Office of the Registrar

Main titles for Supplement to the Undergraduate Catalog
2003-2005

The University
Undergraduate Education
Undergraduate Schools and Courses
Judd A. and Marjorie Weinberg College of Arts and Sciences
School of Communication
School of Education and Social Policy
Robert R. McCormick School of Engineering and Applied Sciences
Medill School of Journalism
School of Music
Other Undergraduate Programs
Administration and Faculty
Student Services

Student Affairs

Page: 7

Description of Change:
delete text: which are

New text:
Students are encouraged to take advantage of these opportunities and services, designed to help them establish and meet personal, academic, and career goals; assist them in acquiring skills to confront problems and issues in their lives; and provide them with essential services as part of a residential community.

Student Affairs

Health Service

Page: 7

Description of Change:
Correction of text

New text:
All students are required to have healthcare insurance coverage.

Residence Halls and Food Services
New text:
Complete information about Northwestern's residences,
including rental rates, is e-mailed to applicants
after they have been admitted to the University and
paid the required tuition deposit.

Student Affairs Office
Description of Change:
change text: Internship-finding assistance

New text:
Internship services, including individual -
ized help, programs, and vacancy listings.

Description of Change:
delete text & replace:
Access to Careertrak, an online searchable database
listing thousands of full-time, part-time, and internship
positions as well as other online resources

New text:
CareerCat, a career management system, which offers on-campus interviews for students,
easy on-line registration, and other enhanced features

Description of Change:
insert new text

New text:
* Access to Monstertrak, an on-line searchable database listing thousands of full-time, part-
time, and internship positions as well as other on-line resources

Description of Change:
delete text: Expo, Graduate and Professional school fair
replace text: Forum, Horizons program

New text:
Special events include fall and winter Career
job fairs, Virtual Career Fairs, Martin Luther King Jr. Public Interest Job Fair, Internship
Initiative, and Career Conversations.

Services for Students with Disabilities
Northwestern University’s programs and activities are accessible for full participation to all its students, including those with mobility impairments and with difficulties such as learning disabilities or auditory, visual, or other special conditions.

**New text:**

Additional information is available on the SSD web site at www.northwestern.edu/disability.

**Description of Change:**
Replace sentence: The brochure includes maps of the Evanston and Chicago campuses indicating building access and parking locations.

**New text:**

Additional information is available on the SSD web site at www.northwestern.edu/disability.
Financial Aid

Page: 17

Description of Change:
Update to text.

New text:
During the 2003–04 academic year, undergraduate students at Northwestern received more than $64 million in grant assistance: $52.5 million from Northwestern, $7 million from federal and state governments, and $4.5 million from outside sources. The average Northwestern grant for the 3,250 students receiving aid was $16,000.
Undergraduate Schools and Courses: Supplement to the Undergraduate Catalog 2003-2005

There are no entries for the Supplement to the Undergraduate Catalog 2003-2005 under this title.
African American Studies

"Politics, Society, and Policy"

**Page: 45**

**New Course**

**AF_AM_ST *AF AM 365 Black Chicago**

This course focuses on the presence of African-Americans in Chicago from the turn of the 20th Century to the turn of the 21st Century. Themes to be addressed include: the meanings of migration from the South to the North; the development of the black political submachine; black urban fiction in Chicago; black music, including gospel, jazz and blues; the formation and hardening of the "color line"; Chicago's relation to the Civil Rights Movement; and the development and meaning of class structures in Chicago. May also count toward Historical and Comparative Studies concentration.

**African Studies Program**

**Minor in African Studies**

*Minor course requirements (6 units)*

**Page: 47**

**Description of Change:**
Demonstrated competence in any African language or a European language other than English that is used in Africa (French or Portuguese) by completing the second year of language study or being certified by the appropriate language department. Professional school students whose curricula preclude meeting this requirement as well as students with proficiency in another Weinberg College language may petition the program to count additional courses with African content toward the minor in lieu of fulfilling the language requirement.

New text:

Anthropology

Major in Anthropology

Departmental courses

Page: 48

Description of Change:
add under Human biology... after *398 (senior year)

New text:
* 399 (senior year)

Concentration in Human Biology

Page: 49

Description of Change:
add above Relaged Courses

New text:
* 399 (senior year)

Art Theory and Practice

Courses Primarily for Undergraduates

Page: 56

ART 270-0 Introduction to the Understanding of Art
Description of Change:
Title Change
ART 272-0 Introduction to Understanding of Contemporary Art

Description of Change:
Title Change

New text:
Critical Methods for Contemporary Art

Biological Sciences Undergraduate Program

Courses Primarily for Undergraduates

New Course
BIOL_SCI 307 Learning and Teaching Biology

New Course
BIOL_SCI 348 Plant Population Genetics

New Course
BIOL_SCI 330 Plant Biology

New Course
BIOL_SCI 349 Plant Community Ecology

New Course
BIOL_SCI 350 Plant Systematics
New Course
LATIN 115-1,2 Accelerated First-Year Latin

Beginning course designed to compress Latin 101 into two quarters of study for students with the need for a more intense introduction to Latin. Classical Latin vocabulary, grammar, and syntax, with graded readings for translation. Three class meetings a week. Prerequisite: department placement.

Courses with Readings in English

New Course
CLASSICS 245-0 Classics and Cinema

Analysis of how literary and social/political assumptions intersect in the reception of two related dramatic forms originating in 5th-century Greece and 20th-century United States.

New Course
CLASSICS 340-0 Homer and the Traditions of Epic

Detailed study of the Iliad and Odyssey with selective attention to later works shaped by them, from the Homeric Hymns through the Argonautica and the Aeneid to European epics of the sixteenth and seventeenth centuries and "epic" novels, such as Tom Jones.

Economics

Courses Primarily for Sophomores, Juniors, and Seniors

New Course
ECON 316-0 Advanced Topics in Macroeconomics

Topics may include growth, business cycles, unemployment and search, monetary economics, macroeconomic policy, inter-temporal choice, general equilibrium.
New Course
ECON 359-0 Economics of Non-Profit Organizations

The economic rationale for the non-profit sector in a mixed economy. Topics include the objectives and behavior of non-profit organizations, competition with commercial firms, volunteerism, and charitable donation.

English

Literature Courses Primarily for Juniors and Seniors

Page: 78

New Course
ENGLISH 355 Medieval Drama

Environmental Sciences Program

Major in Environmental Sciences

Page: 79

Description of Change:
Update of requirements for the major, as approved by WCAS. Plus description of new courses. New description of ISP double major provision.

New text:
Foundations in Science: nine or ten courses, depending on freshman chemistry, including all of the following: Chemistry 101, 102, 103 (or 171,172); Mathematics 214-1,2. five of the following: Math 214,3; Statistics 210; Physics 135-1,2 (Physics 130-1,2 may be substituted with consent of the program advisor); Biology 210-1 or 164; Chemistry 210-1; Economics 201, 202.
Core courses: three courses, Env. Sci. 201, 202, 203. (One or more of Env. Sci. 235, Biol. 204, Chem. 204, Geol. Sci. 201, Geog. 211 may be substituted with consent of program advisor)
Advanced Studies: six courses, of which at least four must be at the 300-level.
Science track: four courses from the Science list, two from the Environment & Society list;
Policy track: Economics 281, 310-1, 370; plus three additional courses, two of which must be from the science list.
Senior year research: two courses, Env. Sci. 398-1,2 or Civ. Eng. 398-1,2.
Advanced studies:
Geography 211, 341, 343; Geol. Sci. 201, 301, 303, 304, 313, 316, 317, 318, 319; Physics 301.
Environment & Society list: Anthropology 306, 310; Economics 370; Env. Sci. 390; Geog. 328; History 215; Philosophy 268; Pol. Sci. 304, 349, 371; Sociology 312.

Environmental Sciences Second Major for ISP Students

Page: 80

Description of Change:
DELETE SECTION OF TEXT WITH BULLETS UNDER THE 'ENVIRONMENTAL SCIENCES SECOND MAJOR FOR ISP STUDENTS' AND SUBSTITUTE NEW TEXT FOLLOWING THE WORDS "and must take the following additional courses:"

New text:
--Env. Sci. 201, 202, 203
--two courses listed under Environment & Society above
--two courses, not in the same department, from those on the Science list, except Chem 342-1;
--Students may take the 2 quarters of Env Sci 398 instead of ISP 398.

Page: 80

Description of Change:
new course descriptions, under the heading "Core Course"

New text:
Chemical and physical perspectives on the evolution of the planet; emergence of life and nature of biogeochemical cycles; the role of human activities that are now part of these cycles.

Population processes in nature, role of human population growth, interactions between populations, major impacts of human populations on the environment.

Integrated study of fundamental chemistry, industrial production, energy use, and public policy using the automobile as an example.

European Studies Program

Major in European Studies

Page: 80

Description of Change:
move text "• HISTORY 201-1,2" to first entry under "Major course requirements"
**New text:**
Major course requirements

- HISTORY 201-1,2
- EUR ST 301-1,2,3
- 6 additional courses dealing with Europe, at least 4 at the 300 level
- 2 300-level language/literature courses taught in a continental European language
- EUR ST 390-1,2,3

With the exception of the two 300-level language courses, none of the above courses may be double-counted toward the European studies major and another major.

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**French**

**Minor in French**

**Page: 81**

**Description of Change:**
Change to French minor course requirements

**New text:**
Up to 4 200-level courses: 2 chosen from 201, 202, 203; 2 chosen from 210 or 211, 271 or 272

**Courses Primarily for Undergraduates**

**Page: 82**

**FRENCH 111-1,2,3 First-Year French**

**Description of Change:**
Change to course structure

**New text:**
Four class meetings a week.
New Course
ITALIAN 305 Italian Cultural Traditions

Geography Program

Page: 86

Description of Change:
Major in Geography
Program courses: GEOG 210, 211, or Envr Sci 235; Geog 341; and 4 additional geography courses, at least 3 of which must be at the 300 level, including 1 unit of research (399)
Related courses: Econ 201, 202; Math 214-1,2; Stat 210; or equivalent

New text:
Major in Geography
Program courses: Geog 211 or Envr Sci 235; Geog 341; and 4 additional geography courses, at least 3 of which must be at the 300 level, including 1 unit of research (399)
Related courses: Econ 201, 202; Math 214-1,2; Stat 210 or equivalent

Page: 86

Description of Change:
Delete course Geog 210 The Natural Environment

New text:

Geological Sciences

Courses Primarily for Freshmen and Sophomores

Page: 88

New Course
GEOL_SCI 109-0 We Choose to Go to the Moon

How and why did the US go to the Moon in 1969? What did we learn, and why should we go back? Topics include fundamentals of spaceflight, human exploration of space, and the geology of the Moon.
GEOL_SCI 114-0 Uniformity, Catastrophe, and the Meaning of Evolution

Description of Change:
Course name change to "Evolution and the Scientific Method"

New text:

German

Major in German

Page: 90

Description of Change:
Correction to text:
Students returning from a study abroad program in their junior year must enroll in one 300-level quarter-course in the department.

New text:
Students returning from a study abroad program in their junior year must enroll in two 300-level quarter-courses in the department

Page: 90

Description of Change:
Correction:
- History (1 unit): Chosen from 233-1, HISTORY 344-2, HISTORY 349

New text:
- History (1 unit): Chosen from 233-1,2, HISTORY 344-2, HISTORY 349

Page: 90

Description of Change:
Correction to text:
- Comparative literature: 3 quarter-courses including COMP LIT 202 or 280; and 2 chosen from COMP LIT 302, 383, 397-1,2,3, and a graduate seminar

New text:
- Comparative literature: 3 quarter-courses including COMP LIT 202 or 280; and 2 chosen from COMP LIT 302, 383, or a graduate seminar
Description of Change:
Correction to text:

- Religion: 2 quarter-courses chosen from RELIGION 224, 306, 331, 335, 352

New text:
- Religion: 2 quarter-courses chosen from RELIGION 230, 320, 332, 334, 339

Major in German

Departmental courses

Page: 90

Description of Change:
Delete

New text:
- Political science: appropriate courses to be determined in consultation with an adviser

Minors in German

Page: 90

Description of Change:
Correction to text:

- History (1 unit): 233-1, HISTORY 344-2 OR 349

New text:
- History (1 unit): 233-1,2, HISTORY 344-2 OR 349

Language Courses

Page: 91

New Course
GERMAN 111-1,2,3 Beginning Yiddish

History

Major in History

Page: 92
Description of Change:
Add concentration

New text:
Comparative History, with a topical focus

Page: 95

HISTORY 301-1,2 Survey of African American History
Description of Change:
Delete course

Page: 95

New Course
HISTORY 212-1,2 African American History

Page: 29

Description of Change:
Correction to text. To simplify things, I have just revised text in the box below.

New text:
The Integrated Science Program (ISP) is a highly selective curriculum of natural sciences and mathematics presented predominantly in small classes at an accelerated pace. ISP courses emphasize the common base and the interrelationships between the sciences, including the importance of mathematics and the development of first principles, leading to advanced topics at the forefront of modern science. The goal is to provide students who are interested in careers in science and mathematics with a broad, quantitative background that will give them superior preparation for further work in graduate or professional schools or for permanent employment. The curriculum is composed of 23 quarter-courses as well as a regular seminar series. Students are encouraged to take advantage of opportunities to pursue independent research with leading scientists at Northwestern. ISP may lead to a three-year bachelor of arts degree if, by the end of the third year, the student has completed 36 or more quarter-courses and satisfied all other college requirements.

Admission is by special application to the director of the ISP program. For more information on admission procedures, consult the description of ISP under Academic Options in the Undergraduate Education section of this catalog. Also see the Admission section for achievement tests required. The ISP curriculum consists of specially designed courses taught by faculty members of science and mathematics departments. Course descriptions are found...
with the appropriate departments in this catalog. Though listed in a three-year format, the program is usually spread over four years, particularly if a student wishes to combine an ISP major with a second major in mathematics or another science. Specific second major requirements for ISP students can be found under individual departments in this catalog. For more information, see the ISP Web page at www.isp.northwestern.edu.

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**Linguistics**

Courses Primarily for Undergraduates

**Page:** 100

**New Course**

**LING 223 Language Myths**

**Page:** 100

**New Course**

**LING 224 Languages of Chicago**

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**Mathematics**

**Page:** 103

**Description of Change:**

substitution for first three paragraphs

**New text:**

Mathematics, often celebrated as the “Queen of the Sciences,” has long been a basic tool in the physical sciences, engineering and commerce. Today, it is also used in sophisticated ways in the social sciences and humanities. Students majoring in mathematics have the opportunity to learn about its diverse applications, as well as acquiring an understanding of both the foundations and the frontiers of the discipline. The department offers a major and a minor in mathematics. The mathematics major is quite flexible; it can accommodate students interested in the foundations of the modern mathematical sciences, as well as those whose primary interest is the application of mathematics in the biological, social, and behavioral sciences, management, or engineering. Students with sufficiently strong preparation who are interested in a more rigorous approach to the subject are encouraged to enter the MENU program. The department encourages properly prepared students to enroll in its graduate courses. All majors are encouraged to discuss their program of study with the director of undergraduate studies as well as their individual professors.
Mathematics

MENU Program

Page: 103

Description of Change:
substitution for the text under MENU program

New text:
MENU Program
The Mathematical Experience for Northwestern Undergraduates Program (MENU) is designed for students with a love for mathematics and a solid background in calculus; it is ideal for mathematically talented students who are considering a major in mathematics, the physical sciences, or economics, although it is by no means restricted to them.
MENU is comprised of 290 and 340, two specially designed year-long courses normally taken in the freshman and sophomore years. Since admission to 290 is based on results of the CEEB Advanced Placement Examination (preferably the BC exam), it is strongly recommended that high school students with a keen interest in mathematics prepare for and take this exam. Students who have a solid grasp of calculus of one variable (including both differentiation and integration) who have not taken an AP examination are encouraged to speak to the MENU director to determine if enrolling in 290 (as against 214-3) is appropriate for them. The director of MENU is available as an adviser for all MENU students, regardless of their major, during their time at Northwestern.
Further information on MENU is available at the Mathematics Department home page.

Placement in Calculus

Page: 103

Description of Change:
Substitution for text

New text:
Placement in Calculus
Students who have not yet taken any calculus should enroll in 214-1. Students who have taken calculus in high school should enroll in the most advanced course appropriate to their background
• those who have completed a semester of calculus with grades of “B” or higher should ordinarily register for 214-2
• those who have completed a year’s course in calculus with grades of “B” or higher should ordinarily register for 214-3
• those who have studied multivariable calculus and/or linear algebra before reaching Northwestern should consult the department’s calculus coordinator
To help determine the appropriate placement, students may take the Self-Placement Examination available on the web. The calculus coordinator is also available to consult with students who are unsure about their correct placement

General Course Recommendations

Page: 103
New text:
General Course Recommendations for beginning students

• Students who have mastered the elements of single variable calculus and are looking for an early introduction to theoretical mathematics should consider enrolling in MENU (see above under MENU).
• Other students, including premedical students, who are interested in mathematics, the natural sciences, economics, and engineering, should begin in the standard calculus sequence 214-1,2,3
• those interested in economics may replace 214-2,3 with 214-4 (see course descriptions below)
• students who intend to major in the behavioral sciences and those from Medill often take 210-0 and 211-0 rather than 214-1,2,3, especially if they are concerned about the level of their math skills
• students seeking to fulfill the Area II distribution requirement with mathematics courses who do not intend to do more advanced work in mathematics may choose from a 100-level course, 210-0 and 211-0

Material from the basic calculus courses (214-3, 215, 219, 221) is also covered in 291-1,2,3. Other sequences such as 290-1,2,3, 292-1,2,3, and ESAM 252-1,2,3 cover substantial parts of this material. Those uncertain about the exact equivalences should consult with the director of undergraduate studies. Students should not attempt to mix and match courses from different sequences without prior consultation with the director of undergraduate studies, since they will not be allowed credit for programs that result in excessive duplication of subject matter.

Majors in Mathematics

Page: 103

Description of Change:
substitution of text

New text:
The Major in Mathematics
Basic courses: 214-1,2,3, 215, 219 or 290-1,2,3 or equivalent
Required major courses: a total of nine 300-level courses offered by the department; these must include 334 and at least one of the complete sequences 310-1,2,3, 312-1,2,3, 330-1,2,3, 337-1,2,3, or 338-1,2,3. With the prior approval of the department, as many as 3 of these 9 courses may be 300-level courses offered by other departments which focus on serious applications of mathematics or have substantial mathematical content. This option is especially recommended to those interested in the applications of mathematics to other areas of study.

Major in Applied Mathematics

Page: 104

Description of Change:
delete the entire "Major in Applied Mathematics"
Some General Advice for Majors
A course in computer science is often valuable for students. Students interested in probability and statistics or in becoming an actuary should take 330-1,2,3 and one or more courses in statistics (e.g. Stat 350, 351, 352, or 355). They should complete their major requirements with courses from among real analysis (310 or 312), computer science, and areas where probability and statistics are used. Those interested in economics should take Math 310 and 330 and as well as Econ 380 and/or 381. Double majors in mathematics and economics should consult the director of undergraduate studies in Economics for other possible changes to their requirements.

Mathematics Second Major for ISP Students

Insert the following:
312-1,2,3 and 338-1,2,3
in the part about full-year sequences

Honors in Mathematics

Honors in Mathematics
Majors (in either mathematics or applied mathematics) with outstanding records may be nominated for graduation with departmental honors. Those graduating under the regular mathematics option must have completed both 310-1,2,3 or 312-1,2,3 and 337-1,2,3 or 338-1,2,3. In exceptional cases, students who have not completed these courses may be considered for honors.
To be nominated for departmental honors a student must, in addition, complete with distinction two quarters of independent study or two quarters of a graduate course, as well as an acceptable project that culminates in an honors thesis. Finally, the student must have a grade point average of 3.5 or above in courses used to satisfy major requirements. (Basic
courses as defined above are not used in this computation.)
For more information on honors consult the director of undergraduate studies. See also Honors under Academic Policies earlier in this section of the catalog.

The Teaching of Mathematics

Page: 105

Description of Change:
substitute one word

New text:
Substitute "desire" for "wish"

Courses Primarily for Undergraduates

Page: 105

New Course
MATH 104-0 Introduction to Game Theory

Introduction to the mathematical theory of strategic competition; optimal strategies, and equilibria; the Prisoner's Dilemma; bargaining and negotiation; strategic voting; applications to economics and political science. For non-science students seeking a gentle introduction to the subject, without the technical details or prerequisites of a more advanced course. Familiarity with high-school mathematics is assumed.

Page: 105

Math 104-0 Games and Fallacies

Description of Change:
delete course

New text:

Page: 105

New Course
MATH 110-0 Introduction to Mathematics I

This course explores the beauty and mystery of mathematics through a study of the patterns and properties of the natural numbers 1,2,3... . Topics include counting, probability, prime numbers, Euclidean algorithm, and unique factorization. Recommended for students with little mathematical background.

Page: 105

Math 110-0 Survey of Modern Mathematics I

Description of Change:
New text:

Page: 105

New Course
MATH 111-0 Introduction to Mathematics II

Similar in spirit to 110, with topics chosen from number theory, topology, probability, geometry, cryptology and algebra. Recommended for students with little mathematical background. 110 is not a prerequisite for 111.

Page: 105

MATH 111-0 Survey of Modern Mathematics II

Description of Change:
Delete this course

New text:

Page: 105

New Course
MATH 219-0 Linear Algebra

Basic concepts of linear algebra. Solutions of systems of linear equations; vectors and matrices; subspaces, linear independence, and bases; determinants; eigenvalues and eigenvectors; other topics and applications as time permits. Prerequisite: 214-3 or 214-4. Students may not receive credit for 219 and any of 217, 290-1, 291-3, or 292-1.

Page: 105

MATH 219-0 Linear Algebra with Economics Applications

Description of Change:
Delete course

New text:

Page: 105

New Course
MATH 290-1,2,3 Linear Algebra and Multivariable Calculus

Page: 105

MATH 290-1,2,3 MENU: First Year

Description of Change:
New Course
MATH 301-1,2 Mathematical Models in Finance
*Description of Change:*
Substitution of course in prerequisites

New text:
Substitute 219 instead of 221

Page: 106

MATH 310-1,2,3 Real Analysis

Rigorous analysis in Euclidean space, beginning with one and proceeding to several variables. Properties of the real numbers, limits and continuity, differentiation and integration, sequences and series, the inverse and implicit function theorems. Applications to Fourier series. Primarily for undergraduates; open to graduate students only with departmental permission. Students may not receive credit for both of 310-1 and 312-1 or for both of 310-2 and 312-2. Prerequisite: 215, 219, 308.

Page: 106

MATH 310-1,2,3 Introduction to Real Analysis
*Description of Change:*
Delete this course

New text:

Page: 106

New Course
MATH 312-1,2,3 MENU: Real Analysis

Rigorous analysis in Euclidean space and on metric spaces. Metric space topology, properties of Euclidean spaces, limits and continuity, differentiation and integration, sequences and series, the inverse and implicit function theorems. Lebesgue integration with applications. 312-1,2 differ from 310-1,2 in two respects: they cover more topics in more depth, and aim at intensive development of students’ ability to analyze and create mathematical proofs. Faster than 310, and at a higher level of abstraction. Students may not receive credit for both of 310-1 and 312-1 or for both of 310-2 and 312-2. Prerequisite: permission of department.

Page: 106
New Course
MATH 318-0 Introduction to Optimization

Mathematical methods and concepts on which continuous nonlinear optimization theory (determining the maxima and minima of a function on an allowable set of points) rests. Examples drawn from economics, business, and engineering. Prerequisite: 310-1 or 312-1.

Page: 106

New Course
MATH 330-1,2,3 Probability and Stochastic Processes

1. Discrete probability spaces, random variables, expected value, combinatorial problems. Special distributions, independence and conditional probability. Weak law and central limit theorem (CLT). 2. Integrating density functions, convolutions, multidimensional joint distributions and densities, proof of the the weak law and CLT. Markov chains with discrete parameter, recurrence and transience, stationary distributions. 3. Integrating density functions, convolutions, multidimensional joint distributions and densities, proof of the weak law and CLT. Markov chains with discrete parameter, recurrence and transience, stationary distributions. Students may not receive credit for both 330-1 and 392-1. Prerequisites: 215, 219.

Page: 106

MATH 330-1,2,3 Probability and Statistics
Description of Change:
Delete this course

New text:

Page: 106

New Course
MATH 334-0 Linear Algebra: second course


Page: 106

MATH 334-0 Linear Algebra for Applications
Description of Change:
Delete this course
New Course
MATH 337-1,2,3 Abstract Algebra

1. Groups and their structure; elementary ring theory; polynomial rings. 2. Continuation of ring theory; basic field theory. 3. Galois theory; modules over Euclidean domains; application to canonical form theorems of linear algebra. Prerequisite: 308 or instructor's permission. Students may not receive credit for corresponding quarters of both 337 and 338.

MATH 337-1,2,3 Introduction to Modern Algebra
Description of Change:
Delete this course

New Course
MATH 338-1,2,3 MENU: Abstract Algebra

1. Groups and their structure, including the Sylow theorems; elementary ring theory; polynomial rings. 2. Continuation of ring theory; basic field theory; Galois theory. 3. Module theory, including application to canonical form theorems of linear algebra. 338 differs from 337 in two respects: it covers more topics in more depth, and aims at intensive development of students’ ability to analyze and create mathematical proofs. Prerequisite: permission of department. Students may not receive credit for corresponding quarters of both 337 and 338.

MATH 338-1,2,3 MENU: Algebra
Description of Change:
Delete this course

New Course
MATH 340-1,2,3 MENU: Applied Analysis

Same description as before
MATH 340-1,2,3 MENU: Second Year
Description of Change:
Delete this course

New text:

Philosophy

Major in Philosophy

Page: 107

Description of Change:
Delete text "313"

New text:
add text "one of Phil 310, 311, 312, or 313;"

Honors in Philosophy

Page:

Description of Change:
add to text

New text:
(Philosophy 398 cannot be used to fulfill the Department’s requirement that majors take at least 4 courses in Philosophy at the 300-level.)

Page: 107

Description of Change:
add to text

New text:
(Philosophy 398 cannot be used to fulfill the Department’s requirement that majors take at least 4 courses in Philosophy at the 300-level.)

Courses Primarily for Freshmen and Sophomores

Page: 108

Description of Change:
for 210-1,2,3, delete title "Introduction to Existentialism"
New text:
for 210-1,2,3, correct title to "The History of Philosophy"

Page: 108

Description of Change:
for 219-0 delete title "History of Philosophy"

New text:
correct 219-0 title to "Introduction to Existentialism"

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Political Science

Page: 113

Description of Change:
Correction to page.

New text:
Political Science: Undergraduate Catalog 2003-2005
A knowledge of political science is central for understanding human behavior, policy making, and the relationships between people and governments. A background in political science is therefore critical for people in public service, politics, the business sector, and the media. Such professionals are in constant need of information on and understanding of the political, legal, and public implications of their fields. The Department of Political Science is internationally recognized for excellence at both the undergraduate and graduate levels. The department is especially strong in American politics and government; the politics of foreign countries, especially in Europe, Latin America, Asia, and Africa; law and politics; political economy; international studies; and political theory. Political Science faculty at Northwestern are associated closely with the activities of the Program of African Studies, the Center for International and Comparative Studies, and the Institute for Policy Research, all of which are outstanding in their respective specialties.

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Political Science

Major in Political Science

Page: 113

Description of Change:
Correction to whole text

New text:
Major in Political Science: Undergraduate Catalog 2003-2005
The major in political science allows students to develop an understanding of various political phenomena and processes. Students can begin pursuing the major with 200 level courses, which provide a general introduction to subfields of political science as well as background for 300 level courses. Majors can choose courses from the following subfields of political science: American Politics, Comparative Politics, International Relations, Political Theory, and Research Methodology.

When students declare a major in political science they meet with an advisor in the department to discuss their program of study. Students planning to major in political science are advised to complete the 200-level prerequisites and at least one 300-level course in political science by the end of their sophomore year. Students who intend to study abroad should discuss their options with an advisor in the department early in their sophomore year.

**Major in Political Science**

**Departmental courses**

**Page:**

**Description of Change:**
Correction to page.

**New text:**
Requirements for the major in Political Science:
Undergraduate Catalog 2003-2005

Basic courses: 3 courses chosen from 201, 204, 220, 221, 230, 240, 250

Major courses: 7 300-level courses in political science, 1 of which must be 310, 311, or 312 and another of which must be 395.

Related courses: 5 quarter-courses in anthropology, economics, history, philosophy, psychology, or sociology, of which at least 2 must be at the 300 level; no more than 1 may be at the 100 level.

Students should take at least one of the following courses before taking 395: 310, 311, 312. Students normally take the required 395 in the junior year. All majors also are urged to acquire mastery of a foreign language.

**Minor in Political Science**

**Page:**

**Description of Change:**
Correction to page.

**New text:**
Minor in Political Science: Undergraduate Catalog 2003-2005

The minor in political science offers students the opportunity to acquire a foundation in the discipline as well as significant exposure to advanced courses. Students can choose courses that focus on American Politics, International Relations, Political Theory, and Research
Methodology. Students should begin pursuing the minor with the introductory 200 level courses. The minor in Political Science also allows students to pursue specialized interests. For example, students who aspire to a legal career, an appropriate minor might concentrate on law and politics courses and could include 230, 330, 331, 332, or 333. Minors may follow similar pathways for concentrations in political theory, international relations, comparative politics, and American political processes, or they may choose an array of courses that cut across subfields rather than concentrate on one or two areas. To develop an individual program of study for a minor in political science, students should consult with a member of the departmental advising team.

Comparative Politics

Page:

Description of Change:

New text:
POLI_SCI 355-0: Chinese Politics

Page:

New Course
POLI_SCI 355 Chinese Politics

Fundamental conflicts in Chinese politics; party-mass relations; class; the urban-rural split; and debates over ideology, democracy, and development strategy.

Political Theory

Public Policy and Political Economy

Page:

New Course
POLI_SCI 376 Comparative Capitalism in Advanced Industrialized Countries

Different patterns of industrialization produce differences in the political organization of capitalism, i.e., in the position and role of labor and in relations between business and the state. Historical roots of those differences and their implications for contemporary politics and policy.

Page:

New Course
POLI_SCI 373 Political Economy of Developing Countries

Major analytical perspectives of modern political economy through the examination of concrete problems in the developing world.
Seminars, Independent Study, and Special Opportunities: Undergraduate Catalog 2003-2005
Political Research Seminar (395) is required of all political science majors. The 395 Research Seminar is ordinarily taken during junior year (or fall quarter of senior year). With consent of the department, students may receive credit for more than one 395 seminar provided that, if 398 and 399 are also taken, 395 with 398 and 399 do not exceed a total of four course credits.

Psychology
Major in Psychology
Seminars, Independent Study, and Special Opportunities

Related courses

Page: 118

Description of Change:
correction to text: correct abbreviation for Communication Sciences; delete CSD 203, which is no longer offered

New text:
2 200-level mathematics courses plus 3 additional courses chosen from the following: any 200-level mathematics course; any 300-level statistics course; any biological sciences, chemistry, computer science, or physics course at any level; ANTHRO 213; COGSCI 207; CSD 202, 301, or 302. With department permission, PSYCH 351 may also be counted toward this requirement.

Courses Primarily for Juniors and Seniors

Page: 119

PSYCH 312-1,2 Neurobiology and Behavior
Description of Change:
Course renamed
Change course title to "Physiological Psychology"

**Page:** 119

**PSYCH 326-0 Social and Personality Development**  
**Description of Change:**  
Description change; current version lists both old and new prerequisites

**New text:**  
Research methods, theories, and facts relating to the development and modification of attitudes and behavior. Prerequisites: 205; 204, 215, or 218.

**Page:** 119

**PSYCH 360-0 Human Memory and Cognition**  
**Description of Change:**  
Description change: add "s" to prerequisites, to clarify that there is more than one

**New text:**  
In-depth survey of recent work in human memory and cognition. Prerequisites: 205 and 228 or consent of instructor.

**Page:** 119

**PSYCH 384-0 Interpersonal Relations**  
**Description of Change:**  
Course renamed PLUS Description changed

**New text:**  
384-0: Close Relationships  
Social psychological analysis of close relationships; emphasis on romantic relationships. Interpersonal processes associated with relationship formation, development, and dissolution. Prerequisite: 204.

---

**Religion**

**Page:** 120

**Description of Change:**  
New courses

**New text:**  
The department of Religion has extensively revised its course offerings, adding, deleting, and renaming nearly all the courses in the curriculum. Until the 2005-7 catalog is available, please see the department for details.
Spanish

Portuguese Language Courses

**Page:** 132

**New Course**
**PORT 202 Reading & Writing Portuguese**
Academic Policies

Requirements for the Degree of Bachelor of Arts in Communication

General Requirements

Page: 136

Description of Change:
delete "Thirty-five of the required 45 units must be completed with grades of A, B, or C (grades of C-minus do not satisfy this requirement)."

New text:
Add "No more than 10 of the 45 required units can be completed with grades of C- or D"

Page: 136

Description of Change:
Delete "No more than 18 of the 45 courses offered for the degree may be taken in the major department."

New text:
Academic Options

Interdepartmental Studies

Requirements for a Major in Interdepartmental Studies

Page: 137

Description of Change:
delete: "associate dean for undergraduate affairs"

New text:
replace with "undergraduate dean"

Interschool Certificates and Adjunct Major

Adjunct Majors

Page: 137

Description of Change:
Delete "International studies, gender studies, and legal studies" dashes

New text:
Make remaining text a sentence.

Communication Sciences and Disorders

Requirements for a Major in Communication Sciences and Disorders

Page: 139

Description of Change:
delete: "Courses taken in the department: No more than 18 can
be counted toward the BSCmn degree"

New text:

Basic Science Courses for Undergraduates and Graduates

Page: 138
New Course
CSD 202 Neurobiology of Communication

Human anatomy, physiology, and neurology in relation to communicative behavior. Sensory, perceptual, cognitive, and motor processes.

Communication Studies

Course Specializations for Departmental Majors

Communication Industries and Technologies

Page: 142

Description of Change:

New text:
add to the list of courses in numerical order:
374, 384

"Rhetoric, Media, and Public Culture"

Page: 142

Description of Change:
Delete: "and
one other 200-level course from the following: 225, 271,
and 275."

New text:

Page: 142

Description of Change:
Change "minimum of three" to "minimum of four"

New text:
add to list of courses under "minimum of four" in numerical order
225, 271, 275, 326, 374

Media and Politics

**Page:** 143

**Description of Change:**

**New text:**
add in numerical order "384"

Argumentation and Advocacy

**Page:** 143

**Description of Change:**

**New text:**
Add "Gen Cmn 104" to this list "two practice-oriented courses from 214, 215, and 221"

**Page:** 143

**Description of Change:**

**New text:**
add in numerical order to the list of theory oriented courses "326"

General Requirements for a Major in Communication Studies

**Page:** 143

**Description of Change:**

delete: "A maximum
of 18 courses in the Department of Communication

Studies may be counted toward the bachelor’s degree."

**New text:**

"Courses Primarily for Juniors, Seniors, and Graduates"

**Page:** 146

**New Course**
**COMM_ST Comm St 397 Senior Honor's Thesis**
Students work on a yearlong project with the guidance of a faculty advisor, culminating in a senior thesis. Those who complete the program successfully will be eligible to graduate with departmental honors. Open via application to the program director only.

Radio/Television/Film

Requirements for a Major in Radio/Television/Film

Page: 148

Description of Change:
delete "and writing"

New text:

Theatre

Requirements for a Major in Theatre

"History, Literature, and Criticism"

Page: 151

Description of Change:
delete "note the School of Communication 18-unit requirement (see General Requirements)"

New text:
Sentence should read "Electives in Communication and other areas."
**Description of Change:**
Replace the following text:

"During the spring quarter students must successfully complete SESP 391 Advanced Research Methods."

**New text:**
During the spring quarter students must successfully complete SESP 391 Advanced Research Methods and be recommended for admittance to the honors program.

**Page:** 156

**Description of Change:**
Replace the following text:

"Students who successfully complete 391 may formally enter the three-quarter honors program by registering for SESP 398 Honors Thesis in the fall quarter of their senior year."

**New text:**
Students who successfully complete 391 and are recommended for the honors program may formally enter the three-quarter honors program by registering for SESP 398 Honors Thesis in the fall quarter of their senior year.
Academic Programs

Human Development and Psychological Services, Learning and Organizational Change, Secondary Teaching, and Social Policy Programs

SESP Core (8 units)

Page: 158

Description of Change:
New requirements. Change the following text:

"One course chosen from the following is also required:
SESP 201 Human Development: Childhood and Adolescence
SESP 202 Introduction to Community Development
SESP 203 Human Development: Adulthood and Aging
LOC 212 Learning and Understanding
SESP 316 Moral Values in Human Development: An Introduction
SESP 317 Gender and the Life Course
SESP 318 Adult Development and Work Careers"

New text:
One course chosen from the following is also required:
SESP 201 Human Development: Childhood and Adolescence
SESP 203 Human Development: Adulthood and Aging
LOC 212 Learning and Understanding
SESP 316 Moral Values in Human Development: An Introduction
SESP 317 Gender and the Life Course
SESP 318 Adult Development and Work Careers

Page: 158

Description of Change:
Add new text after the following:

"The practicum involves a one-quarter unpaid internship in an off-campus setting related to the student’s program."

New text:
The students conduct social science research while at the site.
Concurrent with the internship, students attend a weekly seminar taught by a Northwestern faculty member that integrates their experiential knowledge with the theoretical training in their course work.

New text:
The site research will serve as the basis for a final research paper.

Human Development and Psychological Services

Page: 159

Description of Change:
New requirements. Replace the following text:

"Major program — 16 courses"

New text:
Major program — 18 courses

Page: 159

Description of Change:
New requirements. Replace the following text:

"• Required major courses — 11 courses, at least 4 at the 300 level, selected from an approved list in human development and psychological services and other areas such as anthropology, communication studies, linguistics, psychology, and sociology."

New text:
• Required major courses — 13 courses, at least 5 at the 300 level, selected from an approved list in human development and psychological services and other areas such as anthropology, communication studies, linguistics, psychology, and sociology.

Page: 159

Description of Change:
New requirements. Replace the following text:

"Electives — 11 courses"

New text:
Electives — 9 courses
Description of Change:
New requirements. Replace the following text:
"Major program — 16 courses"

New text:
Major program — 18 courses

Description of Change:
New requirements. Replace the following text:
"• Required major courses — 9 courses, at least 3 at the 300 level, selected from an approved list in learning and organizational change and other areas such as cognitive science, computer science, economics, psychology, and sociology."

New text:
• Required major courses — 9 courses, at least 4 at the 300 level, selected from an approved list in learning and organizational change and other areas such as cognitive science, computer science, economics, psychology, and sociology.

Description of Change:
New requirements. Replace the following text:
"Electives — 11 courses"

New text:
Electives — 9 courses

Learning and Organizational Change

Social Policy

Description of Change:
New requirements. Replace the following text:
"Major program — 16 courses"

New text:
Major program — 18 courses
Description of Change:
New requirements. Replace the following text:

"• Basic courses — 6 courses
SOC POL 201 Introduction to Social Policy
SOC POL 304 Social Policy and the Human Services
SOC POL 307 Educational Policy
SOC POL 330 Economics of Social Policy
ECON 201 Introduction to Macroeconomics
ECON 202 Introduction to Microeconomics"

New text:
• Basic courses — 8 courses
SESP 202 Introduction to Community Development
SOC POL 201 Introduction to Social Policy
SOC POL 304 Social Policy and the Human Services
SOC POL 307 Educational Policy
SOC POL 330 Economics of Social Policy
ECON 201 Introduction to Macroeconomics
ECON 202 Introduction to Microeconomics
POL SCI 220 American Government and Politics

Page: 159

Description of Change:
New requirements. Replace the following text:

"• Required major courses — 11 courses, at least 5 at the 300 level, selected from an approved list in human development and psychological services and other areas such as anthropology, communication studies, linguistics, psychology, and sociology."

New text:
• Required major courses — 10 courses, at least 6 at the 300 level, selected from an approved list in human development and psychological services and other areas such as anthropology, communication studies, linguistics, psychology, and sociology.

Page: 159

Description of Change:
New requirements. Replace the following text:

"Electives — 11 courses"
Electives — 9 courses

Secondary Teaching Program

Page: 160

Description of Change:
Replacing the following text:

"Students enrolled in the School of Education and Social Policy or elsewhere in the University who wish to pursue the secondary teaching major and recommendation for secondary teaching certification must apply for formal admission to the Secondary Teaching Program."

New text:
Students enrolled in the School of Education and Social Policy or elsewhere in the University who wish to pursue the secondary teaching major and recommendation for secondary teaching certification must apply for formal admission to the Secondary Teaching Program during the term in which they are enrolled in Teach Ed 304 or no later than the first week of October of their junior year.

Secondary Teaching Program

Preparation for Professional Work in Middle and Secondary Schools

Page: 160

Description of Change:
Replacing the following text:

"Students in the Secondary Teaching Program take extensive course work in the liberal arts and complete a major in the academic subject they expect to teach."

New text:
Students in the Secondary Teaching Program take extensive course work in the liberal arts and complete a major, or the equivalent of a major, in the academic subject they expect to teach.

Teaching Major Requirements

*English (15 units)*

Page: 161

Description of Change:
New requirements.

New text:
- 3 introductory courses: ENGLISH 298 and 210-1,2 or 270-1,2
• 2 composition courses, one of which must be Teach ed 325

• 8 literature courses: 2 American literature courses, 2 English literature courses, and 4 additional literature courses, one of which must be non-Western literature

• 1 linguistics course chosen from LING 220, 221, 250, 260, 270, 311, 312, 321, 322, 323, 341, 342, or one poetry course

• 1 reading and language acquisition course: TEACH ED 324

French (12 units)

Page: 161

Description of Change:
New requirements.

New text:
• 6 language courses: FRENCH 202, 203, 301, 302, 303, 305

• 3 literature courses: FRENCH 210 and 2 additional 300-level literature courses taught in French

• 3 culture and civilization courses, at least 2 of which must be 300-level, chosen from FRENCH 201, 211, 380, 390, 391-1,2, 396

Spanish (12 units)

Page: 161

Description of Change:
New requirements.

New text:
• 3 language and composition courses: SPANISH 201-1 or 201-2, or appropriate substitute for heritage speakers; 202-1 or 207, 202-2

• Spanish 220

• 3 literature courses chosen from SPANISH 250, 251, 260, 261

• 5 additional 300-level courses taught in Spanish, with at least 1 course from a period earlier than 1800

• 1 culture course chosen from SPANISH 360, 361 or 380

Mathematics (12 units)

Page: 161

Description of Change:
Replace the following requirement
"• 1 probability and statistics course chosen from MATH 330-1; STAT 202, 302"

New text:
• 1 probability and statistics course chosen from MATH 330-1; STAT 202, 302 or SESP 210

History (12 units)

Page: 161

Description of Change:
New requirements.

New text:
• History 201-1, 2
• History 210-1, 2
• 2 ancient/classic civilization courses
• 6 additional history courses
• 3 related courses chosen from ECON 201, SOC 201, ANTHRO 214, POL SCI 220, SOC 226 or SESP 210 or STATS 210, PSYCH 110, GEOG 341

Clinical Experiences

Page: 162

Description of Change:
Correction to the first three paragraphs

New text:
Secondary teaching students complete three clinical experiences: a 40-hour non-school practicum, a 100-hour practicum and a secondary student teaching internship. However, students must have applied to the program no later than the first week of October of their junior year to be eligible for the 100-hour practicum and student taching. Eligibility for Admission is based on a passing grade on the Illinois Basic Skills Test; a GPA of at least 2.5; a minimum 2.5 average in the subject area and professional education courses.

Students typically complete the first practicum during winter of sophomore or junior year and the 100-hour practicum is typically spring quarter of their junior year. The practicum includes a minimum of 10 hours per week in a classroom for the length of the quarter as well as a practicum seminar (TEACH ED 378 or 379). Students are also enrolled in a methods course (TEACH ED 354-59) and a third education course (TEACH ED 341). Students usually enroll in a fourth class, frequently in their concentration area. They must complete a preliminary contract for their practicum during the first two weeks of the quarter.

Students then typically complete the student teaching internship during fall or winter quarter of their senior year. To apply for student teaching, they must have satisfactorily completed their practicum and related requirements (see above) and passed the Illinois subject area exam for teachers. They also must have a GPA of 2.5 and a grade point average of 2.5 or above in their major and professional core courses. (Note: While a grade point average of
2.5 is the minimum requirement, an average closer to 3.0 is more competitive for a student teaching placement.

Additional Requirements for Certification

Page: 162

Description of Change:
New requirements.

New text:
• Completion of a Digital Portfolio

• Illinois State Teacher Certification Examination (Basic Skills, Content Area, and Assessment of Professional Teaching exams). Information about the required Illinois State Teacher Certification Examination is available in the Office of Student Affairs. Some school districts require a police background check before student teachers may begin their internships and become eligible for certification.

• United States citizenship or evidence of permanent resident status

Recommendation for Certification

Page: 162

Description of Change:
Replace the following text:

"Students successfully completing approved teacher training programs at Northwestern qualify to receive Illinois certification. Although legal requirements for certification vary from state to state, each teacher training program offered at Northwestern is sufficiently flexible to permit a student who plans carefully to complete provisional requirements of most states. A teacher certification reciprocity agreement exists between Illinois and 40 other states. Information is available in the SESP Office of Student Affairs. Northwestern will recommend a student for a teaching certificate only when the student has successfully completed an approved Northwestern University teacher preparation program. Students should apply through the SESP Office of Student Affairs no later than the quarter preceding the final quarter of study at Northwestern."

New text:
Students successfully completing approved teacher training programs at Northwestern qualify to receive Illinois certification. Although legal requirements for certification vary from state to state, each teacher training program offered at Northwestern is sufficiently flexible to permit a student who plans carefully to complete provisional requirements of most states. A teacher certification reciprocity agreement exists between Illinois and 40 other states. Information is available in the SESP Office of Student Affairs. Northwestern will recommend a student for a teaching certificate only when the student has successfully completed an approved Northwestern University teacher preparation program.

Partnership through the Arts Program
Complete the program requires bi-weekly discussions, three courses (including SESP 202: Introduction to Community Development) and 50 hours of community service every year, as well as a two quarter Capstone Project.
Description of Change:
New title of the BS degree, Manufacturing Engineering.

New text:
The new title is Manufacturing and Design Engineering. Its ABET accreditation status remains unchanged.

Academic Policies

Requirements for the Degree of Bachelor of Science

Page: 168

Description of Change:
Students must have received a grade of C, or higher, in any course taken elsewhere and then used to fulfill a McCormick degree requirement.

New text:
A grade point average of not less than C is required for all courses presented for the degree. Students must have received a grade of C, or higher, in any course taken elsewhere and then used to fulfill a McCormick degree requirement. The grade point average of the 16 major program courses ...

Pass/No Credit Option

Page: 168
The requirement of a speaking course may not be fulfilled by a course taken P/N.

**New text:**
... only four 100- or 200-level courses may be taken under the P/N option and used to satisfy the seven-course requirement in the social sciences/humanities area. ... in mathematics, engineering analysis and computer proficiency, basic sciences, design and communications, and ...

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**Academic Options**

**Honors Program in Engineering and Education**

**Page:** 172

**Description of Change:**
This program has been discontinued.

**New text:**

---

**Undergraduate Programs of Study**

**McCormick Curriculum Requirements**

**Page:** 173

**Description of Change:**
The former degree program, Manufacturing Engineering, is now called, Manufacturing and Design Engineering.

**New text:**
MFG ENG (manufacturing and design engineering)
**Description of Change:**
The former degree program, Manufacturing Engineering, is now called Manufacturing and Design Engineering.

**New text:**
MFG ENG (manufacturing and design engineering)

McCormick Curriculum Requirements

**Design and Communications (3 courses)**

**Page: 174**

**Description of Change:**
GEN ENG 106-1,2 "Engineering Design and Communications" will be relisted as IDEA 106-1,2.

**New text:**
Writing and Design.
IDEA 106-1,2

**Basic Engineering (5 courses)**

**Page: 174**

**Description of Change:**
Erroneous bullet points in front of CHEM ENG 211, MAT SCI 314, MECH ENG 220, and MECH ENG 370 in the section, Thermodynamics.

**New text:**
Thermodynamics:
BME 250 ...
CHEM 342-1 ...
CHEM ENG 211 ...
MAT SCI 314 ...
MAT SCI 315 ...
MECH ENG 220 ...
MECH ENG 370 ...

**Page: 174**

**Description of Change:**
Erroneous bullet points in front of "or MAT SCI 203" and "or MAT SCI 301" in the section, Materials science.

**New text:**
Materials science:
MAT SCI 201...
Description of Change:
ECE 230 has been renamed, Programming for Engineers.

New text:
ECE 230 Programming for Engineers

Page: 174

Description of Change:
Add the course, CIV ENG 304-0 “Civil & Environmental Engineering Systems Analysis” to the list of Basic Engineering Courses in the category of Systems Engineering and Analysis.

New text:
Systems Engineering and Analysis:
CHEM ENG 210
IEMS 310
ES APPM 346
CIV ENG 304

Page: 174

Description of Change:
Add the new course ECE 231-0 “Advanced Programming for Computer Engineers” to the category of Computer Programming as an either/or with ECE 230 “Programming for Engineers.”

New text:
Computer Programming:
COMP SCI 211
COMP SCI 317
ECE 230 or ECE 231

Department Curricula

Applied Mathematics Curriculum

Page: 175

Description of Change:
In the Basic Engineering requirement, replace the two categories, Computer Science and Computer Engineering, with the new categories, Computer Architecture, and Numerical Methods and Computer Programming.

New text:
Basic Engineering - 5 courses.
Description of Change:
Make statement under Basic Engineering read, “MAT_SCI 203 or 1 other course from Systems engineering and analysis, Computer programming, Computer architecture and numerical methods, or Materials science.”

New text:
Basic Engineering:
CIV ENG 216
MECH ENG 241
Thermodynamics 1 course
Electrical science 1 course
MAT_SCI 203 or 1 other course from Systems Engineering and Analysis, Computer Programming, Computer Architecture and Numerical Methods, or Materials Science

Computer Engineering Curriculum

Description of Change:
Change, “Computer Engineering: ECE 203 (grade of C- or better required for graduation) and ECE 230” to, “Computer Architecture and Numerical Methods: ECE 203 (grade of C- or better required for graduation). Computer Programming: ECE 231.”

New text:
Basic Engineering - 5 courses.
Probability, Statistics, ...: ECE 302
Electrical Science: ECE 202
Computer Architecture and Numerical Methods: ECE 203 (grade of C- or better required for graduation).
Computer Programming: ECE 231
1 course from thermo....

Computer Science Curriculum

Description of Change:
In the departmental requirements under the heading “Project work”, replace the statement, "The courses above must be chosen to include 2 quarters of project work..." with, "The courses must be chosen to include a 2-quarter project..."

New text:
Project Work:
The courses must be chosen to include a 2-quarter project, resulting in the construction ...

**Page: 178**

**Description of Change:**
Limit to 3 the number of times a student can repeat COMP SCI 338-0 and use them toward their Computer Science degree.

**New text:**
No more than 4 credits of COMP_SCI 338-0, “Practicum in Intelligent Information Systems”, can be toward the satisfaction of their engineering degree requirements.

**Electrical Engineering Curriculum**

**Page: 178**

**Description of Change:**
Change, “Computer Engineering: ECE 203 (grade of C- or better required for graduation) and ECE 230” to, “Computer Architecture and Numerical Methods: ECE 203 (grade of C- or better required for graduation). Computer Programming: ECE 230 or ECE 231.”

**New text:**
Basic Engineering - 5 courses.
Electrical Science: ECE 202 (grade of C- or better required for graduation).
Computer Architecture and Numerical Methods: ECE 203 (grade of C- or better required for graduation)
Computer Programming: ECE 230 or ECE 231
Probability, Statistics, ...: ECE 302
1 course from the basic engineering list...

**Industrial Engineering Curriculum**

**Page: 179**

**Description of Change:**
Change the requirement, IEMS 390-1,2 or IEMS 391-1,2, to IEMS 391-2 “Industrial Engineering Design Project II” and one course from IEMS 390-1, IEMS 390-2, or IEMS 391-1.

**New text:**
Senior Design Project - 2 courses.
IEMS 391-2 and one course from IEMS 390-1, IEMS 390-2, or IEMS 391-1.

**Page: 179**

**Description of Change:**
Add the new IEMS 383-0 to the departmental program selection category, Production and Logistics.
New text:
Production and Logistics - 1 course.
IEMS 381, 382, or 383.

Manufacturing Engineering Curriculum

Page: 179

Description of Change:
New Title for this degree program.

New text:
Manufacturing and Design Engineering

Page: 180

Description of Change:
MFG ENG 398 is renumbered as IDEA 398

New text:
Senior Design Project - 2 courses
IDEA 398 "Manufacturing Engineering Design Project".

Page: 180

Description of Change:
Change the core course requirements of the Manufacturing and Design Engineering degree:
Replace “COMP_SCI 110 or ECE 230” and “IEMS 244 or COMP_SCI 317” with IDEA 344
"Manufacturing Engineering Design" and IDEA 308 "Human Centered Product Design"

New text:
Core - 10 Courses
IDEA 344 Manufacturing Engineering Design
IDEA 308 Human Centered Product Design
IEMS 201
IEMS 305 or IEMS 307
etc.

General Engineering Courses

Page: 181

GEN_ENG 106-1,2 Engineering Design and Communication

Description of Change:
GEN ENG 106-1,2 "Engineering Design and Communication" is now to be listed under the department, Institute for Design Engineering and Applications, as IDEA 106-1,2.
New Course
GEN_ENG 215-1,2,3,4 Engineering Advanced Conceptual Workshop

Exercises related to the segment of Engineering Analysis in which the student is currently enrolled. Prerequisites: Co-registration in the counterpart GEN_ENG 205-1,2,3,4.

Page: 181

GEN_ENG 206-1,2,3 Honors Engineering Analysis

Description of Change:
ES APPM 253 is now GEN ENG 206-4

New text:
(Omit the last, parenthetical sentence.)

Page: 181

GEN_ENG 206-1,2,3,4 Honors Engineering Analysis

Description of Change:
ES APPM 253 is now the fourth segment in this series course.

New text:
Covers the topics addressed 205-1,2,3,4 at a deeper level. Intended for students with demonstrated strength in mathematics, computer programming, and/or physics. Prerequisite: Consent of the instructor.

Page: 183

BMD_ENG 322-0 Mathematical Modeling of Physiological Systems

Description of Change:
Course has been dropped.

New text:

Page: 184
BMD_ENG 373-0 Cardiac Mechanics
Description of Change:
Course has been dropped.

New text:

Civil Engineering

Courses Primarily for Undergraduates

Page: 188

CIV_ENG 219-0 Continuum Mechanics I
Description of Change:
Course has been dropped.

New text:

Page: 189

CIV_ENG 340-0 Fluid Mechanics II
Description of Change:
The prerequisite of CIV ENG 321 should be CHEM ENG 321.

New text:
Prerequisite: CHEM ENG 321, MECH ENG 241 or consent of the instructor.

Page: 188

New Course
CIV_ENG 206-0 Environmental Literacy

New title to replace “Analyzing Environmental Issues”

Page: 188

New Course
CIV_ENG 304-0 Civil and Environmental Engineering Systems Analysis

This course presents quantitative techniques to develop descriptive and prescriptive models that can be used to support efficient planning and management of civil and environmental engineering systems. Prerequisites: MATH 214-2 or Equivalent.

Page: 188
CIV_ENG 314-0 Mechanics of Crustal Processes
Description of Change:
Course has been dropped.

New text:

Page: 190

CIV_ENG 368-0 Industrial Hygiene and Environmental Control
Description of Change:
Course has been dropped.

New text:

Page: 190

CIV_ENG 372-0 Transportation System Design and Analysis
Description of Change:
Course has been dropped.

New text:

Page: 190

New Course
CIV_ENG 382-0 Infrastructure Facilities and Systems

Theory, function, planning, design, ownership, finance and operation of contemporary infrastructure systems presented in lecture-discussion format, along with weekly field trips to example systems.

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Electrical and Computer Engineering

Courses Primarily for Undergraduates

Page: 193

ECE 115-0 The Electron in the 21st Century
Description of Change:
Course has been dropped.

New text:

Page: 196
New Course
ECE 394-0 ASIC and FPGA Design

Overview of Computer Aided Design tool flow for ASIC and FPGA Design. Synthesis from hardware description languages and creation of finite state machines. Differences between FPGA and ASIC design flows. Exploration of concepts in several projects. Prerequisites: ECE 303.

Page: 195

ECE 365-0 Communication Filters
Description of Change:
Course has been dropped.

New text:

Page: 194

New Course
ECE 231-0 Advanced Programming for Computer Engineers

Object-oriented programming, classes and data hiding, dynamic object construction and destruction, derived classes and inheritance, virtual functions; file processing; introduction to UNIX; testing and test generation. Prerequisite: COMP_SCI 110 or knowledge of any programming language.

Page: 194

New Course
ECE 230-0 Programming for Engineers

Revision of previous 230-0, "Programming for Computer Engineers"
New Prerequisite: GEN_ENG 205-1,2

Page: 196

Engineering Sciences and Applied Mathematics
Courses Primarily for Undergraduates

ES_APPM 253-0 Honors Engineering Analysis IV
Description of Change:
This course has been converted into GEN ENG 206-4.

New text:
New Course
IEMS 345-0 Negotiations and Conflict Resolution for Engineers

This course is a highly interactive case-study based exploration of the field of negotiations and dispute resolution. Students interact in simulated negotiations and disputes that range in complexity from single party/single issue to multi party/multi issue cases that illustrate integrative negotiations techniques. In addition, this course explores dispute resolution as well as alternate dispute resolution techniques as well in the context of typical industrial situations. Prerequisites: IEMS 303 and IEMS 342 are recommended

Page: 198

New Course
IEMS 343-0 Project Management for Engineers

This course is a case study based exploration of the project management body of knowledge. Key topics include: project scheduling, risk management, project leadership, small group dynamics, project methodologies, lifecycle concepts and project controls. A Socratic approach is taken to explore various case studies in the context of established and leading edge project management concepts. Prerequisites: IEMS 303 and IEMS 342 are recommended

Economics and Financial Decisions

Page: 198

New Course
IEMS 373-0 Introduction to Financial Engineering

(replaces previous Financial Engineering I course.)

Production and Logistics

Page: 199

New Course
IEMS 383-0 Service Operations Management
Explores service industries. Introduces cost reduction and service enhancement models. Topics include location planning, workforce scheduling, yield management, queuing analysis, and call center management. Prerequisites: IEMS 313 and IEMS 315

Manufacturing Engineering

**Page:** 199

**Description of Change:**
Replace the category, Manufacturing Engineering, with Manufacturing and Design Engineering.

**New text:**
Manufacturing and Design Engineering

**Page:** 199

**Description of Change:**
Courses previously designated as MFG_ENG will not be designated as IDEA courses.

**New text:**

**Page:** 199

**Description of Change:**
Courses previously designated as MFG_ENG will now be designated as IDEA courses.

**New text:**

Manufacturing Engineering

Courses Primarily for Undergraduates

**Page:**

**MFG_ENG 106-1,2 Engineering Design and Communication**

**Description of Change:**
GEN ENG 106-1,2 will now be listed as IDEA 106-1,2.

**New text:**
(see previous description for GEN ENG 106-1,2)

**Page:** 199
**New Course**  
**MFG_ENG 298-0 Interdisciplinary Design Projects I**

Product or system design projects carried out by small student groups. Conceptual and detailed design, implementation and evaluation, reporting and archiving. At least one team member must be registered for IDEA 398. Prerequisite: IDEA 106-1,2.

**Page:** 199

---

**MFG_ENG 395-0 Special Topics in Manufacturing Engineering**  
**Description of Change:**  
This course will now be IDEA 395-0

**New text:**  
IDEA 395-0 "Special Topics in Manufacturing Engineering"

**Page:** 199

---

**MFG_ENG 398-0 Manufacturing Engineering Design Project**  
**Description of Change:**  
This course will now be IDEA 389-0

**New text:**  
IDEA 398-0 "Manufacturing Engineering Design Projects"

**Page:** 199

---

**MFG_ENG 399-0 Independent Study**  
**Description of Change:**  
This course will now be IDEA 399-0

**New text:**  
IDEA 399-0 "Independent Study"

**Page:** 199

---

**New Course**  
**MFG_ENG 308-0 Human-Centered Product Design**

This project-based course focuses on user needs. The course introduces observational methods, brainstorming, prototyping, business models, and the social and engineering concerns for product design. Prerequisite: Sophomore standing or IDEA 106-1,2 (EDC)

**Page:** 199

---

**New Course**  
**MFG_ENG 297-0 Intermediate Topics in Engineering Design (0.5 units)**
Topics suggested by students and faculty with approval of the Institute.

**Page: 199**

**New Course**
**MFG_ENG 306-0 Technology Assessment and Innovation**

Application of real-world methodologies to innovative engineering design. Critical evaluation of candidate technologies; consideration of stakeholder needs and constraints; design review; design proposal.  
Prerequisite: Sophomore standing or IDEA 106-1,2 (EDC)

**Page: 199**

**New Course**
**MFG_ENG 344-0 Manufacturing Engineering Design**

This course focuses on production system design with emphasis on manual assembly, machining processes, material handling, material storage, and product design for manufacture and assembly.  
Prerequisite: MECH_ENG 340-1 or Consent of the Instructor

**Page: 199**

**New Course**
**MFG_ENG 370-0 Advanced Topics in Engineering Design (0.5 units)**

Topics suggested by students and faculty with approval of the Institute.

**Page: 199**

**New Course**
**MFG_ENG 370-0 Engineering Portfolio Development (0.5 units)**

Students create a portfolio that showcases engineering work and furthers their personal career goals, such as obtaining a position in industry or acceptance into a program of graduate study. The portfolio is a design project, aimed at presenting a story about its creator in a physical presentation that embodies its goals. The course also provides students with an integrated capstone experience in design and communication. The course provides instruction on giving effective presentations and requires multiple presentation activities. NOTE: This course can be combined with any other IDEA half-unit course to produce a whole-unit credit.

---

**Mechanical Engineering**

**Courses Primarily for Undergraduates**
New Course
MECH_ENG 382-0 Experiments in Micro/Nano Science and Engineering

This course covers wide and diverse interdisciplinary topics spanning physical, biological sciences and engineering. It consists of seven integrated labs by which students acquire hands-on experience in various aspects of nano and micro science and engineering. The labs cover clean room microfabrication, flow visualization in microchannels, nanomechanics, AFM and dip pen nanolithography, multi-physics computational tools, and experimental techniques to evaluate micro/nano devices. Prerequisites: ME381 or permission of instructor.
Medill School of Journalism: Supplement to the Undergraduate Catalog 2003-2005

There are no entries for the Supplement to the Undergraduate Catalog 2003-2005 under this title.
Academic Policies

Programs of Study

Bachelor of Music

Page: 213

Description of Change:
omit first sentence and replace with text below

New text:
Courses of study leading to the bachelor of music degree include music cognition, music composition, music education, musicology (historical or ethnomusicology tracks), music theory, general academic studies, and performance in jazz studies, piano, string instruments, voice, winds and percussion instruments.

Page: 213

Description of Change:
second paragraph, last sentence, omit the word "ethnomusicology" from the list of recent ad hoc specializations.

New text:

Bachelor of Arts in Music

Page: 213
The Bachelor of Arts in Music offers a broad liberal arts education with a major in music. The requirements of this degree are essentially identical to those for the B.A. in the Weinberg College of Arts and Sciences. Within the degree’s focus on music, there exists a wide range of possibilities for study spanning from cultural musicology to cognitive studies of music and from music composition to advanced technology for music. The Bachelor of Arts curriculum offers considerable latitude in designing a sequence of courses to suit the student’s interests and goals. A key feature for the student is the planning and execution of a senior project. This degree is an excellent stepping stone to further education in music or to any career in which the person is deepened and enriched by knowledge of music.

Degree Requirements

Page: 216

Music majors must earn a grade of C or above in all courses required in the major, including all core courses and all specialization courses, in order to count those courses toward graduation requirements. Grades of D and above must be earned in all distribution courses and in all free electives in order to fulfill those requirements.

Music Performance Study

Page: 216

The School of Music offers major instruction in piano, string instruments, winds, percussion, and voice. Students should consult their adviser or program coordinator for the assignment of an instructor. Consent of the instructor and department chair as well as concurrent registration in ensemble (except in piano) are required. Elective performance study assignments are made by the appropriate department chair as space is available.
Academic Options

Double Major

Page: 217

Description of Change:
omit the word "only" from the second sentence.

New text:

Interdisciplinary Certificates

Page: 217

Description of Change:
new heading
all new text below for this section

New text:

Minor Programs

School of Music students may elect to complete
one of the minor programs developed
by the School of Music faculty and representing
disciplines often used in the music profession. Some minors cross the normally established
disciplines to enable students to combine the study of music with another area in an
interdisciplinary fashion. Each includes a minimum of six and a maximum of nine
courses. Students applying for School of Music minors must present records showing a
minimum of five courses not double counted in their major.
Students who complete all required courses and
notify the Office of Student Affairs that they have done so will receive a notation on their
Northwestern transcripts. Applications to receive the minor should be completed along with
the Application for a Bachelor’s Degree.

Page: 218

Description of Change:
add new entry

New text:

Music Composition

The Minor in Music Composition requires 9 courses:

3 units of Composition 111
3 units of Composition 311
1 unit Instrumentation or Orchestration (MUS COMP 314)
1 unit 300-level Composition
1 unit Music Technology
6 quarters Composition Colloquium

Interdisciplinary Certificates

Commercial Music

**Page: 217**

**Description of Change:**
change the word "Certificate" to "Minor" in the first line

**New text:**

Jazz Studies

**Page: 217**

**Description of Change:**
change the word "Certificate" to "Minor" in the first line

**New text:**

Music Business

**Page: 218**

**Description of Change:**
change the word "Certificate" to "Minor" in the first line

**New text:**

Music Cognition

**Page: 218**

**Description of Change:**
change the word "Certificate" to "Minor" in the first line

**New text:**

Music Criticism

**Page: 218**
Description of Change:
change the word "Certificate" to "Minor" in the first line

New text:

Music Technology

Page: 218

Description of Change:
change the word "Certificate" to "Minor" in the first line

New text:

Interschool Programs

Partnership through the Arts Program

Page: 218

Description of Change:
omit this entry entirely.

New text:

Resources

Facilities

Page: 220

Description of Change:
this paragraph should be replaced with the paragraph below.

New text:
The School of Music occupies several buildings. The Music Administration Building houses administrative offices, classrooms, studios, and practice rooms. The faculties of the Department of Music Studies, Voice and Opera Program, and Piano Program have offices in this building. Regenstein Hall houses rehearsal facilities, practice rooms, a 200-seat lecture/recital room, and the library and offices for the University bands. The Department of Music Performance Studies office and studios for faculty of the Conducting and Ensembles, String Instruments, and Wind and Percussion Instruments Programs also are located in Regenstein Hall. Practice Hall contains 35 practice rooms. Lutkin Hall, seating 400, is used for student and faculty recitals and lecture classes. Pick-Staiger Concert Hall provides a 1,000-seat concert hall, rehearsal facilities, and offices and library for the University Symphony Orchestra. The School of Music also maintains a computer lab and an
electronic music studio.

Music Studies for Nonmajors

Page: 221

Description of Change:
omit the last sentence "For additional information about instruction, inquire in person at the School of Music’s Office of Student Affairs" and replace with the sentence below.

New text:
For additional information about instruction, call the program coordinator at 491-4782.

Music Studies for Nonmajors

Private Lessons for Credit

Page: 221

Description of Change:
change complete above text to what is given below. (all fees went up $10)

New text:
Nonmusic majors may take half-hour private music lessons for .5 course credit in GEN MUS 115 Applied Piano/Organ, 120 Applied Strings, and 125 Applied Winds/Percussion. A registration fee of $210 (for 2004–05) is billed to the student’s tuition and fees account. Nonmusic majors may take voice classes or private voice lessons, for up to .5 course credit (subject to instructor consent), in GEN MUS 131, 133, 134, 160, 231, 260, and 360. A registration fee of $185 for voice classes, $220 for beginning private voice lessons, or $270 for intermediate or advanced private voice lessons (for 2004–05) is billed to the student’s tuition and fees account. Students are accepted for private instrumental lessons and for vocal lessons and classes based on an audition and the availability of an instructor.

Courses Open to Undergraduates

Page: 221

New Course
GEN_MUS 121-0 Beginning Nonmajor Class Guitar(.5)
New Course
MUSIC 399-0 Independent Study

Music Studies

Page: 222

Description of Change:
add parenthesis below after the word "musicology" in the sixth line

New text:
(historical or ethnomusicology track)

Music Composition

Music Studies

Major Studies Requirement

Page: 222

Description of Change:
old text
322-1,2 Materials of Modern Music (1 unit)

New text:
300-level Composition electives (2 units)

Page: 222

Description of Change:
old text
Music theory courses in analysis (2 units) (1 unit must be in 20th-century analysis)

New text:
20th-century analysis (1 unit)
New Course
MUS_COMP 111-1,2,3 Class Composition

Class instruction in techniques of composition. Open to nonmusic majors. Prerequisite: preceding quarters of 111 or consent of instructor.

Music Education

Page:

Description of Change:
old text for the "choral track" section should be replaced with the text below.

New text:
Choral Track (6.5 units)

• 231-1 Guitar Class I (.5 unit)
• 232 Voice Class (.5 unit)
• CONDUCT 340-2 Advanced Conducting

361 Teaching General Music I
• 362 Teaching General Music II
• 366 Teaching Choral Music I
• 367 Teaching Choral Music II
• Instrumental class elective (.5 unit)

Music Education

Page: 222

Student Teaching Courses

Page:

Description of Change:
looks like there was a religion class submitted to this on-line editor that shouldn't be here! :)

New text:

Page:
An undergraduate major in musicology (either historical or in ethnomusicology) is available within the bachelor of music degree or as a concentration within the bachelor of arts. The courses required for this specialization are selected from musicology, analysis, and the departmental core. As some of the courses are offered on a two-year alternating schedule, certain courses may not be available during a given academic year.

Major Studies Requirement

For a major in musicology (historical track), 16 course units are required:

- 350–355 History of Music (6 units)
- Musicology electives or cognates (6 units)
- applied lessons/ensemble/performance (3 units)
- Senior project or thesis (1 unit)

For a major in musicology (ethnomusicology track), 16 course units are required:

- Ethnomusicology Core (3 units)
- Area and Topics courses (9 units)
- applied lessons/ensemble/performance (3 units)
- Senior project or thesis (1 unit)
Description of Change:
omit entire text and replace with below.

New text:
The major in music technology offers a unique professional preparation for a career in the technological sectors of the musical world — from games and Web-based multimedia to programming and composing for electronic media. Music technology students are engaged in creating music content for media as well as building technological tools for musical tasks.

Major Studies Requirement
For a major in music technology, 16 course units are required:

• 12 courses in Music Technology (to be determined in consultation with the Music Technology program advisor)
• 385 Senior Project (1 unit)
• Applied lessons/ensemble/performance experience (3 units)
Undergraduates majoring in theory receive training in a variety of advanced analytical methods. Undergraduates majoring in music cognition receive a broad education in music and the cognitive sciences. The emphasis is on “cognitive musicology,” whereby music is studied as an important aspect of human ability and society, using the tools and insights of cognitive science and musicological research.

Major Studies Requirement (Music Theory)

For a major in music theory, 16 course units are required:

- 300- and 400-level courses in music theory and cognition (6 units)
- Applied lessons/ensemble/performance experience (3 units)
- Music Technology (1 unit)
- Musicology (2 units)
- Cognates (3 units)
- Senior project (1 unit)
- 390 Theory Colloquium (0 units)

Major Studies Requirement (Music Cognition)

For a major in music cognition, 16 course units are required:

- 351 Music Cognition (1 unit)
- 335 Music Cognition (2 units)
- Major Electives (4 units)
- PSYCH 201 Statistical Methods (1 unit)
- PSYCH 205 Research Methods (1 unit)
- Cognate areas (3 units)
- Applied lessons/ensemble/performance experience (3 units)
- Senior project (1 unit)
New Course
MUS_THRY 394-0 Music Cognition Colloquium

Music Performance Studies

Page: 228

Description of Change:
omit and replace with below.

New text:
This department consists of the Conducting and Ensembles; Jazz Studies and Pedagogy; Piano; String Instruments; Voice and Opera; and Wind and Percussion Instruments Programs.

Conducting and Ensembles

Page: 228

Description of Change:
omit entire second sentence:

While an ad hoc major in conducting (for which courses are selected in consultation with the department chair) is available to undergraduates, students are urged to consider majoring in conducting at the graduate level.

New text:

Conducting and Ensembles

Courses Open to Undergraduates

Page: 228

New Course
CONDUCT 341-0 Choral Literature I
A comprehensive examination of choral music literature from the Renaissance to 1800.

Page: 228

New Course
CONDUCT 342-0 Choral Literature II

A comprehensive examination of choral music literature from 1800 to the present.

Page: 228

CONDUCT 377-0 Jazz Ensembles
Description of Change:
omit CONDUCT 377-0

New text:

Page: 228

New Course
CONDUCT 395-0 Early Music Ensemble

Page: 228

CONDUCT 377-0 Jazz Ensembles
Description of Change:
omit this entry

New text:

Jazz Studies and Pedagogy

Page: 228

Description of Change:
last two lines old text was:
CONDUCT 377 Jazz Ensembles (3–3.5 units)
WIND PER 391 Chamber Music (3–3.5 units)

should change to:

New text:
JAZZ ST 377 Jazz Ensembles (3–3.5 units)
JAZZ ST 391 Jazz Combo (3–3.5 units)
New Course
JAZZ_ST 340-0 Concepts in Jazz Pedagogy

Page: 229

New Course
JAZZ_ST 377-0 Jazz Ensemble

Page: 229

New Course
JAZZ_ST 391-0 Jazz Combo

"Piano, Organ, and Church Music"

Page: 229

Description of Change:
"Piano, Organ, and Church Music" heading should be changed to JUST "Piano"

New text:

Page: 229

Description of Change:
omit entire text and change to below.

New text:
The Piano Program offers the major in piano performance. This major combines a strong musical basis for a professional career with the broad humanistic interests embodied in a liberal arts education. The course of instruction focuses on the studio and includes private lessons, studio classes, a thorough course in piano repertoire, piano pedagogy, and accompanying classes. Electives are available in chamber music and other areas, allowing students to tailor a program to their individual needs. Frequent performances as a soloist and as an assisting musician develop skills in public presentation. Solo recitals, required in both the junior and senior years, are considered an integral part of the programs.
Major Studies Requirement in Piano Performance

For a major in piano performance, 20 course units are required:

- PIANO 161 Piano Performance (3 units)
- PIANO 261 Piano Performance (3 units)
- PIANO 361 Piano Performance (6 units)
- PIANO 313-1,2,3 Piano Repertoire (3 units)
- PIANO 315-1,2,3 Piano Pedagogy (3 units)
- PIANO 391 Chamber Music or 392 Chamber Music: Trios (.5 unit)
- PIANO 328 Beginning Collaborative Piano (1.5 units)
- Junior Recital (0 units)
- PIANO 380 Senior Recital (0 units)

Students enrolled in a five-year double-degree program may substitute three 300-level musicology and/or music theory electives for the pedagogy requirement.

"Piano, Organ, and Church Music "

Organ Courses Open to Undergraduates

**Page:** 229

ORGAN 163-0,263-0,363-0 Organ Performance

*Description of Change:*

omit this entry entirely

**New text:**

Page: 229

ORGAN 163-0,263-0,363-0 Organ Performance

*Description of Change:*

omit this entry entirely (ORGAN 163-0, 263-0, 363-0)

**New text:**

Page: 230
ORGAN 310-1,2,3 Keyboard Harmony/Improvisation
Description of Change:
change of course description

New text:
Harpsichord lessons; students accepted with permission of instructor

Page: 230

ORGAN 380-0 Senior Recital
Description of Change:
omit this entry entirely (ORGAN 380-0)

New text:

String Instruments

Courses Open to Undergraduates

Page: 231

New Course
STRINGS 353-0 Introduction to the Harp

Voice and Opera

Courses Open to Undergraduates

Page: 231

VOICE 351-1,2,3 Opera Workshop for Juniors
Description of Change:
course description change

New text:
Professional portfolio preparation; advanced techniques for the performance of arias; methods of text and character analysis; audition techniques; study of opera scenes. Must be taken sequentially.

Page: 231

VOICE 352-1,2,3 Opera Workshop for Seniors
Description of Change:
New text:
Track 1, section 20: Specialty seminars (stage make-up, combat, etc.); opera scene work and performance. Prerequisite: 351-1,2,3. Must be taken sequentially.
Track 2, section 21: Opera scene work and outreach performances; professional portfolio preparation; advanced techniques for the performance of arias; audition techniques/Prerequisite: THEATRE 243. Must be taken sequentially.

Wind and Percussion Instruments

Courses Open to Undergraduates

Page: 232

WIND_PER 353-0 Introduction to the Harp
Description of Change:
omit WIND PER 353 Intro to Harp entirely.

New text:
Music Theatre Program

Partnership through the Arts Program

**Page:** 236

**Description of Change:**
Omit the Partnership through the Arts program entirely. It no longer exists.

**New text:**
(none)
University Administration

Office of the Associate Provost of University Enrollment

Undergraduate Admission Office

Page: 240

Description of Change:
Add text

New text:
Landis G. Fryer, BA, Assistant Director
Kenneth Hutchinson, BS, Assistant Director
Aaron Zdawczyk, MA, Assistant Director
Onis Cheathams, MA, Associate Director

Undergraduate Schools

Judd A. and Marjorie Weinberg College of Arts and Sciences

Philosophy

Page: 251

Description of Change:
add Tad Brennan, (PhD Princeton)  
Associate Professor

Description of Change:

Page: 2

add Jonathan Garthoff, (PhD UCLA), Assistant Professor

Description of Change:

Page: 251

School of Music

Administration

Page: 270

Description of Change:

correction: was  
Toni-Marie Montgomery, PhD

New text:  
Toni-Marie Montgomery, DMA

Description of Change:  
correction to old text:  
Peter R. Webster, PhD  
Associate Dean for Academic Affairs, John W. Beattie Professor  
of Music Education and Technology, Interim Chair of Music  
Studies, and Interim Coordinator of Music Composition
Page: 270

Description of Change:
omit Heather A. Landes, MM

New text:
TBD

Page: 270

Description of Change:
old text
Linda A. Garton, MM

New text:
Linda A. Garton, PhD

Page: 270

Description of Change:
old text
Margaret Gholson, BA

New text:
TBD

Page: 270

Description of Change:
omit Peter R. Webster entry entirely, and replace with new text below

New text:
Jason Eckardt (DM Columbia)
Lecturer

Music Studies

Music Composition
Description of Change:
omit Peter R. Webster entry entirely, and replace with new text below

New text:
Jason Eckardt (DM Columbia)
Lecturer

Description of Change:
addition to title

New text:
Jay Alan Yim (PhD Harvard)
Associate Professor and Coordinator of Music Composition

Music Education

Page: 270

Description of Change:
title change

New text:
Maud Hickey (PhD Northwestern)
Associate Professor and Coordinator of Music Education

Page: 270

Description of Change:
add new prof

New text:
Carlos Abril (PhD Ohio State)
Assistant Professor

Page: 270

Description of Change:
omit last part of Peter Webster's title: "Interim Chair of Music Studies, and Interim Coordinator of Music Composition"

New text:

Musicology
**Description of Change:**
change in coordinator-- it's not Thomas Bauman anymore.

**New text:**
Linda P. Austern (PhD Chicago)
Associate Professor and Coordinator of Musicology Program

Thomas Bauman (PhD California Berkeley)
Professor

**Description of Change:**
omit three faculty members entirely:
Virginia Gorlinski
Stephen Hill
Judith Schwartz

**New text:**

*Music Technology*

**Description of Change:**
omit two entries entirely:
Maud Hickey
Peter R. Webster
and add one new entry (below)

**New text:**
Scott Lipscomb (PhD UCLA)
Associate Professor

*Music Theory and Cognition*
Robert O. Gjerdingen (PhD Pennsylvania)
Associate Professor, Coordinator of Music Theory and Cognition Program

Description of Change:
omit entry entirely for:
Scott Lipscomb
Peter R. Webster

New text:
Stefan Eckert (PhD SUNY Stony Brook)
Lecturer
Elizabeth Margulis (PhD University of Arkansas)
Assistant Professor

Music Performance Studies

Conducting and Ensembles

New text:
Robert Hasty (DM Northwestern)
Senior Lecturer

Jazz Studies and Pedagogy
Description of Change:
omit Michael Kocour entry entirely, and replace with below

New text:
Joan Hickey
Lecturer

Jazz Studies and Pedagogy

Piano, Organ, and Church Music Program

Page: 272

Description of Change:
change to program title -- used to be "Piano, Organ and Church Music" (now is just "Piano")

New text:
Piano

Page: 272

Description of Change:
omit entries entirely for:

Steven Alltop
Douglas R. Cleveland
Margaret Kemper
Christine Kraemer
Richard Webster

and add one entry below

New text:
Julian Dawson (MM Trinity Dublin)
Senior Lecturer

Page: 272

Description of Change:
title change

New text:
Alan Chow (MM Juilliard)
Professor of Piano

String Instruments

Page: 272
Description of Change:
add two entries

New text:
Charles Pickler
Lecturer

Gregory Sarchet (MM Juilliard)
Lecturer

Voice and Opera

Page: 272

Description of Change:
omit two entries:
Rhoda Levine
William Woodruff

and add the five new ones below

New text:
Alan Darling (Certificate, Royal Academy of Music)
Senior Lecturer in Voice

Melissa Foster
Senior Lecturer in Voice

Pamela Hinchman (MM Curtis Institute of Music)
Associate Professor of Voice

Kenneth Smith
Lecturer in Voice

Rachael Gates (DMA Ohio State)
Lecturer in Voice

Wind and Percussion Instruments

Page: 273

Description of Change:
add five new entries

New text:
Randy Hawes (MM Carnegie Mellon)
Lecturer in Trombone

Michael Henoch
Lecturer in Oboe

Scott Hostetler
Michael Burritt (MM Eastman)
Professor of Percussion and Coordinator of Wind and Percussion Instruments Program

Frederick L. Hemke (AMD Wisconsin)
Louis and Elsie Snydacker Eckstein Professor of Music, Professor of Saxophone, Charles Deering McCormick Professor of Teaching Excellence

Page: 273

Description of Change:
two title changes

New text: