# MINUTES ACADEMIC SENATE April 7, 1978

ATTENDANCE: (See attached attendance roster.)

The meeting was called to order at 4:10 by Dr. Jean Kelty, chairperson of the Senate.

#### APPROVAL OF MINUTES OF MARCH 3, 1978 SENATE MEETING

The minutes of the March 3 Senate meeting were approved as distributed.

#### REPORTS OF SENATE COMMITTEES

Charter and ByLaws Committee - Dr. Cox reported. The committee was asked about the confusion in the interpretation of the Charter and ByLaws in light of the YSU-OEA agreement, Article 9.2, subparagraph A, page 16, regarding who has authority for curriculum changes. Input was received from both Dr. O'Neill and Dr. Edgar (letters attached to the February minutes). Approval of Academic Senate through the Academic Affairs Committee must be received for the changes in degrees, majors, requirements in curriculum as outlined in the ByLaws, Section 2A (1), page 7, which states that any change involving more than one department has to go through the Academic Affairs Committee.

The committee was also asked for input on how the Senate could be improved. The committee will study this question and report at the next Senate meeting. The Charter and ByLaws Committee meets from 11 to 1 on Tuesdays. Anyone interested in this matter is invited to come to the meetings and provide input. Contact Dr. Cox for meeting location.

Executive Committee - Dr. Kelty reported.

The committee is proceeding with the appointment to committees for the 78-79 academic year and will report at the May meeting. The Academic Senate has been given an official office, CAST, Room 1080. All records will be moved into that office.

Elections and Balloting Committee - No report.

#### Motion to direct Elections and Balloting to include all nominee names on the ballot Carried

Dr. Singler questioned the manner in which elections are being conducted; specifically, concerning nominations to the Elections and Balloting Committee.

He brought up two points: 1) The nomination procedure is being used as an election procedure and 2) That procedure is in violation of the Charter and ByLaws. Roberts Rules of Order states that everyone receiving a nomination shall be duly nominated. All names should be placed on the ballot for election by their college. He moved that the Senate direct the Elections and Balloting Committee to include on the ballot for election to the Elections and Balloting Committee the names of all nominees duly nominated and that this procedure be followed in the future. Motion received a second.

Dr. Kelty stated a reservation about the motion as to whether it might be the province of the Charter and ByLaws Committee. She then read a memo from Dr. Secrist stating the position of the Elections and Balloting Committee (Attached to minutes).

Discussion followed. Points made included:

- 1) When you ask someone to place his name in nomination, you expect to find his name on the ballot. The answer received was that it was too much trouble to have a run-off election.
- 2). It would not be true that we would necessarily have to have a run-off election if all the nominations appear there, only if two people tie or there has to be a majority. Answer: I think there has to be a majority.

Dr. Cox, former member of Elections and Balloting, stated that the Charter and ByLaws does not say that a majority is required. It was the feeling of the committee that they should have the fewest number of nominees possible in order to assure that the candidates elected have some semblance of a majority. This is part of a larger problem. There are no rules as to how an election should be held. A long-term solution would be to have written rules that should be followed by Elections and Balloting.

Dr. Singler made four points:

- 1) The fact that we follow the procedure does not make it right.
- 2) Elections and Balloting should have a right to some flexibility.
- 3) Language in Roberts Rules of Order states that everyone receiving a nomination is nominated.
- 4) Nominating ballots should not be made election ballots.

Dr. Dykema, Parliamentarian, stated that Roberts doesn't cover specifically how the elections or appointments to committees should be made. It says that the systems used for nominations for office under Chapter 45 may be applied to the selection of membership for committees. It discusses the impropriety of eliminating down to two people, because you may split a body into opposing sides. It doesn't imply that it is wrong to eliminate some on the ballot. It is somewhat confused.

Clarification: Do you wish to single out only Elections and Balloting ballots?

Dr. Singler: Yes, this is the current consideration.

Dr. Richley: It is already too late in view of the fact that other schools have already sent their ballots out. Perhaps this should be studied by Charter and ByLaws.

Question called on the motion. Motion carried.

Motion to refer the question of election procedures to Charter and ByLaws
Carried

Dr. Jenkins moved that the entire matter of all election procedures to Senate and committees be referred to Charter and ByLaws for consideration. Second by R. Curry.

Discussion points made were:

- 1) You may be eliminating the function of the Elections and Balloting Committee.
- 2) If problems can occur in one area, they could happen in others. Elections should be throughly investigated.
- Dr. Kelty stated two possible solutions:
- 1) Refer the matter to Charter and ByLaws, or
- 2) Refer it to Elections and Balloting for that committee to bring recommendations back to the Senate.

Dr. Cox: The initial statement on procedure should come from the Elections and Balloting Committee, followed with review by the Charter and ByLaws Committee.

Question called on the motion. Motion carried.

#### REPORTS OF OTHER SENATE COMMITTEES

Educational Media Committee - There was no representative at the meeting. Any questions will be answered at the next meeting.

<u>Individualized Curriculum Committee</u> - No report. It was included on the agenda in error.

<u>University Honors Committee</u> - There can be no action taken on this report. There was no enough time to get the report, in its entirety, on the agenda. Any action needed will be taken at the May meeting. (See attached proposal.)

Dr. Altinger reported. He stated that the background for the proposal was based on a report made to the United States Department of Education stating 3-5% of a normal student body needs individual honors work.

Dr. Altinger asked for feedback so the committee can resolve any problems. He noted that in the fall's incoming freshman class 644 students were interested in independent study, 281 are interested in an Honors Program, and 330 students wanted to study in a foreign country.

The proposal passed out at the meeting was sent to Academic Deans and Academic Affairs for their suggestions. Difficulties would arise in relation to bookkeeping, student credit hours and work load. It would go to the department in which the teacher resides. The people who would govern the work are the ones presently governing it.

A lengthly discussion followed which was terminated by a call for a straw vote to indicate support for the concept. Senate indicated their support. This report will eventually be submitted to Academic Affairs and then to Curriculum Committee.

#### UNFINISHED BUSINESS

<u>Computer Committee</u> - Dr. Dandipani reported. No action is to be taken as this report was not on the agenda. It will be voted on at the May meeting.

The handout (attached) refers to Motion 1 of the May 20, 1977 meeting. That motion has since been found unacceptable. (See May 20 and November 4, 1977 minutes.)

The Computer Committee consulted Dr. Edgar and the Charter and ByLaws Committee. The handout is the revised motion. There will be one joint committee in place of the Senate Computer Committee and the Data Services Committee. At the same time we are asking that the Charter and ByLaws Committee put a freeze on the Computer Committee for one year from the day the joint committee is appointed. It would run one year and then there would be an evaluation as to whether to continue the committee as one body.

NEW BUSINESS - None.

ADJOURNMENT - It was moved and seconded that the meeting be adjourned. Meeting adjourned at 5:05.

#### ATTENDANCE UNIVERSITY SENATE April 7, 1978

Leon Rand .

AL AND SCIENCES	SCHOOL OF ENGINEERING
Common Poolon	Donald Arnett Donal Marne
George Beelen Frederick Blue   Holiu	Paul Bellini Au Bollini
Barbara Brothers Anathona	
A Marie Carlotte	Robert Foulkes Kill Joneskush
Dean Brown	John Kearns
Carl Chuey	John Petrek John Jatuk
William Cochram	John Ritter
Irwin Cohen Boun	Samuel Skardte & g Skardu
Paul Dalbec (Saul & Jallee	Leslie Szirmay
Janet DelBene Sant & Albene	
Christine Dykema . The forem a	
Gary Fry	FINE AND PERFORMING ARTS
George Haushalter (1) Hace (1)	
James Houck	Donald Byo
William Jenkins W. Cullud	Ronald Gould
Jean Kelty Jean Militine	Elaine Juhas Luni Julia
Friedrich Koknat	Edward Largent
Renee Linkhorn (ALIM BRIM)	Jon Naberezny
Loretta Liptak Logfin Linear	Daniel O'Neill
Donald Milley	David Robinson
Brendan Minogue / Den Marie Waneou	Arthur Spiro
James Morrison (CM)	Louis Zona
Gratia Murphy 222	
Sidney Roberts	
Le 11 Satre Thatse	APPLIED SCIENCE AND TECHNOLOGY
Cl. les Singler	THE DESCRIPTION OF THE PROPERTY OF THE PROPERT
David Stephens Dataskan	James Conser
Elizabeth Sterenberg Entereulty	Janis Cramer Cramer
illizabeth Steremberg Zaguzzakazaka	Barbara Erickson & Enchron
$m{v}$	Kathylynn Feld
DUCTNESS ADMINISTRAÇÃO	
BUSINESS ADMINISTRATION	Bari Lateef
	Gary Pilcher Day J. Color
Dennis Bensinger	Victor Richley
A. Ranger Curran	Mary Sebestyen
E. T. Deiderick	Daniel Suchora Thursey South
William Flad	•
Inez Gross	
Donald Hovey	<u>ADMINISTRATIVE</u>
Mervin Kohn	£222
Donald Mathews	Taylor Alderman Fileville
Jane Simmondance Oncom	Earl Edgar Tragar
	Michael Householder
	Rama Krishnan
SCHOOL OF EDUCATION	Charles McBriarty CMCB
1. 0	William McGraw two Ly
Margaret Braden	Robert Miller
David Cliness	Arnold Moore am
Robert DiGiulio	Jon Naberezny
Louis Hill	Nicholas Paraska
G' ianne Leck	Edmund Salata
7///	James Scriven
	21 A 41.
Juanita Roderick	George Sutton /
Charles Smith	Bernard Yozwiak

#### STUDENT MEMBERS

Sam Barbera
John Carano
Jackie Caventer
Richard Curry
George Glaros
Laura Grohovsky
Jeff Gwin
Tony Koury
Mary Miller
Genna Pavel
Albert Pesa
Linda Schajatovic
Jon Steen
Dave Stroud
William Yeaton

#### INTER-OFFICE CORRESPONDENCE

Dr. Jean Kelty, Academic Senate

**DATE** April 5, 1978

FROM Dr. Howard B. Cox, Chairman/Marketing Dept.

SUBJECT Report to the Academic Senate- April 7, 1978

It was brought to the attention of the Charter and By-Laws Committee that there has been confusion concerning the interpretation of the Charter and By-Laws on curricula changes in light of the language of the YSU-OEA Agreement. (Article 9.2 (a), p. 16).

This committee discussed the matter at length and received input from both the administration, represented by Dr. Edgar, and the OEA, represented by Dr. O'Neil. Both stated that there was no intention to change the Charter and By-Laws in this matter and their replies were attached to the minutes of the Senate. (Feb. 3, 1978). As a result, we have concluded that the approval of the Academic Senate, through the Academic Affairs Committee, must be received for changes in degrees, majors, requirements and curricula, as outlined in By-Law 6, Section 2 (a) (1), page 7.

Section 2. Appointed Chartered committees are charged and composed as follows--

- (a) The Academic Affairs Committee;
  - (1) This committee is charged with recommending to the Senate the general university requirements, appropriate academic standards, new degrees, new majors, and changes in degree and major requirements whenever such changes affect more than one academic department.

    For this purpose, a change affects a department only if one of its courses is involved in the change.
  - (2) The membership of the committee shall consist of eight faculty with at least one member from each college, administrator(s), and two students.

The following is the memo from Dr. Secrist to Dr. Kelty:

All Senate elections with nominating ballots are conducted this way. The committee established the procedures four years ago. Only when nominations are made from the floor such as for the President of the Senate, is there no nominating ballot. In a school as large as Arts & Sciences especially, it is not feasible to have fifty names on a ballot for one position. There would have to be a long series of run-off elections. The intent of placing only those with the most nominations on the ballot is to abide by the letter and intent of the ByLaws to have approximately twice the number of candidates as there are positions.

#### REVISED MOTION

The Academic Senate recommends that the President of the University establish an administrative committee consisting of six faculty members, one from each college/school on the recommendation of the Senate Executive Committee, six administrative representatives, and two students on recommendation of the president of student government. This committee shall have the following charge: "To review plans and make recommendations relative to both academic and administrative computing services, including the evaluation of computer hardware, software, and institutional data needs." The joint committee will make its recommendations to the administrative officer to whom the Director of the Computer Center reports. This proposal shall replace the Senate Motion No. 1, of May 20, 1977, concerning allocation of programming and analysis hours.

April 7, 1978

Submitted by Computer Committee

# RECEIVED

COVER SHEET TO BE ATTACHED TO ALL REPORTS SUBMITTED TO THE ACADEMIC SENATE PR 1 7 1978
Date 4-17-78 Report Number (For Senate Use Only) BUSINESS EDUCATION AND TRESSEDUCATION
Name of Committee Submitting Report University Curriculum Committee
Committee Status: (elected chartered, appointed chartered, ad hoc, etc.) Appointed
<u>charter</u>
Names of Committee members: Dr. Margaret Braden, John Grim, Dr. William  Jenkins, Roger Krause, Dr. Ronald Jonas, Dr. Philip Munro, Dr. David  Robinson, Dr. James Steele, Dr. Calvin Swank, Harold Yiannaki
Please write a brief summary of the report which the Committee is submitting to
the Senate: (attach complete report) The University Curriculum Committee
meets weekly on Mondays at 2 p.m. in the Buckeye Room of Kil.
Hall. The attached course proposals have been considered by the
Committee, and have been circulated in the prescribed manner and
have been incorporated into the University inventory of courses.
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? Yes
Other relevant data:

Chairman (please initial)

Engineering Technology 625 (Addition)

Circuits, Electronics and Electromechanics I. A survey of the major topics in electrical circuits, electronics, and electromechanics. Emphasis on AC/DC networks and magnetics. Three hours lecture and three hours lab per week. Prereq.: Math 750. 4 q.h.

Engineering Technology 725 (Addition)

Circuits, Electronics and Electromechanics II. A continuation of EET 625 with emphasis on AC/DC machinery, electronics and controls. Prereq.: EET 625. 4 q.h.

Engineering Technology 700 (Change)

Physical Measurements. Practice in the use and selection of instruments for measuring pressure, temperature, strain, force, flow rate, vibration, etc. Three hours lecture, three hour laboratory per week. Prereq.: EET 625 or equivalent. 4 q.h.

Mechanical Engineering 720 (Deletion)

Heat Transfer I. A study of the fundamental laws of heat conduction. Steady and unsteady-state one- and two- dimensional conduction problems solved both analytically and numerically. Three hours lecture and two hours laboratory per week. Prereq.: Math 706 and IE 642. Prereq. or concurrent: ME 604. 4 q.h.

Mechanical Engineering 721 (Deletion)

Heat Transmission. The fundamentals of heat transfer by conduction, convection, and radiation, followed by investigations of combinations of these modes of heat transfer. Not intended for students having ME 720. Prereq.: Math 705. 4 q.h.

echanical Engineering 725. (Addition)

Heat Transfer I. The fundamentals of heat transfer by conduction, convection, and radiation; investigations of combinations of these modes of heat transfer. Prereq.: ME 603, and Math 705. 4 q.h.

Mechanical Engineering 821 (Deletion)

Heat Transfer II. A study of the fundamental principles of heat transfer by convection and radiation. Empirical relations for forced and natural convection systems. Condensation and boiling heat transfer. Heat exchangers. Radiation problems including the influence of both the material properties and the geometrical arragement of the bodies involved. Three hours lecture and two hours laboratory per week. Prereq.: ME 720. 4 q.h.

Mechanical Engineering 825 (Addition)

Heat Transfer II. A continuation of Heat Transfer I involving more advanced topics in conduction, convection and radiation. Design problems solved analytically, numerically, and by computer methods. Prereq.: IE 642, ME 725, and Math 706. 4 q.h.

Mechanical Engineering 825L (Addition)

Heat Transfer II Laboratory. Experiements involving conduction, convection and radiation modes of heat transfer. Heat exchangers. Three hours per week. Prereq.: ME 725. 1 q.h.

ingineering Technology 740 (Change)

Microprocessor Fundamentals. An introductory treatment of microprocessor software and hardware. Includes a study of microprocessor components, systems, programming and application. Commercially available units are discussed. Three hours lecture, and three hours laboratory. Prereq.: EET 620. 4 q.h.

#### Engineering Technology CPT 614 (Change)

Business Systems and Procedure. Study of methods of analysis and evaluation of information flow in real-life information systems including forms design, use of equipment, and employee training. Prereq.: CPT 608. 3 q.h.

#### Engineering Technology CPT 612 (Change)

<u>Programming-PL/1</u>. Detailed study of the PL/1 language; analysis of its facilities will be made to demonstrate specific applicability to engineering, mathematical and commercial problems. Several class problems will be coded to reinforce efficient coding techniques with emphasis on structured coding. Three hours lecture and three hours laboratory per week. Prereq.: CPT 601 or CPT 607 4 q.h.

#### Engineering Technology CPT 602 (Change)

Scientific Programming II. A continuation of CPT 601 stressing the application of FORTRAN, to advanced problems in science, engineering, and business. Fundamental numerical techniques applied to problem solving. PREREQ.: CPT 601 or consent of instructor. 4 q.h.

#### Engineering Technology CPT 607 (Change)

Business Programming I. An introductory COBOL programming course using structured and top down programming. Use of structured flowcharts in performing the analysis, coding, debugging, and documentation of basic commercial applications using the COBOL language. Three hours of lecture and three hours of programming laboratory per week. Prereq.: CPT 502 or consent of instructor. 4 q.h.

#### Engineering Technology CPT 616 Change.

Operating Systems. Study and use of Job Control Language; operating systems including translators, compilers, high level language processing, batch processing, real-time processing, and multiprogramming. Prereq. or concurrent: CPT 611. 4 q.h.

#### Engineering Technology 870 (Addition)

<u>Process Controls Technology</u>. An introduction to process control technology dealing with elements and evaluation. Topics include signal conditioning, transducers, control elements, and controller principles. Prereq.: EET 607, 611. 4 q.h.

#### Engineering Technology 840 (Addition)

<u>Microprocessor Applications</u>. An introductory treatment of microprocessor applications. Inclused a study of microprocessor applications in the commercial, industrial, and residential areas. both hardware and software aspects are discussed. Prereq. EET 740. 4 q.h.

#### Engineering Technology 780 (Addition)

Communication System Fundamentals. An introductory treatment of modern communication systems. Includes a study of audio signals, noise, untuned and r.f. amplifiers, amplitude, frequency, and pulse modulation, transmission lines, antennas, and multiplexing of communication channels. Prereq: EET 607. 4 q.h.

#### Engineering Technology 620L (Addition)

<u>Digital Fundamentals Laboratory</u>. Experiments utilizing digital integrated circuits to implement various logic functions discessed in lecture. Taken concurrently with EET 620. Three hours per week. 1 q.h.

#### Engineering Technology 620 (Addition)

<u>Digital Fundamentals</u>. An introductory study of number systems and conversions, codes, Boolean Algebra, and logic gates. Includes the study of Boolean function simplification, truth tables, Karnaugh maps and combinatorial circuits. Prereq.: Math 570 3 q.h.

#### Engineering Technology 614 (Change)

<u>Industrial Electronics</u>. Analysis of electronic control circuits in industry; analog and digital time delay circuits; silicon controlled rectifier circuits; photoelectric devices; phase shift control. Prereq. or concurrent: EET 606. 4 q.h.

#### Engineering Technology 600 (Change)

Measurements. Measurement errors; basic meter in D.C. measurement; basic meter in A.C. measurement; D.C. and A.C. bridges; electronic voltage and current meters; cathode ray oscilloscope; counting and digital display instruments; transducers. Prereq.: EET 605. 3 q.h.

#### Engineering Technology CPT 618 (Change)

<u>Data Processing Application</u>. This course is designed to acquaint the student with business data processing applications. Practical case studies include payroll, accounts payable, budget control, inventory control, production control, etc. Three hours of lecture and three hours of laboratory per week. Prereq.: CPT 608 and CPT 611. 4 q.h.

#### Engineering Technology CPT 810 (Addition)

Special Topics. The content of this course will vary from term to term. It will be concerned with various topics to allow a student to remain current with the changing computer technology. Subject material will be announced in advance. Prereq.: CPT 611 or consent of instructor. 1-4 q.h. May be repeated up to 8 q.h.

#### Engineering Technology EET 850 (Addition)

Integrated Circuit Applications. An introduction to integrated circuits technology and applications. Emphasis will be placed on typical applications, including operational amplifier applications, comparators, voltage regulators, Schmitt triggers, analog-to-digital converters, digital-to-analog converters. Prereq.: EET 607. 3 hrs. lecture and 3 hrs. lab. 4 q.h.

#### Nursing N611L (Change)

Nursing Care of Adults and Children III Laboratory. Clinical laboratory experience provides opportunity for application of care in major health problems of children and adults. Satisfactory achievement of clinical objectives is requisite for passing 611L. 611L must be taken concurrently with 611. Prereq.: Nursing 610 and 610L with a grade of C or better; Chrm. 502. Twelve hours of laboratory per week. 4 q.h.

Nursing N612L (Change)

Nursing Care of Adults and Children IV Laboratory. Clinical laboratory experience provides opportunity for application of care of children and adults with major health problems. The biological and psychosocial effects of illness are included in the health care of patients. Satisfactory achievement of clinical objectives is requisite for passing 612L. 612L must be taken concurrently with 612. Prereq.: Nursing 611 and 611L with a grade of C or better; Chem 502 and Chem. 503. Twelve hours of laboratory per week. 4 q.h.

Nursing N501L (Change)

Introduction to Nursing I Laboratory. Clinical laboratory provides the principles and application of basic nursing skills. Satisfactory achievment of clinical objectives is requisite for passing 501L. 501L must be taken concurrently with 501. six hours of laboratory per week. Prereq.: Permission of chairman. 2 q.h.

Nursing N502L (Change)

Introduction to Nursing II Laboratory. Clinical laboratory experience provides opportunity for application of basic and more complex nursing principles. Satisfactory achievement of clinical objectives is requisite for passing 502L. 502L must be taken concurrently with 502. Prereq.: Nursing 501 and 501L with a grade of C or better. Biol 551. Six hours laboratory per week. 2 g.h.

Nursing N505L (Change)

Nursing Care of Adults and Children I Laboratory. Clinical experience is provided in the care of maternity patients, the newborn, infant, and children. Satisfactory achievement of clinical objectives is requisite for passing 505L. 505L must be taken concurrently with 505. Prereq.: Nursing 502 and 502L with a grade of C or better; Biol. 552; Psych 755 (or concurrently). Nine hours laboratory per week. 3 q.h.

Nursing N610L (Change)

Nursing Care of Adults and Children II Laboratory. Learning experiences in mental health, general, and rehabilitation hospitals are provided with field trips to related agencies. Satisfactory achievement of clinical objectives is requisite for passing 610L. 610L must be taken concurrently with 610. Prereq.: Nursing 505 and 505L with a grade of C or better; Biol 560. Twelve hours of laboratory per week. 4 q.h.

Nursing N711 (Deletion)

Introduction of Phamacology. A general survey of pharmacology consisting of lectures and assigned readings. Emphasis is on principles of pharmacology, the consideration of drug groups and uses and abuses of drugs. Prereq.: Chem 503: junior standing. 4 q.h.

Industrial Engineering 725 (Addition)

Manufacturing Engineering. Techniques of metal cutting and a description of metal removing equipment along with an investigation of economical optimization of machining parameters. Associated topics include numerically controlled machine tool languages, computer aided manufacturing, metal forming and plastic molding. Prereq.: Math 705, IE 642. Prereq. or concurrent with Material Science. 606. 4 q.h.

\rt 723 (Addition)

Weaving 1. An exploration of simple beginning weaving techniques on a four harness loom. Emphasis on the actual making of yarns on the spinning wheel and dyeing with natural dyes. Off-loom techniques such as basketry, macrame, simple looms, inkle loom weaving, finger weaving, shaped loom weaving (such as circles, and triangles) will be an intregal part of the course. Prereq.: Art 510 or Permission. 3 q.h.

Art 719 (Addition)

U.S. Art 19th Century. Covering all aspects and media of painting, sculpture, architecture and the decorative arts of the 19th Century. Prereq.: Art 514. 3 q.h.

Art 823 (Change)

Weaving II. Emphasis will be placed on the more advanced loom techniques of pattern weaving, tapestry, ripsmatta, rug making, double weave, open weave, simple garmet making, and Ikat dyeing. A continuation of more complicated off-loom techniques. Prereq.: Art 723. 3 q.h.

Art 707 (Change)

U.S. Art 17th & 18th Century. Covering all aspects and media of painting, sculpture, architecture and the decorative arts of the 17th and 18th Centuries. Prereq.: Art 514. 3 q.h.

MET 850 (Addition) Engineering Technology

CE 716, ME 725. 4 q.h.

Air Conditioning Principles and Practice. A study of the practical techniques used in the design of heating, ventilating, and air conditioning systems. Topics include load calculations, unit selection and duct system layout. The laboratory will include the use of design charts and manufactureers catalogs in a project. Three hours of lecture and three hours of laboratory per week. Prereq.: MET 610 4 q.h.

Mechanical Engineering M.E. 823 (Change)

Refrigeration and Air Conditioning. The application of thermodynamic, fluid flow and heat transfer principles to the design of domestica and industrial systems for the purposes of material processes and human comfort. Design of equipment to meet required heating and cooling loads. Design project included. Prereq.:

## YSU Honors Program

The Honors Program at YSU is based on the fact that there are great differences among individual students. To avoid wasting human resources, we are seeking to cultivate the gifted and talented student within the structure of YSU. The Honors Program is designed to identify and stimulate gifted individuals and allow for their maximum development. Research has shown that the intellectual processes of the gifted and talented are unique, and that the development of such people should not be left to chance.

The gifted and talented students are those who are capable of high performance by virtue of superiority in one or more of the following areas:

- 1) General intellectual ability
- 2) Specific academic aptitude
- 3) Creative or productive thinking
- 4) Leadership ability
- 5) Visual and performing arts
- 6) Psychomotor ability

Some benefits of being an Honors Student include:

- 1) Scholarships. All incoming freshmen in the top 25% of their class with an ACT score of at least 23 qualify for a scholarship.
  - 2) Small classes or seminars.
- 3) Association with other superior students.
  - 4) Challenging academic experiences.
- 5) Ready access to Departmental Honors Advisors for special advisement.
- 6) Individualized Curriculum Program for those whose needs are not completely met by existing conventional programs.
- 7) A certificate awarded at the Honors Convocation to students who complete the requirements. (Achievement of this award is also noted on the transcript.)
- 8) A distinct advantage when applying for admission to graduate or professional schools.
- 9) Personal Attention given to each student by members of the Honors Faculty, who are chosen from among the leading scholars and teachers in the University.

## Admission to the

## Honors Program

Any student may enter the Honors Program by registering for an Honors Course or Honors Seminar.

# Requirements for Graduation From the Honors Program

- 1) 21 hours of Honors courses distribute among at least three departments.
- 2) One University Honors seminar sequence (nine hours) in addition to the abov requirement.
- 3) A grade point average of at least 3.5 in all Honors courses completed and at least 3.5 overall at the time of completion of the Honors Program requirements.

### Honors Courses for 1978-79

Math 523H for students not in math, science or engineering

Math 571H for calculus students

Phil 715H for all students in the Spring

English 550H and 551H

Music 510H

701 Honors Seminar

The Honors Committee meets regularly to study and discuss means of providing for the best educational progress of the students in the Honors Program. Current plans include more individualized work with professors for in-depth study, interdepartmental offerings, and opportunities to meet and study with local professionals and leaders in a wide variety of careers.

Questions concerning the Honors Program should be directed to:

Director, Honors Program Youngstown State University Youngstown, Ohio 44555 Telephone: 742-3306