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The University of Akron Faculty Senate Chronicle

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## Faculty Senate Chronicle March 31, 1989

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CONTENTS

The following is a supplement to The University of Akron Chronicle,  
1988-89, No. 6, dated 3/27/89:

Page

Appendix to Minutes of University Council Meeting  
of 3/2/89

C. Curriculum Changes..... 2

Any comments concerning the contents of The University of Akron Chronicle may be directed to the Office of the Senior Vice President and Provost.

## APPENDIX C

### CURRICULUM CHANGES

The following curriculum changes, in accordance with the Curricula Change process adopted by University Council on December 12, 1974, have had final approval by the Senior Vice President and Provost, or through specific vote by University Council, all effective September 1989 (unless otherwise noted).

#### AS-89-4 Department of Mathematical Sciences

##### Description:

3450:100	Preparatory Mathematics. 3 credits. Prerequisite: Placement. A review of high school algebra: real numbers, exponents and radicals, factoring, linear and quadratic equations, graphing, systems of equations, and problem solving. For students whose algebraic skills are not sufficient to allow them to enroll in University mathematical science courses. Does not meet General Studies mathematics requirement.
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#### AS-89-5 Department of Mathematical Sciences

Add	3450:145	College Algebra. 4 credits. Prerequisite: Placement. Real numbers, equations and inequalities, linear and quadratic functions. Exponential and logarithmic functions. Systems of equations, matrices, determinants. Permutations and combinations.
Drop	3450:147 3450:148	Elementary Functions I. 3 credits. Elementary Functions II. 3 credits.

#### AS-89-8 Department of Mathematical Sciences

Add	3470:260	Basic Statistics. 3 credits. Prerequisite: Mathematics Placement Test. Applied approach to data description and statistical inference (hypothesis testing, estimation); one-sample parametric and nonparametric methods. Analysis of ratios, rates, and proportions. Computer applications.
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Add	3470:280	Introduction to Statistical Computing. 2 credits. Prerequisite: 3470:260 or 3470:262 or permission of the instructor. Introduction to statistical computing using statistical packages. Emphasis is on interpreting and using computer output of statistical problems involving descriptive statistics, hypothesis testing, regression, and analysis of variance.
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**AS-89-10 Department of Mathematical Science**

## Change in Prerequisite

3450:427/527	Introduction to Numerical Analysis	TO:
	3450:223 and 3460:201 or 330 or knowledge of FORTRAN	
3450:428/528	Numerical Linear Algebra	TO:
	3450:223 and 3460:201 or 330 or knowledge of FORTRAN	

## Title, Description, Outline

3450:429/529	Numerical Solutions for Ordinary Differential Equations. 3 credits. Prerequisite: 3450:427/527. Mathematical analysis of numerical methods for solving ordinary differential equations. Runge-Kutta and linear multi-step methods for initial value problems. Shooting, collocation, and difference methods for boundary value problems.
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**AS-89-13 Department of Accounting**

Add	3980:618	Citizen Participation. 3 credits. The fundamental theory, background, techniques and issues of citizen participation in urban policy-making.
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**AS-89-15 Department of Urban Studies**

Add	3980:633	Comparative Planning. 3 credits. A survey of national, regional and local planning institutions, plans and planning implementation measures in use in the developed world. Particular attention will
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be given to the planning experiences of European nations and their impact on American planning theory and practice.

**AS-89-16 Department of Urban Studies**

Clarification of foreign language requirement for Doctor of Philosophy in Urban Studies

Add To Page 146 - General Bulletin - Plan C: "Urban Studies" to the list of doctoral programs.

Add To Page 149 - General Bulletin - to the degree requirements for the Doctor of Philosophy in Urban Studies: "Doctoral language requirements or appropriate alternative research skills and techniques may be prescribed by the student's advisory committee, depending upon the career plans of the student and upon the academic and/or scientific requirements of the dissertation."

**AS-89-17 Department of Biology**

Drop	3100:449/549	Plant Biosystematics.	2 credits.
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**AS-89-18 Department of Biology**

Add	3100:448/548	Economic Botany.	2 credits.
		Prerequisite: 3100:111/112 or instructor's permission. A survey of economically important plants and plant products, excluding food plants. Includes wood and fiber, dyes, drugs, resins, latex and other extractives.	

**AS-89-21 Department of Geology**

Title, Description

3370:425/525	Stratigraphy.	3 credits. T0:
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Advanced Stratigraphy. 3 credits.  
Prerequisites or corequisites: 360, 324 or permission. Emphasis on correlation, depositional systems, sedimentation and tectonics, seismic stratigraphy, and terrain analysis. Laboratory in the field.

**AS-89-22 Department of Geology**

Revise program in Geophysics Option of B.S. in Geology

Add Science Electives - 9 credits. At least three of the following courses:

3460:201	Introduction to FORTRAN Programming. Equivalent	2 credits. OR:
3650:350	Computational Physics.	3 credits.
3650:406	Waves.	3 credits.
3650:431	Mechanics I.	3 credits.
3650:436	Electromagnetism I.	3 credits.

3650:431 and 3650:436 are strongly recommended for students planning to pursue a graduate degree in geophysics.

Drop	3650:431	Mechanics.	3 credits.
	3650:436	Electricity and Magnetism.	3 credits.

**AS-89-25 Department of Mathematical Sciences**

Add	3460:428/528	UNIX System Programming. Prerequisite: 3460:426 and (330 or knowledge of C). An overview of the UNIX operating system. Shell programming. Process management, processor management, storage management, scheduling algorithms, resource protection, and system programming.	3 credits.
	3460:610	Symbolic and Numerical Methods. Prerequisite: 3450:223 and (3450:312 or 428/528, or 410/510) and (3460:330 or knowledge of Lisp). Computer applications of symbolic methods using an advanced symbol manipulation language (MACSYMA). Lisp-level programming for MACSYMA. Theoretical and practical aspects of combining symbolic and numerical methods.	3 credits.

**AS-89-26 Department of Mathematical Sciences**

Revise Bachelor of Science Degree in Computer Science as follows:

Bachelor of Science -

- \* The General Studies and the second year of a foreign language
- \* Core Curriculum:



3460:209	Computer Programing I	3 credits.
3460:210	Computer programming II	3 credits.
3460:306	Assembly Language Programming	3 credits.
3460:307	Applied Systems Programming	3 credits.
3460:316	Introduction to Data Structures	3 credits.
3460:330	Survey of Programming Languages	3 credits.
3460:418	Introduction to Discrete Structures	3 credits.
3460:420	Structured Programming	3 credits.
3460:426	Operating Systems	3 credits.

Options:Mathematics

## \* Other Required Courses:

3450:221	Analytic Geometry-Calculus I	4 credits.
3450:222	Analytic Geometry-Calculus II	4 credits.
3450:223	Analytic Geometry-Calculus III	4 credits.
3450:427	Introduction to Numerical Analysis	3 credits.
3450:461	Applied Statistics	4 credits.

Select one of the following two courses:

3450:312	Linear Algebra	3 credits.
3450:428	Numerical Linear Algebra	3 credits.

Electives -- approved upper-level computer science courses 12 credits.

Business

## \* Other required courses:

3250:201	Principles of Macroeconomics	3 credits.
3250:201	Principles of Microeconomics	3 credits.
3450:215	Concepts of Calculus I	4 credits.
3450:216	Concepts of Calculus II	4 credits.
3450:115	Linear Programming	1 credit.
3460:302	Programming Applications with COBOL	3 credits.
3460:475	Data Base Management	3 credits.
3470:461	Applied Statistics	4 credits.

## \* Select two of the following three courses:

6400:371	Business Finance	3 credits.
6500:371	Management: Principles and Concepts	3 credits.
6600:300	Marketing Principles	3 credits.

\* Electives -- approved upper-level computer science courses 6 credits.



**AS-89-28 Department of Mathematical Sciences**

Add	3470:663	Experimental Design	3 credits.
		Selected topics in experimental design including random and fixed effects, nested designs, split plot designs, confounding, fractional factorials, latin squares, and analysis of covariance.	
Drop	3470:463/563 3470:644	Experimental Design Advanced Experimental Design	

**AS-89-29 Department of Mathematical Sciences**

## Title, Description

3470:461/561	Applied Statistics	TO:
	Applied Statistics I Applications of statistical theory to natural and physical sciences and engineering, including probability distributions, interval estimation, hypotheses testing (parametric and nonparametric), and simple linear regression and correlation.	

## Prerequisites:

3470:465/565	Design of Sample Survey	TO:
	3470:461/561 or equivalent	
3470:665	Linear Model	TO:
	3470:651 or equivalent and 3470:620 or equivalent	

**AS-89-30 Department of Mathematical Sciences**

Add	3470:415/515	Mathematical Concepts for Statistics	4 credits.
		Prerequisites: 3450:223, 3450:312, or equivalent. Topics from matrix algebra and analysis: quadratic forms, eigenvalues and roots, generalized inverses, vector functions, continuity, differentiation, extrema problems, multivariate integration, infinite series, and application. May not be used to meet graduate degree requirements for mathematical sciences majors.	

Add	3470:462/562	Applied Statistics II Prerequisite: 3470:461/561 or equivalent. Applications of the techniques of regression and multifactor analysis of variance.	4 credits.
Add	3470:467/567	Response Surface Methodology Prerequisite: 3470:462/562 or equivalent. First and second order response surface designs, efficient experimental plans, methods for the analysis, and optimization of response functions.	3 credits.
Add	3470:495/595	Statistical Consulting Prerequisite: 3470:480/580 or permission. Students will be assigned to work with an instructor on current projects in the Center for Statistical Consulting. May be repeated for a total of 4 credits; however, only 2 credits will count toward major requirements. Does not count for elective credit for Math Science Department majors.	1 credit.
Add	3470:699	Thesis Research (May be repeated for a total of 4 credits) Prerequisite: Permission. Properly qualified candidates for master's degree may obtain 2-4 credits for research experience which culminates in presentation of faculty-supervised thesis.	2 credits.

**AS-89-31 Department of Mathematical Sciences****Revise Bulletin Description**

3470: Statistics  
Bachelor of Science  
Bachelor of Arts

The General Studies and the second year of a foreign language.

**Core Curriculum:**

3450:221	Analytic Geometry-Calculus I	4 credits.
3450:222	Analytic Geometry-Calculus II	4 credits.
3450:223	Analytic Geometry-Calculus III	4 credits.
3450:312	Linear Algebra	3 credits.
3470:451	Theoretical Statistics I	3 credits.
3470:452	Theoretical Statistics II	3 credits.
3470:461	Applied Statistics I	4 credits.
3470:462	Applied Statistics II	4 credits.



Options:Option I:

## Other Required Courses:

3450:421	Advanced Calculus I	3 credits.
3450:422	Advanced Calculus II	3 credits.
	Electives--approved 300/400-level Mathematical Sciences courses	5 credits.

Option II:

## Other Required Courses:

3470:415	Mathematical Concepts for Statistics	4 credits.
3470:400	Statistical Consulting	2 credits.
3470:480	Statistical Computer Applications	3 credits.
	Electives--approved 300/400-level statistical courses	2 credits.

**AS-89-32 Department of Mathematical Sciences**Revise Bulletin Description - Master of Science Degree - StatisticsCore Curriculum:

3470:651	Probability and Statistics	4 credits.
3470:652	Advanced Mathematical Statistics	3 credits.
3470:655	Linear Models	3 credits.
3470:663	Experimental Design	3 credits.
3470:665	Regression and Correlation	3 credits.
3470:692	Mathematics and Statistics Seminar	2 credits.

Thesis Option:

(30 credits of graduate work)  
In addition to the core curriculum,  
8-10 credits in 500/600 level mathematical  
sciences courses and 2-4 credits in  
3470:699 Thesis Research must be completed.

Non-Thesis Option:

(33 credits of graduate work).  
In addition to the core requirements,  
15 credits in 500/600 level mathematical  
sciences courses must be completed.

A comprehensive examination, taking the  
form suggested by the Department, must be  
completed in the thesis or non-thesis  
options.



With the consent of the Department, up to 6 credits of approved graduate-level electives outside the Department may be substituted in the thesis or non-thesis option.

### AS-89-33 Department of Chemistry

#### Changes in Admission, Retention, and Graduation Policy

##### Statement of Policies - Admission

Effective fall semester, 1989, for students enrolled at The University of Akron and for students wishing to transfer directly to Buchtel College of Arts and Sciences from other institutions, THE FOLLOWING CRITERIA MUST BE SATISFIED FOR ADMISSION TO THE DEPARTMENT OF CHEMISTRY:

1. The student must be admissible to Buchtel College of Arts and Sciences.
2. Principles of Chemistry I and II, Qualitative Analysis, Organic Chemistry Lecture I, Analytical Geometry and Calculus I and II, and Elementary Classical Physics I, must be completed, and the grades must have been recorded. For the Bachelor of Arts in the Chemistry program, Elementary Classical Physics I may be replaced by Physics for Life Sciences I.
3. A minimum grade point average of 2.30 must be met in all university work, including transfer credits.
4. A minimum grade point average of 2.30 must be met in all work in major field, including transfer credits.
5. A minimum grade point average of 2.30 must be met in all work in the major on The University of Akron campus.
6. A minimum grade point average of 2.00 must be met in all work in mathematics, including transfer credits.
7. A minimum grade point average of 2.00 must be met in all work in physics, including transfer credits.

Only credits earned at an accredited institution of postsecondary education, as recognized by The University of Akron, will be considered for transfer credit and only those grades will be considered in the grade point average.

An exception to this admission policy is that Honors Program students who choose Chemistry as their major are automatically admitted to the Department.



Retention

STUDENTS IN THE CHEMISTRY PROGRAMS MUST MAINTAIN A MINIMUM GRADE POINT AVERAGE OF 2.30 OVERALL AND A MINIMUM 2.30 GRADE POINT AVERAGE IN CHEMISTRY COURSES IN ORDER TO REMAIN IN THE PROGRAM. A student who fails to maintain the 2.30 cumulative average, including transfer credits, will be placed on academic probation. Failure to raise the average to 2.30 in a period of one semester or one 10-week summer session will result in dismissal from the program. The student may not apply for readmission for at least one semester.

A student receiving a grade below C- in a required chemistry course will be required to repeat the course.

Graduation

The student must earn a 2.30 cumulative grade point average in chemistry coursework on The University of Akron campus and a 2.30 cumulative grade point average for all chemistry coursework including transfer credits.

Grades below C- obtained in any course at other institutions will not apply toward a chemistry degree at The University of Akron. Grades below C- obtained in chemistry courses will not apply toward the chemistry degree.

The student must earn a 2.30 cumulative grade point average in all degree coursework.

AS-89-34 Department of Political Science

3700:395

Internship in Government and Politics. TO: 2-9 credits.  
(May be taken twice for a total of nine hours. No more than four credits may be applied toward major in political science.)  
Prerequisite: Three courses in political science at The University of Akron, 2.00 average in political science, and permission of instructor. Supervised individual placement with political office holders, party groups, governmental agencies, law firms and other organizations providing professional level work.

3700:695

Internship in Government and Politics. TO: 3-6 credits.  
(May be repeated for a total of six credits.) Prerequisite: Permission of graduate adviser. Supervised individual placement with political office holders, party groups, governmental agencies, law firms and other organizations providing professional level work.



**AS-89-36 Department of Political Science**

Add 3700:410/510 International Defense Policy. 3 credits.  
 Prerequisite: At least one of the following: 3700:220, 310; 3400:340, 360, 407, 408 or permission. Introduction to political uses of military forces. Major focus on methodological, conceptual and ethical dilemmas confronted in developing and implementing defense policy.

**AS-89-37 Department of Political Science**

Add 3700:411/511 Theories of International Political Economy. 3 credits.  
 Prerequisite: 3700:310 or permission of instructor. This course examines the predominant and competing theories of international political economy, including imperialism, world systems analysis, long-wave theory, neo-mercantilism, and neo-realism.

**AS-89-38 Department of Economics****Title, Description**

3250:606	Public Finance.	3 credits.	T0:
	Economics of the Public Sector.	3 credits.	
3250:405	Public Finance.	3 credits.	T0:
	Economics of the Public Sector.	3 credits.	
	Prerequisites: 201, 202. Considers nature and scope of government activity, rationale for government intervention, problems of public choice, taxation and revenue-raising, cost-benefit analysis, program development and evaluation.		
3250:637	Labor Law II.	3 credits.	T0:
3250:637	Employment Law.	3 credits.	
	Study of selected aspects of legislation and case decisions affecting employer-employee relations. Topics include employment-at-will; health and safety; wage, hours and benefits; arbitration.		



**BA-89-06 Business Administration - Pre-Business Phase**

Revise Program  
General Bulletin Description - Page 90  
Requirements for Admission

The College will accept the student who has completed sufficient course work to indicate possession of the necessary ability and desire to earn a business administration degree. The number of credits to have been completed will vary from student to student, but will be at least 45 credits with a 2.30 overall grade-point average at the time of acceptance. The following course work must be included in the 45-hour requirement.

- . 3450:145 and 3450:215
- . a behavioral science course
- . 3250:201 or 3250:202
- . 6200:201

Enrollment in upper-college business courses is limited to a student who has done the following:

- . applied for transfer to the college;
- . successfully completed at least 60 credits;
- . earned at least a 2.30 overall grade-point average required;
- . for acceptance and at least a 2.00 grade-point average in business administration and economics courses.

Add	3450:145	College Algebra*.	4 credits.
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\*or equivalent.

**BA-89-07 Business Administration**

Revise Program  
Change in Bulletin Description  
General Bulletin Page 90

**Requirements for Graduation**

To receive a baccalaureate degree from the College of Business Administration, a student must meet the following requirements;

- . Complete a minimum of 128 semester credits with a minimum 2.00 grade-point average. Not more than one credit of physical education may be included.
- . Obtain at least a 2.00 grade-point average in all courses in the major as well as in all courses in business administration and economics.

- . Receive admission to the College of Business Administration and earn at least 15 credits within the College after admission is granted.
- . Obtain the recommendation of the department head.
- . Complete other University requirements listed in Section 3 of this Bulletin.
- . General Studies - 36 credits.
- . Complete the following courses:

\*These are pre-business administration requirements.

#### CT-89-6 Public Service Technology Division

##### New Program - Legal Assisting

##### Admission Requirements

Since class size is limited and firms will hire only superior students, persons admitted to the program should meet one of the following requirements:

1. 3.0 high school GPA on a 4.0 scale.
2. Top one-third nationwide on SAT or ACT scores;
3. High school graduate with at least three years' experience in a law office at any level.

Only those students who attain a 2.5 GPA after the first semester (based on a minimum of 12 hours) will be allowed to continue in the program.

1100:	Physical Education	1 credit.
1100:106	Effective Oral Communication.	3 credits.
2020:121	English	4 credits.
2020:131	Mathematical Analysis I	4 credits.
2020:222	Technical Report Writing	3 credits.
2020:240	Human Relations	3 credits.
2220:104	Evidence and Criminal Legal Process	3 credits.
2290:101	Introduction to Legal Assisting	3 credits.
2290:104	Basic Legal Research and Writing	3 credits.
2290:106	Business Associations	3 credits.
2290:108	Real Estate Transactions	3 credits.
2290:110	Tort Law	3 credits.
2290:112	Family Law	3 credits.
2290:118	Probate Administration	4 credits.
2290:204	Advanced Legal Research	3 credits.



2290:214	Civil Procedure	3 credits.
2290:216	Debtor-Creditor Relations	3 credits.
2290:218	Advanced Probate Administration	3 credits.
2290:220	Legal Assisting Internship	4 credits.
2420:211	Basic Accounting	3 credits.
2440:120	Computer and Software Fundamentals	2 credits.
	Electives	3 credits.
	Electives	3 credits.

Add	2290:101	Introduction to Legal Assisting. 3 credits. Covers the basics of legal assisting emphasizing the fundamental concepts of the legal system. Includes overview of legal assistant career and ethical considerations relative thereto.
	2290:104	Basic Legal Research and Writing. 3 credits. Prerequisite: 2290:101. Will provide the student with basic research abilities necessary in law offices. Includes the use of law library tools (reporter systems, legal encyclopedias, codes, and computer).
	2290:106	Business Associations. 3 credits. Prerequisite: 2290:101. Instructs students in different types of business entities, from sole proprietorships to corporations. Preparation of forms and necessary governmental filings will be stressed.
	2290:108	Real Estate Transactions. 3 credits. Prerequisite: 2290:101. Acquaints students with basic real property law, including different types of deeds, ownerships, easements, and mortgages. Problems arising from sales agreements will be covered.
	2290:110	Tort Law. 3 credits. Prerequisite: 2290:101. Covers the traditional civil wrongs, from the plaintiff's and defendant's standpoints. Actual cases will be briefed and discussed. Stresses importance of preparation prior to trial.



- 2290:112      Family Law.      3 credits.  
Prerequisite: 2290:101. Covers divorce and dissolution of marriage including child support, custody, alimony, etc. Client interviewing is stressed. Juvenile court procedures are covered, including neglect and abuse.
- 2290:118      Probate Administration.      4 credits.  
Prerequisite: 2290:101. Covers law necessary to draft and interpret wills, trusts. Includes administration of a typical estate within Probate Court. Touches on guardianships, commitment of mentally ill.
- 2290:218      Advanced Probate Administration. 3 credits.  
Prerequisite: 2290:101; 2290:118. This is a continuation of -110 but will cover the more complicated trusts and estates and will stress both state and Federal tax filings.
- 2290:214      Civil Procedure.      3 credits.  
Prerequisite: 2290:101. Covers aspects of legal assisting in different types of civil litigation. Includes Ohio Rules of Civil Procedure, preparation of complaints, answers, motions, basic trial preparation.
- 2290:204      Advanced Legal Research.      3 credits.  
Prerequisite: 2290:101; 2290:104. Continuation of 104. Will especially stress importance of clear, concise legal writing. Students will write briefs, motions, and complaints as part of their endeavor.
- 2290:216      Debtor-Creditor Relations.      3 credits.  
Prerequisite: 2290:101. Course covers bankruptcy, collection methods, consumer law, and credit. Course stresses law and procedures and the numerous forms that are part of this practice.
- 2290:220      Legal Assisting Internship.      4 credits.  
Prerequisite: (1) 2290:101; (2) Student must have completed all first-year courses. Gives students experience in law or law-related office. Students work fourteen hours per week in their placement and meet regularly with the Internship Coordinator.



**CT-89-7 Public Service Technology Division****New Program (Certificate) Legal Assisting**

This certificate prepares students who already have earned an academic degree or who already have basic English reading and writing skills to gain the technical courses necessary to assist lawyers participating in the private practice of law, corporate law, or agency practice.

**Admission Requirements:**

Students interested in the Certificate Program, which can be completed within one academic year, must meet one of the following criteria in order to be admitted:

1. Bachelor's degree;
2. Associate degree;
3. Three years experience in providing legal assistance in a law office (within the past five years). Students must get their experience verified and it must be approved by the Program Coordinator.

**Graduation Requirements:**

1. 2.0 gpa in major;
2. Minimum of 31 credits as in curriculum outline;
3. No grade below a "C" in major.

2290:101	Introduction to Legal Assisting	3 credits.
2290:104	Basic Legal Research and Writing	3 credits.
2290:106	Business Associations	3 credits.
2290:108	Real Estate Transactions	3 credits.
	Elective	4 credits.
2290:118	Probate Administration	4 credits. OR:
2290:220	Legal Assisting Internship	4 credits.
2290:110	Tort Law	3 credits*
2290:112	Family Law	3 credits*
2290:204	Advanced Legal Research	3 credits*
2290:210	Advanced Probate Administration	3 credits*
2290:212	Debtor-Creditor Relations	3 credits*
2290:214	Civil Procedures	3 credits*
2290:220	Legal Assisting Internship	4 credits*

\* Students are required to take 15-16 hours from the above selections.

Students interested in a Probate emphasis shall take 2290:204, 2290:210, and three other courses of their choice during the Spring Semester.



Students interested in a Civil Litigation emphasis shall take 2290:220, 2290:204, 2290:214, and two other courses of their choice during the Spring Semester.

### CT-89-8 Business Technology Division

Add	2540:265	Women in Management.	3 credits.
		Deals with gender-related needs and problems of women in management and supervision.	

### CT-89-10 Allied Health Technology Division

Add	2740:100	Introduction to Medical Assisting.	2 credits.
		Medical Assistant role on Allied Health Team, history of medicine, medical practice, medical law and ethics, patient reception, oral and written communications, scheduling.	

Add	2780:106 2780:107	Anatomy and Physiology for Allied Health I and II.	3 credits per semester for total 6 credits - no lab.
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Add	2740:121	Study of Disease Processes for Medical Assisting.	3 credits.
		Prerequisite: 2740:120. Review of medical terminology, study of diseases and treatments of all body systems, and grieving process.	

Drop	2540:263	Business Communications.	3 credits.
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Drop	3100:206, 207	Anatomy and Physiology.	8 credits.
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#### Change in Prerequisites:

2740:120	Medical Terminology	T0:
	None	

2740:135	Medical Techniques I	T0:
	2740:100; 2740:120; or permission	

2740:230	Basic Pharmacology	T0:
	None	

2740:235	Medical Techniques II	T0:
	2740:135, 2740:121	

2740:240	Medical Transcription	T0:
	2540:151, 2740:121	

2740:241	Medical Records 2540:130, 2740:121	T0:
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2740:250	Medical Assisting Specialties 2740:235, 2740:121	T0:
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Revise Medical Assisting Technology Program as follows:

Drop	2540:263 3100:206, 207	Business Communications. Anatomy and Physiology.	3 credits. 4 credits.
Add	2740:100	Introduction to Medical Assisting.	2 credits.
	2740:121	Study of Disease Process for Medical Assisting.	3 credits.
	2780:106	Anatomy and Physiology for Allied Health I.	3 credits.
	2780:107	Anatomy and Physiology for Allied Health II.	3credits.
	2740:135	Medical Assisting Techniques I. 4 credits. Introduction to medical laboratory, theory and practice in preparation for physical examinations, vital signs, EKG, microbiology, medical and surgical asepsis, medical law and ethics.	
	2740:235	Medical Assisting Techniques II. 4 credits. Theory and practice in minor hematology laboratory tests, urinalysis, administering medications, and assisting with minor office surgery.	

**CT-89-11 Allied Health Technology Division**

Revise Respiratory Care Program as follows:

Add	2780:106-107	Anatomy and Physiology for Allied Health.	3 credits each.
Drop	3100:206-207	Human Anatomy and Physiology.	4 credits each.

**CT-89-12 Business Technology Division**

Revise Transportation Airline/Travel Option as follows:

Add	2560:231	Computerized Reservations I.	2 credits.
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Add	2560:2332	Computerized Reservations II.	2 credits.
Drop		Electives	4 credits.

**CT-89-13 Allied Health Technology Division****New Certificate Program - Surgeon's Assistant**

The certificate program, Surgeon's Assistant, provides skills necessary to function as a surgeon's assistant and all the courses needed to sit for the certifying exam. It will enable students to meet short range goals in acquiring skills for immediate job placement.

2770:153	Clinical Experience III	5 credits.
2770:254	Clinical Experience IV	3 credits.
2770:255	Clinical Experience V	5 credits.
2770:249	Surgical Anatomy II	3 credits.
2770:243	Intro to Medicine	2 credits.
2770:244	History & Physical Evaluation	2 credits.
2770:245	Roentgenogram Assessment	1 credit.
2770:246	Medical Laboratory Procedures	1 credit.
2770:247	Pulmonary Assessment; EKG	2 credits.
2770:256	Primary Care: Clinical Experience	2 credits.
Total		26 credits.

**CT-89-14 Allied Health Technology Division****New Certificate Program - Surgical Technologist**

The certificate program, Surgical Technologist, provides skills necessary to function as a surgical technologist and all the courses needed to sit for the certifying exam. It will enable students to meet short-range goals in acquiring skills for immediate job placement.

2770:100	Intro to Surgical Assisting	4 credits.
2770:121	Surgical Assisting Procedures I	2 credits.
2770:222	Surgical Assisting Procedures II OR	4 credits.
2770:249	Surgical Anatomy II*	
2770:131	Clinical Application I OR	2 credits.
2770:151	Clinical Experience I*	
2770:232	Clinical Application II OR	5 credits.
2770:152	Clinical Experience II*	
2770:233	Clinical Application III	5 credits.
2740:120	Medical Terminology	3 credits.
3100:206	Anatomy and Physiology	4 credits.
3100:207	Anatomy and Physiology	4 credits.
3100:130	Principles of Microbiology	3 credits.
Total		36 credits.



\*Clinical Experience I and II will be accepted in place of Clinical Applications I and II for students who have completed the Surgeon's Assistant Option. Surgical Anatomy II will be accepted in place of Surgical Assisting Procedures II for students who have completed the Surgeon's Assistant Option.

#### CT-89-15 Engineering and Science Technology

Add	2920:110	Fundamental Science for Automotive Technology. 4 credits. Prerequisite: 2020:130 with grade "C" or better. Scientific relationships of automotive systems: force, work, energy, friction, fluid properties, and thermodynamic principles of the engine. Credit not applicable toward the AAS, Mechanical Technology.
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#### CT-89-16 Engineering & Science Technology Division

Add	2860:110	Basic Electricity and Electronics. 4 credits. Prerequisite: 2020:130 or equivalent. Principles of electronics: resistors, inductance, capacitance, transistors, microprocessors, power sources, motors, generators, test equipment, circuit diagnosis, troubleshooting. Credit not applicable toward the AAS, Electronic Technology.
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#### CT-89-17 Engineering & Science Technology Division

Add	2880:110	Manufacturing Processes. 2 credits. Study of the machines, methods, and processes used in manufacturing.
Add	2980:231	Building Construction. 2 credits.
Drop	2940:160	Manufacturing & Construction Processes. 2 credits.

#### CT-89-18 Associate Studies Division

Add	2020:151	Elements of Mathematics I. 2 credits. Prerequisites: One year of high school algebra or equivalency test. Fundamental concepts and operations, functions and graphs, factoring and fractions, variation, quadratic equations.
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- Add 2020:152 Elements of Mathematics II. 2 credits.  
Prerequisite: 151 or two units of high school mathematics and placement test. Trigonometric functions, systems of linear equations, determinants, trigonometric functions of any angle, the straight line, radians, the j-operator.
- Add 2020:153 Elements of Mathematics III. 2 credits.  
Prerequisite: 152 or equivalent. Complex numbers, vectors and oblique triangles, exponents and radicals, binomial theorem, exponential and logarithmic functions.
- Add 2020:154 Math for Engineering Technology I. 3 credits.  
Prerequisite: 153 or equivalent. Graphs of the trigonometric functions, additional topics in trigonometry, equations of higher degree, plane and analytic geometry.
- Add 2020:255 Math for Engineering Technology II. 3 credits.  
Prerequisite: 154 or equivalent. The derivative, applications of the derivative, integration, derivatives of the trigonometric, inverse trigonometric, exponential, and logarithmic functions, integration by standard forms.
- Add 2020:356 Math for Engineering Technology III. 3 credits.  
Prerequisite: 255 or equivalent. Applications and methods of integration, first and second order differential equations, series expansion, Laplace Transforms, partial derivatives, double integrals.

**CT-89-20 Business Technology Division**

- Add 2440:247 Microcomputer Hardware and Software Selection. 3 credits.  
Prerequisite: 2440:125; 2440:151; 2440:245. Familiarizes students with the advantages and disadvantages of the microcomputer hardware and software available. Product comparisons, selection criteria, and evaluation are explored.

**CT-89-21 Business Technology Division**

Title

2520:212

Principles of Salesmanship

TO:

Principles of Sales

**CT-89-23 Business Technology Division**

Description

2280:237

Internship.

1 credit.

Prerequisite: Permission. On/off campus observation/work experience integrated with academic instruction. Concepts applied to practical situations. May be repeated for a total of two credits.

**CT-89-27 Engineering & Science Technology Division**

Change in Title

2920:346

Mechanical Design II

TO:

Mechanical Design III

**CT-89-30 Business Technology Division**

Description

2440:131

Introduction to Programming.

2 credits.

Corequisite: 2440:120 Computer and Software Fundamentals. Teaches fundamental programming concepts in a high-level language such as Pascal. Also provides experience with on-line job submission for batch execution by mainframe computers.

**CT-89-33 Business Technology Division**

Revise Transportation Airline/Travel Option as follows:

Add

2540:141

PC Word Processing for nonmajors as an alternative to 2540:140 Keyboarding for Nonmajors.



**CT-89-34 Associate Studies Division****Title**

2020:251	Work Relationships.	3 credits.	T0:
	Human Behavior at Work.	3 credits.	

**Ed-89-02 Health and Physical Education**

Add the following four Options to the Graduate Program in Physical Education:

Exercise Physiology/Adult Fitness  
Educational Foundations (Required Major)

5100:600	Philosophies of Education.	3 credits OR:
5100:604	Topical Seminar in the Cultural Foundations of Education.	3 credits.
5100:620	Behavioral Bases of Education.	3 credits OR:
5100:624	Seminar in Human Development and Education.	3 credits.
5100:640	Techniques of Research.	3 credits.
3100:561	Human Physiology.	4 credits.
3100:562	Human Physiology.	4 credits.
5550:601	Administration of Health, Physical Education, Recreation and Athletics.	3 credits.
5550:605	Physiology of Muscular Activity and Exercise.	2 credits.
5550:606	Measurement and Evaluation in Physical Education.	3 credits.
5550:609	Motivational Aspects of Physical Activities.	3 credits.
5550:695	Field Experience: Master's (at least 2 credits if only option selected).	1-6 credits OR:
5550:698	Master's Problem.	2-4 credits OR:
5550:699	Thesis Research.	4-6 credits.

Total Minimum Credits this Section 21-25

Electives at least two credits from the following list with consent of the advisor:

3100:565	Advanced Cardiovascular Physiology.	3 credits.
5100:520	Introduction to Computer Based Education.	3 credits.
5100:741	Statistics in Education.	3 credits.

5100:743	Advanced Educational Statistics.	3 credits.
5550:5--	Workshops in Sports Medicine.	1-3 credits.
5550:695	Field Experience Master's.	1-6 credits.
5550:697	Independent Study.	1-3 credits.
5550:680	Special Topics in Health and Physical Education.	2-4 credits.

Total Minimum Credits this Section	2
Total Minimum Credits	32

Sport BehaviorEducational Foundations (Required Education)

5100:600	Philosophies of Education.	3 credits OR:
5100:604	Topical Seminar in Cultural Foundations of Education.	3 credits.
5100:620	Behavioral Bases of Education.	3 credits OR:
5100:624	Seminar: Educational Philosophy.	3 credits.
5100:640	Techniques of Research.	3 credits.

Required Courses (Required Major)

5550:601	Administration of Health, Physical Education, Athletics and Recreation.	3 credits.
5550:605	Physiology of Muscular Activity and Exercise.	2 credits.
5550:606	Measurement and Evaluation in Physical Education.	3 credits.
5550:609	Motivational Aspects of Physical Activity.	3 credits.
5550:680	Special Topics in Health and Physical Education (may be repeated)	2-4 credits.
5550:695	Field Experience: Master's (at least 2 hours if only option selected).	1-6 credits OR:
5550:698	Master's Problem	2-4 credits OR:
5550:699	Thesis Research.	4-6 credits.

Behavior Electives at least four credits, limited to two courses in Psychology, from the following:

3750:610	Psychology Core I: Organizational, Social and Applied.	4 credits.
3750:620	Psychology Core II: Developmental, Perceptual and Cognitive.	4 credits.



3750:630	Psychology Core III: Counseling, Individual and Abnormal.	4 credits.
3750:640	Psychology Core IV: Sensory, Biopsychological and Experimental.	4 credits.
3850:631	Social Psychology.	3 credits.
3850:632	Small Group Theory.	3 credits.
3850:680	Sociology of Education.	3 credits.
5100:721	Learning Processes.	3 credits.
5100:741	Statistics in Education.	3 credits.
5100:743	Advanced Educational Statistics.	3 credits.
5550:697	Independent Study.	3 credits.
5600:600	Seminar in Counseling.	1 credit.
5600:610	Counseling Skills for Teachers.	3 credits.
5600:620	Topical Seminar.	1-4 credits.
5600:643	Counseling: Theory and Philosophy.	3 credits.
5610:540	Development Characteristics of Exceptional Individuals.	3 credits.
Total Minimum Credits this Section		4
Additional hours to be selected from above courses to total 32 credits.		
Total program credits		32.

Sport Management

5100:600	Philosophies of Education.	3 credits OR:
5100:604	Topical Seminar in Cultural Foundations of Education.	3 credits.
5100:620	Behavioral Bases of Education.	3 credits OR:
5100:624	Seminar: Educational Philosophy.	3 credits.
5100:640	Techniques of Research.	3 credits.

Required Courses

5550:601	Administration of Health, Physical Education, Recreation and Athletics.	3 credits.
5550:605	Physiology of Muscular Activity and Exercise.	2 credits.
5550:608	Supervision of Physical Education.	2 credits.
5550:609	Motivational Aspects of Physical Activity.	3 credits.
5550:695	Field Experience: Master's.	6 credits.

Business Administration Electives at least three of the following courses:

6200:570	Governmental and Industrial Accounting.	3 credits.
6200:601	Financial Accounting.	3 credits.
6200:610	Accounting Management and Control.	3 credits.
6200:670	Cost Concepts and Control.	3 credits.
6200:699	Seminar in Accounting.	3 credits.
6500:580	Introduction to Health Care Management.	3 credits.
6500:683	Health Services Systems Management.	3 credits.
6600:540	Product Planning.	3 credits.
6600:600	Marketing Concepts.	3 credits.
6600:620	Strategic Marketing Management.	3 credits.

Total Minimum Credits 34

Curriculum Design and Implementation

The Curriculum Design and Implementation Option is designed for teachers of all age groups in physical education. It contains a balance of course work associated with curriculum design models, implementation procedures and contemporary content.

Program Option

Educational Foundations (Required Education)

5100:600	Philosophies of Education	3 credits OR:
5100:605	Topical Seminar in Cultural Foundations of Education	3 credits
5100:620	Behavioral Bases of Education	3 credits OR:
5100:624	Seminar in Human Development and Education	3 credits
5100:640	Techniques of Research	3 credits

Total Minimum Credits this Section 9 credits

Required Courses (Required Major):

5550:536	Adapted Physical Education Tasks for the Learning Disabled Child	2 credits.
5550:603	Curriculum Planning in Health & Physical Education	2 credits



5550:606	Measurement and Evaluation in Physical Education	3 credits OR:
5550:608	Supervision of Physical Education	2 credits

Select one of the following:

5550:601	Administration of Health, Physical Education, Athletics and Recreation	3 credits OR:
5550:609	Motivational Aspects of Physical Activity	3 credits OR:
5550:680	Special Topics (may be repeated to six credits with advisor's consent)	2-4 credits

Select at least one of the following:

5550:695	Field Experience: Master's (at least 2 credits if only option selected)	1-6 credits OR:
5550:698	Master's Problem	2-4 credits OR:
5550:699	Master's Thesis Research	4-6 credits

Total Minimum Credits This Section 10

Elementary or Secondary Education Required Course(s)

5200:630	Elementary School Curriculum and Instruction	2 credits AND/OR:
5300:619	Secondary School Curriculum and Instruction	2 credits

Total Minimum Credits This Section 2

Outdoor Education

5550:550	Application of Outdoor Education to the School Curriculum	4 credits
5550:556	Outdoor Pursuits	4 credits

Total Minimum Credits This Section 8

Additional hours to be selected from above courses to  
total at least 32.

Total Minimum Credits 32

**ED-89-03 Educational Foundations**

Change of Thesis Research requirement for the Master of Arts in Education (Department of Educational Foundations).

To modify the existing Master of Arts in Education programs in the Department of Educational Foundations by requiring either Thesis Research (5100:699) or Masters Problem 5100:698.

The student will earn a minimum of 15 credits excluding thesis, within the Department of Educational Foundations. These credits will be distributed between humanistic studies and behavioral studies with a minimum of nine credits from one of these areas and six credits from the other (college requirements may be included).

**ED-89-06 Counseling and Special Education**

Add	5610:485	Student Teaching - Special Education. 8 credits. Prerequisite: Completion of major program requirements-permission. A full-time eight week (Summer - 5 week) planned teaching experience in a designated setting with exceptional children under the supervision of the cooperating teacher and the University supervisor.
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**EN-89-03 Civil Engineering**

4300:794	Advanced Seminar in Civil Engineering. 1-3 credits.	TO:
4300:694	Advanced Seminar in Civil Engineering. 1-3 credits. Prerequisite: Permission. Advanced projects, reading, studies or experimental courses in various areas of civil engineering.	
4300:698	Special Problems 1-2 credits.	TO:
4300:698	Special Problems 1-4 credits. Prerequisite: Permission. (May be repeated for a total of four credits). Supervised research in student's major field. Topic selected by student subject to approval by advisor and graduate committee. Individual research should lead to a final report which will be graded by the advisor and graduate committee.	
4300:697	Special Problems. 1-2 credits.	TO:



4300:697 Masters Research. 1-9 credits.  
Prerequisite: Permission. Research on some suitable topic in civil engineering as approved by the department. Graded as credit/non-credit and can be repeated. Credit hours cannot be applied towards Masters degree.

#### EN-89-04 Civil Engineering

4300:464 Highway Design. 3 credits.  
Prerequisite: 4300:361 TO:

4300:464/564 Highway Design. 3 credits.  
Prerequisite: 4300:361. Study of modern design of geometrical and pavement features of highways. Design problem and computer use. Graduate students will produce a more complete design.

4300:414 Design of Earth Structures. 3 credits. TO:  
4300:414/514 Prerequisite: 4300:314 or permission.  
Design of earth structures: dams, highway fills, cofferdams, etc. Embankment construction techniques, quality control, embankment analysis, instrumentation, foundation soil stabilization, seepage analysis and control. Design problem. Graduate students will perform more advanced analysis and design.

#### EN-89-05 Mechanical Engineering

4600:633 Modal Analysis in Vibrations. 3 credits.  
TO:

4600:633 Computerized Modal Analysis of Structures. 3 credits.

#### EN-89-06 Mechanical Engineering

Add 4600:732 Advanced Modal Analysis of Structures. 3 credits.  
Prerequisite: 4600:633 or equivalent.  
Structural excitation techniques. Modal parameter estimation. System modification; mass/stiffness/damping matrices substructuring. Prediction and evaluation of structural modified dynamic characteristic.

**EN-89-07 Mechanical Engineering**

Drop      4600:426/526      Industrial Noise Control.      3 credits.

**EN-89-08 Electrical Engineering**

Add      4400:673      Nonlinear Control.      3 credits.  
Corequisites: 4400:674 Control System  
Theory or instructor permission. This  
course is designed to provide students with  
qualitative insights into nonlinear systems  
as well as techniques for controlling such  
systems. Topics include describing  
functions, Popov and circle criteria, jump  
resonances, subharmonics, phase plane,  
conservative systems, Lyapunov theory,  
bifurcation of attractors, and routes to  
chaos.

**EN-89-09 Mechanical Engineering**

Drop      4600:393      Internal Combustion  
Engines Lab.      2 credits.

**EN-89-10 Mechanical Engineering**

Drop      4600:396      Computer Methods Lab.      2 credits.

**EN-89-11 Mechanical Engineering**

Drop      4600:485      Mechanical Engineering  
Problems.      1-2 credits.

**EN-89-13 Biomedical Engineering**

Add      4800:620      Neural Networks.      3 credits.  
Examination of highly parallel, distributed  
architectures for computing that are, to  
varying degrees, derived from structures  
observed in biological nervous systems.  
After an overview of how real neurons  
operate, the course will examine both  
lassial and modern neural computing  
architectures. Comparisons will be made  
with traditional serial machines and  
applications for which neural networks seem  
most promising will be examined.



**EN-89-14 Biomedical Engineering**

Add      4800:621      Sensory Systems Analysis.      3 credits.  
Prerequisite: 4400:371 or equivalent, or  
by permission. Study of various sensory  
modalities from a systems engineering  
perspective. Techniques from linear and  
nonlinear systems analysis are applied to  
aspects of vision, hearing, touch and  
position sensing in humans. Comparisons  
are made with artificial emulations of  
these senses.

**EN-89-15 Biomedical Engineering**

Add      4800:635      Physiological Control Systems.      3 credits.  
Prerequisite: 4400:371 or equivalent, or  
by permission. Analyses of motor,  
circulator, homeostatic and other  
physiological functions are carried out  
from the perspective of control theory,  
both linear and nonlinear. Both  
similarities to and differences from  
traditional engineering systems will be  
presented. Computer simulations of several  
physiological systems will be developed.

**EN-89-16 Biomedical Engineering**

Add      4800:640      Spine Mechanics.      3 credits.  
Prerequisites: 3100:561 or equivalent;  
4300:406 or equivalent; or permission.  
Physical properties and functional  
biomechanics of the spine. Kinematics and  
kinetics of the human spine. Biomechanics  
of scoliosis, trauma, instability, pain and  
orthoses. Mechanics and design of surgical  
implants.

**EN-89-17 Biomedical Engineering**

Add      4800:641      Soft Connective Tissue  
Biomechanics.      3 credits.  
Prerequisites: 3100:561 or equivalent;  
4300:407 or equivalent; or permission.  
Physical properties and functional  
biomechanics of ligament, tendon, joint-  
capsule insertions, myotendinous junction,  
articular cartilage and meniscus. The  
mechanics of injury, repair and replacement  
for accelerated repair and improved  
function.



**EN-89-18 Biomedical Engineering**

Add	4800:642	Hard Connective Tissue Biomechanics. 3 credits. Prerequisites: 3100:561 or equivalent; 4300:407 or equivalent; or permission. Physical properties and functional biomechanics of bone. The biology and mechanics of fractures and fracture healing. Mechanics of external and internal fixators. Total joint implants and reconstruction techniques.
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**EN-89-19 Biomedical Engineering**

Add	4800:650	Cardiovascular Dynamics. 3 credits. Prerequisites: 3100:561, 562 or equivalent; 4600:310 or equivalent. Analysis of blood pumping action, pressure/flow waveform transmission and blood rheology factors. Use of modeling and direct measurement techniques. Clinical implications of disease.
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**EN-89-20 Biomedical Engineering**

Add	4800:651	Cardiovascular Diagnostic and Therapeutic Techniques. 3 credits. Prerequisites: 3100:561, 2 or equivalent. Cardiovascular disease conditions, instrumentation and techniques for diagnosis and surgical procedures and services for treatment. Direct interaction with active clinical laboratories.
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**EN-89-21 Biomedical Engineering**

4800:530	Biomedical Instrumentation I.4 credits. TO:
4800:601	Biomedical Instrumentation I. 4 credits.
4800:613	Biomaterials and Lab. 4 credits. TO:
4800:660	Biomaterials and Lab. 4 credits.
4800:623	Mechanics in Physiology & Medicine. 3 credits. TO:
4800:645	Mechanics in Physiology & Medicine. 3 credits.
4800:643	Biomedical Computing. 3 credits. TO:
4800:630	Biomedical Computing. 3 credits.



**EN-89-22 Electrical Engineering**

Add 4400:772 Model Reduction Techniques for Control Systems. 3 credits.  
 Prerequisite: 4400:674 Control System Theory, or permission of the instructor. Computation of minimal realizations and reduced order models of multivariable systems. Methods covered include: Routh approximation; Caue first, second, and third forms; aggregation; singular perturbation; balancing. Introduction to controller order reduction.

**EN-89-23 Electrical Engineering**

Add 4400:774 Advanced Linear Control Systems. 3 credits.  
 Prerequisite: 4400:674 Control System Theory, and A course in Real Analysis or equivalent. This course will cover topics related to the design of robust control systems. The synthesis of controllers which yield stable closed-loop systems will be considered. The H8-optimality criterion for controller design is included. Special emphasis will be given to the robust stabilization problem and the disturbance attenuation problem.

**FAA-89-03 Communicative Disorders****Change in Prerequisites and Bulletin Descriptions**

7700:695 Externship: Speech-Language Pathology and Audiology. 2-4 credits.  
 TO:  
 Prerequisite: Permission. (May be repeated for a maximum of six credits). Clinical practicum in a selected speech-language-hearing facility.

7700:657 Advanced Clinical Practicum: Rehabilitative Audiology. 1 credit. TO:  
 Prerequisite: Permission. (May be repeated for a maximum of six credits). Supervised clinical practicum in hearing rehabilitation. Includes diagnostic/treatment procedures and preparation of reports.

- 7700:656      Advanced Clinical Practicum:  
Language.      1 credit. TO:
- Prerequisite: Permission. (May be repeated for a maximum of six credits). Supervised clinical practicum in treatment of language disorders. Includes diagnostic/treatment procedures and preparation of reports.
- 7700:652      Advanced Clinical Practicum:  
Fluency.      1 credit. TO:
- Prerequisite: 7700:627 or permission. (May be repeated for a maximum of six credits.) Supervised clinical practicum in treatment of fluency disorders. Includes diagnostic/therapy procedures and preparation of reports.
- 7700:655      Advanced Clinical Practicum:  
Articulation.      1 credit. TO:
- Prerequisite: 7700:321 or permission. (May be repeated for a maximum of six credits.) Supervised clinical practicum in treatment of articulation disorders. Includes diagnostic/treatment procedures and preparation of reports.
- 7700:654      Advanced Clinical Practicum:  
Diagnostic Audiology.      1 credit. TO:
- Prerequisite: Permission. (May be repeated for a maximum of six credits.) Supervised clinical practicum in audiology diagnostics. Includes diagnostic procedures and preparation of reports.
- 7700:651      Advanced Clinical Practicum: Voice.  
1 credit. TO:
- Prerequisite: 7700:626 or permission. (May be repeated for a maximum of six credits.) Supervised clinical practicum in treatment of voice disorders. Includes diagnostic/therapy procedures and preparation of reports.
- 7700:650      Advanced Clinical Practicum:  
Differential Diagnosis.      1 credit. TO:



Prerequisite: Permission. (May be repeated for a maximum of six credits.) Supervised clinical practicum in diagnostic procedures. Includes preparation of reports.

**FAA-89-04 School of Home Economics and Family Ecology**

Change in Course Evaluation

7400:329	Nutrition in Medical Science I - Clinical.	2 credits. TO: (cr./noncr.)
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**FAA-89-05 School of Home Economics and Family Ecology**

Change of Prerequisite

7400:340	Meal Service.	2 credits. TO:
	Prerequisite: 7400:245 or 141.	

**FAA-89-06 School of Art**

Add	7100:491/591	Architectural Presentations I. 3 credits. Prerequisites: Junior Level or Permission. Studio practice in architectural design and presentation methods in residential and commercial interiors.
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Drop	7100:282	Architectural Presentations I.
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**FAA-89-07 School of Art**

Add	7100:492/592	Architectural Presentations II. 3 credits. Prerequisites: 7100:491/591. Continuation of concepts covered in Architectural Presentations I with additional work in color rendering techniques. Emphasis on a variety of rendering mediums.
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Drop	7100:289	Architectural Presentations II.
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**FAA-89-08 School of Art**

Title, Description

7100:293	Introduction to Weaving.	3 credits. TO:
7100:293	Introduction to Fiber Arts. 3 credits. Studio/lecture course exploring traditional and non-traditional fiber form, on-loom and off-loom techniques, with emphasis on aesthetics and history of fibers.	

**FAA-89-09 School of Art**

## Change in Prerequisite

7100:275	Introduction to Photography.	TO:
	Prerequisites: 7100:131, or 7100:144, or 2240:124.	

**FAA-89-13 School of Home Economics and Family Ecology**

## Revise Food Science Minor as follows:

7400:245	Food Theory and Application I.	3 credits.
7400:246	Food Theory and Application II.	3 credits.
7400:403	Advanced Food Preparation.	3 credits.
7400:420	Experimental Foods.	3 credits.

The remaining six credits may be selected from the following:

7400:470	The Food Industry: Analysis and Field Study.	3 credits.
7400:474	Cultural Dimensions of Food.	3 credits.
7400:475	Analysis of Foods.	3 credits.
7400:476	Development in Food Science.	3 credits.
7400:485	Seminar (Food Science related).	3 credits.

**FAA-89-14 Department of Communicative Disorders**

## Title, Description

7700:620	Articulation.	2 credits.	TO:
7700:620	Articulation/Phonology. 2 credits. Prerequisite: None. Historical background, current theories and research related to ethiology, evaluation, and treatment of articulation and phonology disorders.		

**FAA-89-15 Department of Social Work**

## Change in Prerequisite

7750:440/540	Social Work Research I.	3 credits.	TO:
	Prerequisite for 440: 7750:276, or permission; for 7750:540: permission.		



**FAA-89-16 School of Home Economics and Family Ecology**

Add	7400:652	Professional Presentation in Home Economics. 3 credits. Developing effective home economics professional presentations. Emphasis on visuals, display, demonstrations, public relations materials, user manuals, conference management, portfolio development and learning styles.
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**FAA-89-20 School of Music**

Add	7500:527	Graduate Music History Review. 2 credits. Prerequisite: Undergraduate music history equivalent to four semesters of music history or literature study. Review of basic music history for graduate students. Coverage extends from antiquity to the present. Both reading and listening assignments will be required.
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**FAA-89-21 School of Music**

Add	7500:526	Graduate Music Theory Review. 2 credits. Prerequisite: Undergraduate music theory equivalent to four semesters. Review of basic music theory concepts. Coverage includes the chromatic harmony vocabulary of the 18th, 19th and 20th centuries.
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**FAA-89-22 Department of Dance**

## Title, Description

7900:116	Dance Analysis I. 2 credits. TO:
7920:116	Physical Analysis for Dance I. 2 credits. Required for all dance majors. Recommended to be taken in first two years. Lecture/laboratory. Skeletal and muscular analysis for dance technique.

**FAA-89-23 Department of Dance**

## Course Number, Title, Description

7900:117	Dance Analysis II. 2 credits. TO:
7920:117	Physical Analysis for Dance II. 2 credits. Prerequisite: 7900:116. Support systems, conditioning injury prevention, rehabilitation, nutrition for dancers.

**FAA-89-24 Department of Dance**

## Course Number

7900:122	Ballet Technique I.	5 credits	T0:
7920:122			

**FAA-89-25 Department of Dance**

## Course Number

7900:222	Ballet Technique II.	5 credits.	T0:
7920:222			

**FAA-89-26 Department of Dance**

## Course Number

7900:320	Dance Notation.	2 credits.	T0:
7920:320			

**FAA-89-27 Department of Dance**

## Course Number

7900:229	Contemporary Technique I.	3 credits.	T0:
7920:229			

**FAA-89-28 Department of Dance**

## Course Number, Description

7900:316	Choreography I.	2 credits.	T0:
7920:316	Choreography I. Prerequisite: Permission of the instructor. Theoretical and practical introduction to principles of choreography: space, time, energy.	2 credits.	

**FAA-89-29 Department of Dance**

## Course Number, Description

7900:317	Choreography II.	2 credits.	T0:
7920:317	Choreography II. Prerequisite: 316 and permission. Continuation of 316. Emphasis on musical choices and finding movement specific to the individual choreographer.	2 credits.	



**FAA-89-30 Department of Dance**

## Course Number

7900:322	Ballet Technique III.	5 credits.	T0:
7920:322			

**FAA-89-31 Department of Dance**

## Course Number

7900:329	Contemporary Technique II.	3 credits.	T0:
7920:329			

**FAA-89-32 Department of Dance**

## Course Number, Description

7900:416	Choreography III.	2 credits.	T0:
7920:416	Choreography III.	2 credits.	
	Prerequisite: 317, permission.		
	Continuation of 317. Emphasis on form and choreographic analysis.		

**FAA-89-33 Department of Dance**

## Course Number, Description

7900:417	Choreography IV.	2 credits.	T0:
7920:417	Choreography IV.	2 credits.	
	Prerequisite: 416 and permission.		
	Continuation of 416. Expanding into group choreography and longer works.		

**FAA-89-34 Department of Dance**

## Course Number

7900:422	Ballet Technique IV.	5 credits.	T0:
7920:422			

**FAA-89-35 Department of Dance**

## Course Number, Title, Description

7900:423	History of the Dance.	2 credits.	T0:
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7920:431 Dance History: Prehistory to 1661. 2 credits.  
Prerequisite: 115 or permission. Study of important developments from prehistory through the Renaissance to the founding of the French Academy of Dance.

**FAA-89-36 Department of Dance**

Number, Title, Description

7900:424 20th Century Dance. 2 credits.  
Prerequisite: Dance major or permission. TO:

7920:433 Dance History: 20th Century.  
Prerequisite: 115 or permission.  
Development of modern dance as an art form and the further evolution of ballet and concert dance.

**FAA-89-37 Department of Dance**

Number, Title, Description

7900:425 Development of Dance. 2 credits.  
Prerequisite: None. TO:

7920:432 Dance History: 1661 Through Diaghilev Era.  
Prerequisite: 115 or permission.  
Development of dance beginning with the establishment of the French Academy through the Romantic and Diaghilev Eras and their influence on current dance.

**FAA-89-38 Department of Dance**

Number, Description

7900:426 Techniques of Teaching Dance I. 2 credits.  
Prerequisite: Dance major or permission. TO:

7920:426 Techniques of Teaching Dance I. 2 credits.  
Prerequisite: Permission. For dance majors and minors. Development of elementary dance teaching skills for use in the public school and/or community setting.



**FAA-89-39 Department of Dance**

## Number, Description

7900:427	Techniques of Teaching Dance II.	2 credits	T0:
7920:427	Techniques of Teaching Dance II. Prerequisite: 426 or permission. Continuation of 426. Supervised observations, participation and practical experience in teaching elementary dance.	2 credits.	

**FAA-89-40 Department of Dance**

Add	7920:403	Special Topics in Dance. 1-4 credits. Prerequisite: Permission. (May be repeated. No more than 10 credits may be applied toward the BFA or BA degrees). Traditional and nontraditional topics in dance.
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**FAA-89-41 Department of Dance**

Add	7920:490/590	Workshop in Dance. 1-3 credits. Prerequisite: Advanced standing or permission. (May be repeated for a total of eight credits. Group study/projects investigating a particular field of dance not covered by other courses.
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**NU-89-03 Nursing**

Revise RN-MSN Program as follows:

The RN-MSN Program is designed for those associate degree and diploma nurses who aspire to attain the master's degree in nursing. The program is designed to facilitate the educational mobility of registered nurses. The following changes are being proposed:

1. Reduce the number of required prerequisite courses from 80 credit hours to 60 credit hours. The required courses are as follows:

RN with no degree

English Comp. - 8 cr  
 Chemistry - 8 cr  
 Statistics - 2 cr  
 Intro. to Sociology - 4 cr  
 Anatomy & Physiology - 8 cr  
 Microbiology - 3 cr  
 Philosophy OR Ethics OR  
     Logic - 3 cr  
 Oral Communication - 3 cr  
 Developmental Psych - 4 cr  
 Family - 3 cr  
 History - 3 cr  
 Basic Assessment - 3 cr  
 Electives - 8 cr

TOTAL: 60 credits

RN with a non-nursing degree

English Comp. - 8 cr  
 Anatomy & Physiology - 8 cr  
 Microbiology - 3 cr  
 Science Elective - 3 cr  
 Psychology - 6 cr  
 Social/Behav. Sciences - 6 cr  
 Humanities - 6 cr  
  
 Statistics - 2 cr  
 Basic Assessment - 3 cr  
 Electives - 15 cr

TOTAL: 60 credits

2. The ten (10) year limitation on anatomy and physiology and microbiology will be eliminated.
3. The three (3) year work experience requirement will be eliminated.
4. Students will take four (4) bridge courses to cover upper division nursing content. This is 15 credit hours of course work. These bridge courses replace Basic Research, Basic Assessment, Independent Study, and Nursing Synthesis required in the current RN-MSN curriculum.
5. Students must complete all prerequisite course work prior to acceptance into the RN-MSN Program. Once the student is admitted into the RN-MSN Program, course work can be completed in five (5) semesters. At the completion of the RN-MSN Program, the students will receive only the MSN degree.

Add 8200:450

Concepts and Theories of  
 Professional Nursing. 3 credits.  
 Prerequisite: Acceptance into the  
 RN-MSN Program. Selected concepts and  
 theories relevant to professional nursing  
 are studied and related to nursing  
 practice. Critical thinking strategies are  
 utilized to examine nursing theories and  
 concepts.



- 8200:460 Issues and Roles of the Profession of Nursing. 3 credits.  
Prerequisite: Acceptance into the RN-MSN Program. The focus of the course is to relate role theory to personal and professional life. Issues affecting the nursing profession and delivery of nursing care will be addressed.
- 8200:470 Community Health Nursing. 4 credits.  
Prerequisites: 8200:450 and 8200:460. This course will explore selected concepts and issues relevant to community health nursing. The effect of legal, ethical, economic, and political issues on community health nursing will be discussed.
- 8200:480 Leadership and Management Roles in Professional Nursing. 5 credits.  
Prerequisites: 8200:450 and 8200:460. This course focuses on advanced role transition as it relates to the resocialization of the nurse to leadership and management roles.

Drop 8200:489 Basic Research. 2 credits.

**WC-89-01 Department of Business Management Technology**

Title, Description

- 2440:245 Data Base Management. 3 credits.  
Systems for Microcomputers. TO:
- 2440:245 Introduction to dBASE  
III+/IV 3 credits.  
Prerequisite: 2440:120. Explains  
fundamental data-base concepts and provides  
"hands-on" experience using the dBASE  
III+/IV relational model.

**WC-89-06 Office Administration**

Title

- 2540:289 Career Development for Office  
Personnel. 3 credits. TO:
- 2540:289 Career Development for Business  
Professionals.