)

735. Juvenile Delinquency.

Social and psychological factors underlying delinquency; the juvenile court and probation; treatment and preventive measures. Prereq: Soc. 500. Listed also as Criminal Justice 735.

4 q.h.

87-263 Black Studies (Change)

700. Black Studies Colloquium I.

A social studies seminar focusing on the historical, economic, political or social aspects of the experiences of people of African descent. Prereq: Blk. St. 600 or consent of instructor. May be repeated once with different content.

4 q.h.

87-264 Black Studies (Add)

701. Black Studies Colloquium II.

A humanities seminar focusing on the art, music, literature and/or philosophy of people of African descent. Prereq: Blk. St. 601 or consent of the instructor. May be repeated once with different content.

4 q.h.

87-265 Philosophy & Religious Studies (Change)

814. Philosophy of Language.

An introduction to modern philosophical investigation of such topics as semantics and language analysis, the functions of language, modes of meaning, and the relation of linguistic structures to metaphysics. Prereq: Philosophy 600 or junior standing.

4 q.h.

87-266 Philosophy & Religious Studies (Delete)

713. Making of the Modern Man.

The philosophic, religious, scientific, political and social developments out of which our present patterns of Western thought have arisen. Prereq: Philosophy 600 or junior or senior standing.

4 q.h.

87-267 Philosophy & Religious Studies (Add)

714. Philosophy of Mind.

Study of the traditional mind/body problem in philosophy: investigation of philosophical theories of intentionality, mental representation and causation, the contrast of minds and machines, and the relation of philosophy to psychology. Prereq: Phil. 600 or junior or senior standing.

4 q.h.

87-268 Foreign Languages & Literatures (Spanish) (Add)

855. Topics in Spanish Language and Linguistics.

An introduction to the terminology, concepts, bibliography and current issues in Spanish language and linguistics. Major topics include phonology, morphology, semantics, syntax, applied linguistics, transformational grammar, and other topics related to language variation and society. May be repeated once when topic varies.

Prereq: Spanish 725 & 726.

4 q.h.

87-269 Foreign Languages & Literatures (Spanish) (Delete)

850. Problems in Spanish Syntax and Usage.

A course designed mainly for prospective teachers of Spanish, dealing with the more advanced problems of Spanish grammar and usage.

Prereq: Spanish 725 and 726.

4 q.h.

COVER SHEET TO BE ATTACHED TO ALL REPORTS SUBMITTED TO THE ACADEMIC SENATE

Date April 23, 1987

Report Number (For Senate Use Only)

867-17

Name of Committee Submitting Report Programs Division, Academic Programs and Curriculum Committee

Committee Status: (elected chartered, appointed chartered, ad hoc, etc.) _____

Appointed Chartered

Names of Committee members: D. Brown, K. Foutz, R. Kramer, R. Hoover, R. Rollin, T. Lyons, M. Vendemia, D. Curry (student)

Please write a brief summary of the report which the Committee is submitting to the Senate: (attach complete report)

The committee has examined and processed proposals for changes as listed and attached (with PO numbers): #6 Computer Science Certification, #7 Respiratory Therapy Technology, #8 Medical Assisting Technology, #9 Emergency Medical Technology, #10

Materials Engineering, #11 BSN Generic, #13 Home Economics Education
Do you anticipate making a formal motion relative to the report? _____

If so, state the motion: No

Copy to my office, Registrar

If there are substantive changes made from the floor in your committee recommendation, would the committee prefer that the matter be sent back to committee for further consideration? _____

Other relevant data: _____

DB 4/23/87

Chairman (please initial)

COVER SHEET TO BE ATTACHED TO ALL REPORTS SUBMITTED TO THE ACADEMIC SENATE

Date April 23, 1987

Report Number (For Senate Use Only) 367-18

Name of Committee Submitting Report Programs Division, Academic Programs and Curriculum Committee

Committee Status: (elected chartered, appointed chartered, ad hoc, etc.) _____

Appointed Chartered

Names of Committee members: D. Brown, K. Foutz, R. Kramer, R. Hoover, R. Rollin, T. Lyons, M. Vendemia, D. Curry (student)

Please write a brief summary of the report which the Committee is submitting to the Senate: (attach complete report)

The committee recommends approval of the proposed new major, Management Information Science.

Do you anticipate making a formal motion relative to the report? _____

If so, state the motion: The Senate approve the proposed new major, Management Information Science.

If there are substantive changes made from the floor in your committee recommendation, would the committee prefer that the matter be sent back to committee for further consideration? Yes

Other relevant data: _____

DBrown 4/23/87

Chairman (please initial)

Youngstown State University
Academic Programs Division

PD# 867-3 Date Rec'd 1/29/87

Addition of a new program X (Complete B,C)

Deletion of an existing program _____ (Complete A,C)

Change in an existing program _____ (Complete A,B,C)

Program title Management Information Systems Department Management

A. Describe the requirements of the program as it currently exists.
(Attach additional sheets if necessary.)

B. Describe the requirements of the proposed program. (Attach additional sheets if necessary.)

The Department of Management is proposing a new major leading to a Bachelor of Science in Business Administration. The major will be entitled Management Information Systems. The requirements for the new program are the same as for the existing track in Information Systems as is currently being offered by the Management Department.

See Attachment.

C. Using as many additional sheets as are necessary, provide a rationale and estimate how this addition/deletion/change of program will impact upon the resources of departments other than the one originating the form (e.g. enrollments, frequency of support-course offerings, staffing, budgets, equipment, duplicate courses, etc.).

The Management Information Systems is a common major in most schools of business. Virtually all schools in the Ohio state system offer a program such as this and business majors should be given the opportunity to choose this area of study for the potential future rewards in business.

The Management Department is currently using an Academic Challenge grant (\$110,000 per year for two years) to fund the upgrading of Management faculty in Management

----- continued on Attachment -----

Signatures

Department Chairperson Clem Pernick

Dean J. Horst

Prog. Div. D. Brown

Attachment
 Management Information Systems

(B) Courses and Program for Major in Management Information Systems

<u>Specific Major Requirements (Core)</u>	<u>QH</u>
Mgt. 735	4
Mgt. 737	4
Mgt. 804	4
<u>Specific Major Requirements (Cont.)</u>	
Acctg. 709 Management Information Systems II	4
Mgt. 761 Information Systems for Mgt. (Mgt. 725)	4
Mgt. 795 Modeling in Operations Mgt. (Mgt. 789)	4
Mgt. 728 Simulation Techniques in Business (Acctg. 610 or equiv.)	3
Mgt. 825 Micro-computers in Business (Mgt. 761)	4
Mgt. 830 Management Science II	4
Mgt. Upper Division Electives	<u>12</u>
	47
<u>Other</u>	
Business Upper Division Electives	8
Non-business Electives	<u>18</u>
	26

(C) continued

Information Systems. The grant also directs us to hire an additional faculty member trained in MIS to develop coursework in this new program. The faculty position is funded to the full professor level. I believe this support on the part of the State is witness to the credibility of the program as a viable major.

COVER SHEET TO BE ATTACHED TO ALL REPORTS SUBMITTED TO THE ACADEMIC SENATE

Date April 24, 1987 Report Number (For Senate Use Only) 867-19

Name of Committee Submitting Report Student Academic Affairs Committee

Committee Status: (elected chartered, appointed chartered, ad hoc, etc.) _____

Names of Committee members: Demetra, Duricy, Kim, Livosky, McBriarty, McNierney,
McNelis, Mosca, Neville, Owens (chairman), Saklecha, Simmons, Wincik

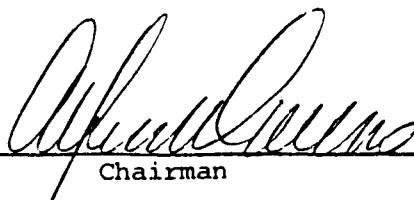
Please write a brief summary of the report which the Committee is submitting to the Senate: (attach complete report) A review of academic performance of Fall, 1986 freshmen revealed that of the six percent who had scored below 15 on the ACT and had ranked in the lowest 30% of their high school class, more than half were on Warning. By the end of Winter, 1987, 15 percent of this group had withdrawn and half of the remainder were on Warning or Probation. Students so identified are "high risk

Do you anticipate making a formal motion relative to the report? Yes

If so, state the motion: That the Recommendations identified in the Report (#1-3) be adopted.

If there are substantive changes made from the floor in your committee recommendation, would the committee prefer that the matter be sent back to committee for further consideration? No

Other relevant data: _____


Chairman

REPORT of the
Student Academic Affairs Committee
April 24, 1987

Introduction

On November 1, 1986, Senate Executive Committee asked this committee to consider making recommendations respecting students whose ACT or SAT composite scores are at levels such that their potential for success in college is highly doubtful. We began our inquiry on December 3, 1986. We reviewed practices at other universities such as Akron, Cleveland, Bowling Green and Kent and in other states such as Georgia. We reviewed reports from other committees such as the Ad Hoc Committee on Undetermined Majors (AY 1985-86) and the Academic Standards and Events Committee (AY 1984-85). Numerous others were invited to meet with the committee, including Ms. Joan Sonnet and Ms. Sherry Zander. Throughout this inquiry, published literature about standardized achievement tests, student retention, and academic advisement was reviewed, as well as aggregate data about the YSU student population.

Findings

1. The Academic Standards and Events Committee's recommendations for students having academic deficiencies seems satisfactory to require such students to address their deficiencies promptly. This group includes students whose deficiencies range from low test scores to not having completed a high school unit in fine arts. Our finding is that a better method could be adopted for identifying incoming freshmen who are most likely to experience academic difficulty.
2. Our literature review indicated that standardized achievement test scores do not satisfactorily predict success or failure in college study. But, the composite ACT scores of approximately 20% of YSU freshmen are below 15 (where the YSU mean score is 17.2).
3. Approximately half of the freshman class of YSU students (1984-present) do not achieve an English Placement Test score high enough to qualify them for English 550; between 30 and 40 percent do not achieve reading test scores above 62 (12th grade).
4. By law, YSU admission policy permits high school graduates to enter the university regardless of high school grade point average.

The committee developed a multiple-criteria test which combined these data. "High risk" students are those whose composite ACT is below 15 and whose high school grade point average ranking is below the 30th percentile.

This test was applied to the so-called traditional (1986 high school graduates) Fall 1986 freshman class. Of approximately 1,700 students, 103 were identified as the "high risk" group. Eighty-eight of these students had scored at or below 62 on the Nelson-Denny test

of reading. Their academic performance was examined after Fall, 1986: more than half (52%) were on Warning. The group's performance was examined again after Winter, 1987: fifteen percent had withdrawn and half of the remainder were on Warning or Probation.

5. The Committee considers these results to be satisfactory support for the two-factor criterion for high risk of academic failure. Low scores on the Nelson-Denny reading test (more than 85% of these students having tested at or below the high school level) provide additional support for the model.
6. It is important to note that while some of the "high risk" group remained in good standing, many YSU students who were not in the "high risk" group either withdrew or dropped below the minimum requirement for good standing during the two-term period.

Recommendations

1. The committee recommends that YSU apply necessary resources to create the new position of special advisor/counselor, including appropriate office and secretarial support, and to provide requisite data about YSU student academic performance. We also recommend that consideration be given to the possibility of assigning this person to the task of coordinating various related activities of (or serving as liaison between) the writing and reading centers, the math lab, and Career Services Office.
2. Incoming freshmen whose ACT composite score is 14 or lower and whose high school rank is in the lowest 30% be assigned to a special advisor/counselor. The special advisor/counselor would:
 - A. Be directed to meet with each such student as necessary to establish a program of study which would optimize each student's chance for academic success;
 - B. Be authorized to restrict such students from coursework which he/she deems academically inappropriate, consistent with university policies;
 - C. Be authorized to require specific coursework or course sequences which he/she deems academically proper, consistent with university policies; and
 - D. Be directed to monitor each such student's academic progress during his or her freshman year (45 credits) and, if necessary, to provide assistance in identifying other educational or career paths.
3. The committee recommends that this program be reviewed and modified if necessary after two complete years of operation.