REVISED VERSION – PASSED AT 12/17/01 FACULTY SENATE MEETING.

DATE: December 5, 2001

TO: Felton Best
President, Faculty Senate

FROM: Paul Petterson
Chair, University Curriculum Committee

RE: Report to Faculty Senate

The Curriculum Committee submits the following Report to the Faculty Senate for consideration at its December 17, 2001 meeting.

I. Department of Design (Graphic/Information)

a. Revise **B.A., Graphic/Information Design**, to; add to admissions requirements: Overall GPA of 2.5 strongly recommended. Student must be in good academic standing.

II.. **Department of Communication**

a. Revise **COMM 253, Introduction to Organizational Communication**, to; remove "majors only" special condition.
b. Revise **COMM 233, Introduction to Public Relations**, to; remove "majors only" special condition; remove prerequisites.
c. Revise **COMM 400, Communication Theory and Process** , to; change prerequisites to: COMM 215, COMM 230 and COMM 245. .
d. Revise **COMM 335, Communication Management**, to; remove prerequisites; remove "majors only" special condition. .
e. Revise **COMM 231, Communication Technologies**, to; remove prerequisites; remove "majors only" special condition.
f. Revise **COMM 245, Introduction to Rhetorical Studies**, to; remove prerequisites.
g. Revise **COMM 451, Environmental Communication**, to; remove prerequisites; remove "majors only" special condition.

III. **Department of English**.

a. Revise **ENG 598, Research In English**, to;
Research skills in literature. Introduces the techniques and resources of literary research through an examination of the theory, history and practice of literary criticism. Three credits. Fall. [G]
b. Add **LING 598, Research in TESOL and Applied Linguistics**:
Research skills in TESOL and Applied Linguistics. Covers research topics and methods in TESOL and Applied Linguistics. Fall. Three credits. [G]
c. Add **LING 599, Thesis**:

Prerequisites: Admission to the M.S. program in TESOL, a minimum of 15 credits
of graduate coursework in TESOL and Applied Linguistics, and permission of the department chair. Preparation of the thesis under the supervision of the thesis adviser. On demand. Three credits. [G]

d. Revise **ENG 599, Thesis**, to;
Prereq.: Admission to the M.A. program in English, a minimum of 15 credits of graduate coursework in English and American literature, and permission of the department chair. Preparation of the thesis under the supervision of the thesis adviser. On demand. Three credits. [G]

IV. **Department of Chemistry**.

a. Revise **CHEM 316, SPECTROMETRIC IDENTIFICATION OF ORGANIC COMPOUNDS**, to;
Prerequisite: CHEM 313. A study of physical methods of structure determination, with emphasis on infrared, ultraviolet, nuclear magnetic resonance and mass spectrometry.
Two three-hour laboratory periods per week. Fall (o). Two credits. ©

b. Revise **CHEM 321, Physical Chemistry I**, to;
CHEM 321, Physical Chemistry of Thermodynamics and Kinetics. Prerequisites: CHEM 301 (may be taken concurrently), CHEM 312, PHYS 125, MATH 122. In depth examination of solid, liquid, and gas behavior, including thermodynamics and kinetics as applied to chemical processes. Three hours of lecture and one three-hour laboratory per week. Fall (o). Four credits. ©

c. Revise **CHEM 322, Physical Chemistry II**, to;
CHEM 322, Physical Chemistry of Quantum and Statistical Mechanics. Prerequisites: CHEM 301, PHYS 126, MATH 221 (all may be taken concurrently), CHEM 312. Quantum mechanics as applied to atomic and molecular structure. Introduction to symmetry concepts. Theory of rotational, vibrational, electronic, and magnetic resonance spectroscopies. Statistical foundations of thermodynamics. Three hours of lecture and one three-hour laboratory
per week. Fall (e). Four credits. ©

d. Delete **CHEM 323, Physical Chemistry Laboratory**.

e. Revise **CHEM 402, Instrumental Methods in Analytical Chemistry**, to;
Prerequisites: CHEM 301, CHEM 322. Theoretical and practical aspects of the most important instrumental techniques used in chemical analysis, including potentiometry, coulometry , voltammetry, UV/Visible absorption spectrophotometry, florescence
spectrophotometry, atomic spectrometry, gas chromatography, and high-performance liquid chromatography. Three hours of lecture and one
four hour laboratory per week. Spring (e). Four credits. ©

f. Revise **CHEM 432, Chemistry Seminar**, to;
Prerequisites: CHEM 321 OR 322. Students will prepare presentations on topics of current interest in various fields of chemistry and may be

required to attend seminars by faculty or
outside speakers. Introduction to the use of the library, literature, and searching procedures in chemical research One conference per week. Spring. One credit. ©

g. Revise **CHEM 459, Bioinorganic Chemistry**, to;
Prerequisites: CHEM 312. Principles of inorganic chemistry as applied to biology. Focuses on
correlation of function, structure, and reactivity of metals in biological systems. Three hours of lecture per week. Spring (o). Three credits. ©

h. Revise **CHEM 460, Principles of Inorganic Chemistry**, to;
CHEM 460, Inorganic Symmetry and Spectroscopy. Prerequisites: CHEM 322. Electronic structure and theories of bonding as they relate to the molecular structures, properties, and spectroscopy of inorganic compounds. Primary focus will be on the compounds of the d-block elements. Three hours of lecture and one three-hour laboratory per week. Spring (e). Four credits. ©

i. Revise **CHEM 461, Descriptive Inorganic Chemistry,** to; change prerequisite to CHEM 321; edit course description to read "A systematic study of main-group elements and the multitude of compounds they form. Acid-base, substitution, and oxidation-reduction reactions along with structural descriptions will be emphasized. Three lectures per week."; change cycling pattern to Spring (o).

j. Delete **CHEM 462, Inorganic Chemistry Laboratory**.

k. Revise **CHEM 320, Biophysical Chemistry**, to;
Prerequisites: CHEM 312, MATH 124 or 125 or 122, PHYS 122 or 126. Principles of physical chemistry emphasizing those areas of critical importance to the biological sciences. Topics include thermodynamics, solution equilibria, molecular transport, and enzyme kinetics. Three hours of lecture per week. Spring (e). Three credits. ©

l. Revise **CHEM 406, Environmental Chemistry**, to;
Prerequisites: CHEM 301, 311. Nature and properties of pollutants, their interaction with each other and the environment, preventitive and remedial methods of control. Laboratory
concerned with sampling and analysis of pollutants. Two hours of lecture
and one two-hour laboratory period per week. Spring (o). Three credits. ©

m. Revise **General Program In Chemistry**, to;
This program is designed for students wishing to go on to graduate-level studies in chemistry, or those who expect to enter professional chemistry at the
bachelor's level. 47 credits in Chemistry, as follows: CHEM 121, 122, 301, 311, 312, 313,
316, 321, 322, 402, 454, 460, and 461; two credits of CHEM 432 are also required for graduation. Students must also complete PHYS 125 and 126, and MATH 122 and 221. The student must also complete 8 credits from the following approved list: BIO 121 or higher, PHYS 220

or higher, ESCI 121 or higher, or MATH 222 or higher. Computer literacy and experience in the use of chemical literature are recommended. For students contemplating graduate study, a year of German or Russian is recommended. No minor is required.

n. Delete **Chemistry-Business Specialization**.

o. Delete **Chemistry-Computer Science Specialization**.

p. Revise **Chemistry-Environmental Science Specialization**, to;

This program is designed for students wishing to go on to graduate level studies in chemistry or environmental science, or for those who expect to enter professional fields of chemistry or environmental science at the bachelor's level. 58 credits in Chemistry and Biology as follows: CHEM 121, 122, 301, 311, 312, 313, 316, 321, 322, 402, 406, 456, and 461; BIO 121, 122, 434 (or 405); two credits of CHEM 432 are also required for graduation. In addition, students must take MATH 122, 221 and PHYS 125, 126. ESCI 121 is recommended. No minor is required.

q. Add **CHEM 120, General Chemistry I coordinated with Intermediate Algebra:**

Prerequisites: Math 101 placement only, Coreq: Special Section of Math 101. Emphasizes relationships of basic chemical principles and theories to properties of substances, their reactivity and uses. Intended for science and engineering students who place into Math 101. Students must take the coordinated section of MATH 101 concurrently. Three hours of lecture, one three-hour laboratory per week. No credit for students with credit for CHEM 121.Fall. Four credits. Study Area IV. ©

V. **Department of Physics and Earth Sciences**.

a. Add **ESCI 521, Topics In The Earth Sciences:**

Advanced Topics in the Earth Sciences - Combination of lecture, discussion and laboratory or field work. May be repeated with different topics for a maximum of six credits. Students are expected to have background in the earth sciences. Irregular. Three credits. [G]

b. Revise **SCI 598, Research In Science Education,** to;

Prerequisite 15 credits in planned program of study for MS in Natural Sciences: Science Education, or permission of instructor. Focus on current global issues related to science education. Students examine current literature and conduct an informal research project on current issues. Requirements include preparation of research paper. Spring (o). Three credits. [G]

c. Add **SCI 581, Independent Study**:
Prerequisites: Acceptance into the Master of Natural Science: Science Education
Program. Work in laboratory, theory, or research to meet individual requirements in
areas not covered by regular curriculum. One to three credits. May be taken more
than once for a limit of six (6) total credits. Requires approved plan of study by arrangement with the supervising instructor. [G]

d. Revise **SCI 418, Teaching Science in the Out-of-Doors**, to; change course to SCI 518; remove prerequisite.

VI. Department of History.

a. Revise **M.S. in Social Science For Certified Elementary And Secondary School Teachers**, to; add HIST 501 to requirements; increase total number of credits to 33.

b. Add **HIST 498, Historical Field Studies Abroad**:
Prerequisites: Permission of Instructor. Classroom and study abroad exploring special historical topics taken from any world region. Normally involves travel outside the United States. Part of course taught abroad; can be taken two times with different topics. Irregular. Three credits. (I)

c. Add **HIST 420, Imperialism**:
Prerequisites: HIST 301 or 310 or permission of instructor. Explores the nature and experience of imperialism in a variety of countries and a number of time periods. Irregular. Three credits. (I)

VII. **Department of Philosophy**.

a. Revise **B.A. in Philosophy**, to; add REL 256 to Specialization in Philosophy of Religion and Religious Studies.

b. Revise **Minor in Religious Studies**, to; add REL 256 to list of course options under Philosophical/Religious Thought course area.

c. Add **PHIL 345, Philosophy Of War And Peace**:
Philosophical concepts related to war and peace from the ancient world to
modern times, including just war, perpetual peace, moral equivalent of war,
non-violence, absolute and non-absolute pacifism, war crimes, cease fires
and peace-keeping. Fall. Three credits. (I)

VIII. **Department of Physical Education/Health Fitness Studies**.

a. Add **PE 113, Introduction To Exercise Science**:
The broad nature of the field of exercise science and the difference between exercise science and its sister discipline, physical education, will be examined. The development of exercise science as a discipline and the changes that exercise and society have undergone in the last

decade. Discussion of exercise and sports psychology and motor behavior as they relate to human movement and behavioral terms. Fall. Three credits.

b. Revise **B.S., Exercise Science And Health Promotion**, to; Remove PE 111 from requirements; add PE 113 to requirements.

IX. **Department of Psychology**.

a. Add **PSY 543, Stress Management: Theory And Research**:
Prerequisites: PSY 541 or permission of instructor. Introduction to the field of stress management and biofeedback. A general overview of current theory, research, and practice as well as ethics and the controversies in biofeedback, and other areas of health psychology. Spring (e). Three credits. [G]

b. Revise **M.A. in Psychology**, to; add Specialization in Health Psychology:
Total number of credit hours: 42. Common Core (18 Cr.); Required courses (18 cr.): PSY 541 Health Psychology, PSY 542 Psychology of Stress, PSY 543 Stress Management Theory and Research, PSY 530 Psychopathology, PSY 551 Primary Prevention, PSY 595 Internship in Prevention Applications. Choose 2 additional electives (6 cr.) from the following list: PSY 458 Human Neuropsychology, PSY 526 Psychology of Learning, PSY 546 Short term Psychotherapy and Healthcare, PSY 553 Developing Prevention Programs, PSY 571 Psychology of Women's
Health, PSY 590 Advanced Topics in Health Psychology, PSY 591 Advanced
Independent Reading and Research in Psychology. Plan A. No more than 9 credits at the 400 level in the planned program of study. NOTE: This item will require external review.

X. **Department of Manufacturing and Construction Management**.

a. **Revise the following Course Designators**:

OLD	**NEW**
TC 118	MFG 118
TC 121	MFG 121
TC 216	MFG 216
TC 316	MFG 316
TC 321	MFG 321
TC 416	MFG 416 [G]
TC 436	MFG 436 [G]
TC 446	MFG 446 [G]

(**G indicates change at graduate as well as undergraduate level**).

b. **Revise the following Course Designators**:

OLD	**NEW**
TC 114	EMEC 114
TC 303	EMEC 303
TC 313	EMEC 313
TC 324	EMEC 324

TC 333	EMEC 333
TC 334	EMEC 334
TC 414	EMEC 414 [G]
TC 463	EMEC 463

XI. **Department of Computer Electronics & Graphics Technology**.

a. **Revise the following Course Designators**:

OLD	**NEW**
IT 501	CET 501
IT 513	CET 513
TC 113	CET 113
TC 223	CET 223
TC 229	CET 229
TC 233	CET 233
TC 243	CET 243
TC 323	CET 323
TC 339	CET 339
TC 349	CET 349
TC 363	CET 363
TC 443	CET 443 [G]
TC 449	CET 449
TC 453	CET 453 [G]
TC 479	CET 479

b. Add **CET 543, Telecommunications Systems**:

Prerequisites: CET 533 or permission of department chair. Radio and optical transmission systems, electromagnetic waves propagation, reflection, refraction and diffraction. Covers satellite communication related to broadcasting, telephony and data transmission. Introduction to characteristics and applications of antennas, cellular phones, fiber optics cables. On demand. Three credits. [G]

c. Add **CET 502, Applied Networking Technology II**:

Prerequisites: CET 501 or permission of department chair. Covers router configurations, router protocols, switching and hub terminology. Implementation of router startup commands, manipulation of router configuration files, IP and data link addressing. Interconnect routers, hubs and switches. On demand. Three credits. [G] ©

d. Add **CET 533, Digital Telecommunication**:

Prerequisites: CE 443 or permission of department chair. Digital communication techniques including coding, decoding, decoding, multiplexing, synchronous and asynchronous communication. Digital transmission for computer networks and modems. Covers digital radio principles and fiber optic applications. On demand. Three credits. [G]

e. **Revise the following Course Designators and Titles**:

OLD	**NEW**
TC 112	GRT 112
TC 261	GRT 242
TC 352	GRT 352

TC 462	GRT 462 [G]
TC 212	GRT 212
(Graphic Arts Industries)	(Graphic Arts Processes)
TC 442	GRT 442 [G]
(Printing Production)	(Print Production)
TC 472	GRT 472 [G]
IT 355	GRT 362
(Estimating For Printing)	(Estimating and Scheduling For Printing)
TC 342	GRT 342
(Porous Printing/Postpress Op.)	(Screen Printing And Postpress Operation)

XII. **Department of Technology Education**.

a. **Revise the following Course Designators**:

OLD	**NEW**
TC 213	TE 213
TC 214	TE 214
TC 215	TE 215
TC 445	TE 445 [G]

XIII. **Department of Engineering Technology**.

a. **Revise the following Course Designators**:

OLD	**NEW**
TC 122	ETC 122
TC 123	ETC 123
TC 353	ETC 353
TC 356	ETC 356

b. Add **Master of Science in Engineering Technology**:

The Master of Science in Engineering Technology degree is a planned program of study requiring thirty (30) credits of graduate courses including the written and oral capstone requirement. The Master's degree program consists of two areas of study - the Foundation Studies (12 credits) and the Engineering Technology Specialization (15 credits). The candidate selects ONE Specialization either in Civil Engineering Technology or Manufacturing/Mechanical Engineering Technology. The CAPSTONE requirement (3 credits) has two options of study -

PLAN A - RESEARCH THESIS with written dissertation and oral defense; or

PLAN C - RESEARCH PROJECT with a design project, written report and oral defense. The graduate candidate must be accepted into the graduate program and

have his/her planned program approved by the graduate advisor. According to
Graduate Policy on courses, NO MORE THAN NINE CREDITS OF 400
LEVEL COURSES, AS APPROVED BY THE GFRADUATE ADVISOR,
CAN BE APPLIED TOWARDS THE MSET DEGREE.
I. FOUNDATION STUDIES (12 SH) Six credits are encumbered and six
credits are electives selected from University courses approved for graduate
study by the ET department and the department offering the course. ET 592
RESEARCH METHODS IN ENGINEERING TECHNOLOGY 3 SH, (Prereq:
Matriculation in M.S.E.T. program and completion of 15 credits of
approved graduate study) STAT 453 Applied Statistical Inference 3 SH,
(Prereq: STAT 104). UNIVERSITY ELECTIVE (to be approved by the
graduate advisor) 3 SH. TECHNICAL ELECTIVE (ET, IT or TC 400 or 500
level approved by graduate advisor) 3 SH
II. ENGINEERING TECHNOLOGY SPECIALIZATION: (Student selects ONE Specialization and completes 15 credits of graduate courses in a planned program
approved by advisor.) Specialization – CIVIL ENGINEERING
TECHNOLOGY - (15 SH required) ET 556 Architectural & Civil Engr.
Tech. CAD 3 SH, ET 577 Engineering Technology Project Administration 3
SH, ET elective (one 500 or 400 level course) 3 SH, ET elective (two 500
level courses) 6 SH; Specialization – MANUFACTURING/MECHANICAL
ENGINEERING TECHNOLOGY - (15 SH required) ET 517 Automated
Assembly & Mfg. Cell Design 3 SH, ET 523 Contemporary Engineering
Materials 3 SH, ET elective (one 500 or 400 level course) 3 SH, ET electives
(two 500 level courses) 6 SH
III. CAPSTONE REQUIREMENT: (3 SH required) The master candidate must select either Plan A, thesis or Plan C, research in engineering technology and each requires a written and oral defense of the research. PLAN A - ET 599 THESIS 3 SH Prereq.: ET 592
and permission of graduate advisor. The preparation of analytical research
and thesis under the supervision of a graduate advisor – requires a written

and oral defense. - OR - PLAN C - ET 598 RESEARCH IN ENGINEERING
TECHNOLOGY 3 SH Prereq.: ET 592 and permission of project advisor. An
applied engineering project conducted under the supervision of graduate advisor. Requires written report and oral defense. Extensive projects may be
approved for up to 6 SH credit.
NOTE: This is a second round of review – program was recently accredited and licensed by DHE.

c. Revise ET 517, **Automated Assembly and Manufacturing Cell Design**, to; change Prerequisite to: Admission to MSET or MSTM, or permission of E.T. Department Chair.
d. Revise ET 523, **Contemporary Engineering Materials**, to; change Prerequisite to: Admission to MSET or MSTM, or permission of E.T. Department Chair.
e. Revise ET 556, **Architectural and Civil Engineering Technology Computer Aided Design**, to; change Prerequisite to: Admission to MSET or MSTM, or permission of E.T. Department Chair.