Supplement to University Catalog 1993-1995

- Financial Regulations
- College of Arts and Sciences
- School of Education and Social Policy
- McCormick School of Engineering and Applied Science
- School of Music
- School of Speech
- Other Undergraduate Programs
- Administration and Faculty

Lily Strong
l-strong@northwestern.edu-(847)491-8438
Office of the Registrar, Northwestern University
Last Updated: September 1994
Tuition and Fees

Tuition and Fees for 1994-95:

Undergraduate Tuition

Tuition: each quarter $5,468

Undergraduate Tuition: Exceptions

Full-time: each quarter $5,468

Excess Courses: each course $1,946

Part-time:
One course, each quarter $1,946
Two courses, each quarter $3,892

Auditor's fee:
Each course audited, each quarter $1,510

Performance Study:
P01 Private Instruction $973
P02 Private Instruction $1,946

Service Fees

Student Hospitalization Plan:
Undergraduate Students
<table>
<thead>
<tr>
<th>Age Category</th>
<th>Fee</th>
</tr>
</thead>
<tbody>
<tr>
<td>(22 years or younger)</td>
<td>$512</td>
</tr>
<tr>
<td>(greater than 22 years)</td>
<td>$680</td>
</tr>
</tbody>
</table>

Application Fee (not refundable) $50

Other Fees
Dependant Hospitalization Plan $1,500

"Division of Student Finance" has been renamed "Office of Student Accounts:

Bills and Payments
The Office of Student Accounts issues student bills at Northwestern.

Installment Payment Plan
For information, contact The Office of Student Accounts.

Withdrawal from the University: Refunds
The Office of Student Accounts considers the date the completed form is received at the Registrar's office as the effective date in making financial adjustments.

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Lily Strong
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Office of the Registrar, Northwestern University
Last Updated: September 1994
College of Arts and Sciences Supplement: 1993-1995

- African-American Studies
- African Studies Program
- Anthropology
- Art History
- Asian Studies
- Biological Sciences
- Business Institutions
- Chemistry
- Classics
- Cognitive Science
- Drama Program
- Economics
- English
- Environmental Science
- French and Italian
- Geography
- Geological Sciences
- German
- Hispanic Studies
- History
- Humanities Center
- Integrated Science Program
- Jewish Studies Program
- Latin American and Caribbean Studies
- Linguistics
- Mathematics
- Philosophy
- Physics and Astronomy
- Political Science
- Psychology
- Religion
- Romance Languages
- Science in Human Culture Program
Lily Strong
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Last Updated: September 1994
Add Courses:
0210 C01 Cognitive Science, Learning and Education
0230 Health and Physical Development

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Last Updated: September 1994
McCormick School of Engineering Supplement: 1993-1995

- **Areas of Concentration**
- **Biomedical Engineering**
- **Chemical Engineering**
- **Civil Engineering Curriculum**
- **Computer Engineering Curriculum**
- **Courses Primarily for Undergraduates**
- **Electrical Engineering Curriculum**
- **Electrical Engineering and Computer Science**
- **Engineering Sciences and Applied Mathematics**
- **General Engineering Courses**
- **Industrial Engineering Curriculum**
- **International Education**
- **Manufacturing Engineering Curriculum**
- **Material Science and Engineering Curriculum**

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Office of the Registrar, [Northwestern University](http://www.northwestern.edu)
Last Updated: September 1994
School of Music Supplement: 1993-1995

- Interdepartmental Studies--Keyboard Studies
- Music Technology Program
- Voice and Opera
- Wind and Percussion Instruments

Lily Strong
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Office of the Registrar, Northwestern University
Last Updated: September 1994
School of Speech Supplement: 1993-1995

- Communication Sciences and Disorders
- Integrated Arts Program
- Performance Studies
- Radio-Television-Film
- Theatre

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Last Updated: September 1994
Other Undergraduate Programs Supplement: 1993-1995

- Center for Writers
- Integrated Arts Program
- International Studies

Lily Strong
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Office of the Registrar, Northwestern University
Last Updated: September 1994
Administration and Faculty

Page 228

College of Arts and Sciences

Administration
changes/additions:
Michael F. Dacey, PhD
Senior Associate Dean and Professor of Anthropology
and Geological Sciences

Marie Thourson Jones, PhD
Associate Dean and Lecturer in Political Science

Michael S. Sherry, PhD
Assistant Dean for Freshmen and Professor of History

deletions:
Judith N. Levi
Sara L. Schastok

African-American Studies
changes/additions:
Aldon D. Morris (PhD SUNY Stony Brook)
Professor; also Sociology

Charles M. Payne (PhD Northwestern)
Associate Professor; also Center for Urban Affairs and
Policy Research

Diana T. Slaughter-Defoe (PhD Chicago)
Professor; also Education and Social Policy, Center
for Urban Affairs and Policy
Research

deletions:
Henry C. Binford
Phillip J. Bowman
Anthropology
changes/additions:
Caroline H. Bledsoe (PhD Stanford)
Professor

Michael F. Dacey (PhD Washington)
Professor; also Geological Sciences; Senior Associate Dean, College of Arts and Sciences

Marian Dagosto (PhD CUNY)
Associate Professor; also Dental School, Medical School

Micaela diLeonardo (PhD Calif Berkeley)
Associate Professor; also Women's Studies

Jane I. Guyer (PhD University of Rochester)
Professor; Director, Program of African Studies
Robert G. Launay (PhD Cambridge)
Professor

Kathleen D. Morrison (PhD Calif Berkeley)
Assistant Professor

Oswald Werner (PhD Indiana)
Professor

Art History
changes/additions:
Michael Leja (PhD Harvard)
Associate Professor

Michael Stone-Richards (PhD University of London)
Assistant Professor

deletions:
Sara L. Schastok

Art Theory and Practice
no changes

Biochemistry, Molecular Biology, and Cell Biology
changes/additions:
Amy M. Bejsovec (PhD Wisconsin)
Assistant Professor

Robert A. Holmgren (PhD Harvard)
Associate Professor; Director, Undergraduate Program in Biological Sciences

Theodore S. Jardetzky (PhD University of Basel)
Assistant Professor

David M. LeMaster (PhD Yale)
Assistant Professor

Kelly E. Mayo (PhD Washington)
Associate Professor

Alfonso Mondragón (PhD Cambridge)
Associate Professor

Thomas V. O'Halloran (PhD Columbia)
Professor; also Chemistry

deletions:
Gary W. Ashley
James Lippincott
Vikram P. Patel

Biological Sciences, Undergraduate Program in
changes/additions:
Robert A. Holmgren (PhD Harvard)
Associate Professor and Director; also Biochemistry, Molecular Biology, and Cell Biology

Joseph T. Hupp (PhD Michigan State)
Professor

Chemistry
changes/additions:
Harold H. Kung (PhD Northwestern)
Professor; also Chemical Engineering
Thomas V. O'Halloran (PhD Columbia)
Professor; also Biochemistry, Molecular Biology, and
Cell Biology

*John A. Pople (PhD Cambridge)
Board of Trustees Professor of Chemistry

deletions:
Gary W. Ashley
David M. LeMaster
Eric J. Roskamp

Classics
changes/additions:
Ahuvia Kahane (PhD Oxford)
Assistant Professor

Economics
changes/additions:
Rebecca M. Blank (PhD MIT)
Professor; also Center for Urban Affairs and Policy
Research

Eddie Dekel-Tabak (PhD Harvard)
Professor

Faruk Gul (PhD Princeton)
Professor

Judith K. Hellerstein (MA Harvard)
Visiting Instructor; also Center for Urban Affairs and
Policy Research

Bruce Meyer (PhD MIT)
Associate Professor; also Center for Urban Affairs and
Policy Research

Joel Mokyr (PhD Yale)
Robert H. Strotz Professor of Economics

Roger B. Myerson (PhD Harvard)
Harold L. Stuart Professor of Decision Sciences; also
Political Science
Robert H. Porter (PhD Princeton)
William R. Kenan Jr. Professor of Economics; also
Center for Urban Affairs and Policy Research

Ian P. Savage (PhD Leeds)
Senior Lecturer and Assistant Chair; also
Transportation Center
Phillip Swagel (PhD Harvard)
Visiting Assistant Professor

Alberto J. Trejos (MA Pennsylvania)
Visiting Instructor

deletions:
Robert Eisner
Bo Honor_
Hugo Hopenhayn
Per Krusell
Andrew F. Newman
Arnold R. Weber

English
changes/additions:
Tracy Davis (PhD Warwick)
Associate Professor; also Theatre

Jules David Law (PhD Johns Hopkins)
Associate Professor

Susan A. Manning (PhD Columbia)
Associate Professor; also Theatre

Barbara J. Newman (PhD Yale)
Professor and Chair

Carl S. Smith (PhD Yale)
Charles Deering McCormick Professor of Teaching
Excellence

French and Italian
changes/additions:
Jane B. Winston (PhD Duke)
Assistant Professor

deletions:
Charles S. Fineman

Geological Sciences
changes/additions:
Michael F. Dacey (PhD Washington)
Professor; also Anthropology; Senior Associate Dean, College of Arts and Sciences

deleotions:
John W. Rudnicki
John V. Walther

German Language and Literature
changes/additions:
Kerstin Behnke (MA University of Illinois)
Visiting Lecturer
Helmuth Berking (PhD Free University of Berlin)
Visiting Associate Professor; also Political Science

deleotions:
Kathy Harms
Peter F. Hayes
Peter Lutz Lehmann
John A. McCumber
Ellen Margaret Risholm

Hispanic Studies
changes/additions:
Gonzalo Daz-Migoyo (PhD NYU)
Professor and Chair

E. Inman Fox (PhD Princeton)
Professor

Susan Herman (PhD Yale)
Visiting Assistant Professor

deleotions:
Agnes Lugo-Ortiz
Joan Ramon Resina

History
changes/additions:
Henry C. Binford (PhD Harvard)
Associate Professor

Bruce Cumings (PhD Columbia)
John Evans Professor of International History and Politics

Peter F. Hayes (PhD Yale)
Alfred W. Chase Professor of Business Institutions

T. William Heyck (PhD Texas)
Professor

Roger A. Kittleson (MA Wisconsin)
Visiting Lecturer

Jacob Lassner (PhD Yale)
Philip M. and Ethel Klutznick Professor of Jewish Civilization

Robert E. Lerner (PhD Princeton)
Peter B. Ritzma Professor in the Humanities

Nancy MacLean (PhD Wisconsin)
Associate Professor

John R. McLane (PhD London)
Professor and Chair
Edward W. Muir (PhD Rutgers)
Professor

James Oakes (PhD Calif Berkeley)
Professor

Harold Perkin (MA Cambridge)
Professor

Carl F. Petry (PhD Michigan)
Charles Deering McCormick Professor of Teaching Excellence

Adolph L. Reed, Jr. (PhD Atlanta) Professor; also Political Science

Frank W. Safford (PhD Columbia) Professor

Michael S. Sherry (PhD Yale) Professor; Assistant Dean for Freshmen, College of Arts and Sciences

Lacey Baldwin Smith (PhD Princeton) Peter B. Ritzma Professor Emeritus in the Humanities; Senior Fellow, Searle Center for Teaching Excellence

Stuart W. Strickland (PhD Harvard) Assistant Professor

deletions:
Arthur F. McEvoy
Ivor G. Wilks

Linguistics
changes/additions:
Judith N. Levi (PhD Chicago) Associate Professor

deletions:
Oswald Werner (PhD Indiana) Professor

Mathematics
changes/additions:
Gui-Qiang Chen (PhD Academia Sinica) Associate Professor

Mikhail Kapranov (PhD Steklov) Associate Professor

Zhihong Xia (PhD Northwestern)
Professor

Neurobiology and Physiology
changes/additions:
Mark A. Segraves (PhD Pennsylvania)
Associate Professor

deletions:
Thomas K. Goldstick
Kelly E. Mayo
Aryeh Routtenberg
John Troy

Philosophy
changes/additions::
Nancy Fraser (PhD CUNY)
Associate Professor; also Center for Urban Affairs and Policy Research

Randolph K. Hill (PhD Illinois)
Assistant Professor

Thomas A. McCarthy (PhD Notre Dame)
John C. Shaffer Professor of the Humanities

John A. McCumber (PhD Tornoto)
Associate Professor

Physics and Astronomy
changes/additions::
Anupam Garg (PhD Cornell)
Associate Professor

Farhad Yusef-Zadeh (PhD Columbia)
Associate Professor

deletions:
Tadashi Arai
Horace P. Yuen

Political Science
changes/additions:
Helmuth Berking (PhD Free University of Berlin)
Visiting Associate Professor; also German

Jonathan D. Casper (PhD Yale)
Professor and Chair

Patricia D. Conley (PhD Chicago)
Assistant Professor

Bruce Cumings (PhD Columbia)
John Evans Professor of International History and Politics

Edward L. Gibson (PhD Columbia)
Assistant Professor

Marie Thourson Jones (PhD Princeton)
Lecturer; Associate Dean, College of Arts and Sciences

Roger B. Myerson (PhD Harvard)
Harold L. Stuart Professor of Decision Sciences; also Economics

Adolph L. Reed Jr. (PhD Atlanta)
Professor; also History

Ben Ross Schneider (PhD Calif Berkeley)
Associate Professor

Wesley G. Skogan (PhD Northwestern)
Professor; also Center for Urban Affairs and Policy Research

Peter Swenson (PhD Yale)
Associate Professor

Kathleen Thelen (PhD Calif Berkeley)
Associate Professor

Michael Wallerstein (PhD Chicago)
Professor; also Center for Urban Affairs and Policy Research

Jeffrey Winters (PhD Yale)
Associate Professor
Robert M. Entman
Ibrahim Abu-Lughod
Dorothy D. Nesbit
Charles C. Ragin

Psychology
changes/additions:
James W. Hall (PhD USC)
Professor; also Education and Social Policy

Douglas L. Medin (PhD South Dakota)
Professor and Chairperson

Ken Paller (PhD Calif San Diego)
Assistant Professor

Neal J. Roese (PhD Western Ontario)
Assistant Professor

Aryeh Routtenberg (PhD Michigan)
Professor

Jeffrey W. Sherman (MA Calif Santa Barbara)
Visiting Instructor

Benjamin D. Sommer (PhD Chicago)
Assistant Professor

Bobby J. Calder
Karen C. Fuson
Winfred F. Hill
Dan P. McAdams
Andrew Ortony
Roger C. Schank
Nestor A. Schmajuk
Vicki Smith

Religion
changes/additions:

deletions:
Isshi Yamada
Barbara J. Newman

Slavic Languages and Literatures
changes/additions:
Irina Dolgova (PhD Leningrad State University)
Senior Lecturer

Ilya Kutik (MA Gorky Literary Institute)
Visiting Instructor

deletions:
Boris Pokrovsky

Sociology
changes/additions:
Aldon D. Morris (PhD SUNY Stony Brook)
Professor and Chair; also African-American Studies

Nicola Beisel (PhD Michigan)
Assistant Professor; also Center for Urban Affairs and Policy Research

Thomas D. Cook (PhD Stanford)
Professor; also Center for Urban Affairs and Policy Research

Kenneth W. Dauber (PhD Arizona)
Assistant Professor; also Center for Urban Affairs and Policy Research

Wendy N. Espeland (PhD Chicago)
Assistant Professor; also Center for Urban Affairs and Policy Research

Ranjay Gulati (PhD Harvard)
Assistant Professor; also Organization Behavior

Carol A. Heimer (PhD Chicago)
Associate Professor

Albert Hunter (PhD Chicago)
Professor

Christopher Jencks (MEd Harvard)
John D. MacArthur Professor of Arts and Sciences; also Center for Urban Affairs and Policy Research

Orville Lee (MA Calif Berkeley)
Visiting Instructor

Charles C. Ragin (PhD Northwestern)
Professor; also Center for Urban Affairs and Policy Research

Linda A. Teplin (PhD Northwestern)
Professor; also Psychiatry

Brian Uzzi (PhD SUNY Stony Brook)
Assistant Professor; also Organization Behavior

James C. Witte (PhD Harvard)
Assistant Professor; also Center for Urban Affairs and Policy Research

Edward J. Zajac (PhD Pennsylvania)
Associate Professor; also Organization Behavior

deletions:
Malcolm Dow
Roberto Fernandez
Charles M. Payne

Statistics
changes/additions:
Thomas Severini (PhD Chicago)
Associate Professor

Bruce D. Spencer (PhD Yale)
Professor and Chair

Martin A. Tanner (PhD Chicago)
Professor
deletions:
Yi Cheng
Bo Honor

Robert R. McCormick School of Engineering and Applied Science

Page 244

Biomedical Engineering

Change:
Matthew R. Glucksberg to Associate Professor and
delete: "Ralph M. Parsons
Outstanding Young Assistant Professor"

James B. Grotberg to Professor

John B. Troy to Associate Professor

Joseph T. Walsh to Associate Professor
Tai Te Wu: delete "Engineering Sciences and Applied Mathematics"

Page 245

Electrical Engineering and Computer Science

Add:
Robert P.H. Chang (Ph.D. Princeton)
Professor; also Material Science and Engineering

Eric Domeshek (Ph.D. Georgia Tech)
Assistant Professor

Daniel Edelson (Ph.D. Northwestern University)
Assistant Professor; Also School of Education

Louis M. Gomez (Ph.D. University of California at Berkely)
Associate Professor; Also School of Education

Lucy Y. Pao (Ph.D. Stanford)
Assistant Professor
Mort Rahimi (Ph.D. University of Iowa)
Professor and Vice President for
Information Systems and Technology

Delete:
Philip J. Woest

Page 246

Engineering Sciences and Applied Mathematics

correct W. Edward Olmstead (PhD Northwestern) to read:
Professor of Applied
Mathematics; also Mathematics. This item should then
be moved and inserted after
Toshio Mura;

insert Thomas Erneux (PhD Brussels), Adjunct
Professor, after Stephen H. Davis;

Bernard J. Matkowsky (PhD NYU), should read: John
Evans Professor of Applied
Mathematics and Chair; also Mathematics; also
Mechanical Engineering; and moved
directly under heading "Engineering Sciences ..... ";

Hermann Riecke (PhD Bayreuth), Assistant Professor
should be changed to Associate
Professor;

insert Mary Silber (PhD Berkeley), Assistant
Professor, after Hermann Riecke;

delete Tai Te Wu (PhD Harvard).

Page 247

Industrial Engineering Management Sciences

Remove Phil Jones' name;
Add
Mark Van Oyen (PhD Michigan)
David Simchi-Levi (PhD Tel Aviv)

Page.247

Materials Science and Engineering

Add:
Zdenek P. Bazant (PhD Czech Acad of Sciences)
Walter P. Murphy Professor; also Civil Engineering

Corrections:
Remove "Assistant Chair" from Buckley Crist

Gregory B. Olson (ScD MIT)
Professor and Associate Chair
Associate Director, Materials Research CenterÊ

Hamlin Jennings (PhD Brown)
Professor; also Civil Engineering

Peter W. Voorhees (PhD Rensselaer)
Professor

Page 247

Change: Ted Belytschko (PhD IIT)
to: Ted Belytschko (PhD IIT) Walter P. Murphy
Professor: also Civil Engineering

Change: James E. Colgate (PhD MIT)
Assistant Professor
to: James E. Colgate (PhD MIT)
Associate Professor

Delete : John Dndurs (PhD Northwestern)

Change : Wing K. Liu (PhD CalTech)
Professor
to: Wing K. Liu (PhD CalTech)
Professor; Also Civil Engineering
Change: Michael A. Peshkin (PhD Carnegie Mellon)
Assistant Professor
to: Michael A. Peshkin (PhD Carnegie Mellon)
Associate Professor

Medill School of Journalism

Administration

Michael C. Janeway, BA
Dean of the Medill School of Journalism and Professor of Journalism
Richard C. Christian, MBA
Associate Dean and Professor of Integrated Marketing Communications

Mary L. Dedinsky, MSJ
Associate Dean, Director of Teaching Media Program, and
Associate Professor of Journalism

Jack C. Doppelt, JD
Associate Dean and Associate Professor of Journalism

Roger C. Boye, MSJ
Assistant Dean, Director of Undergraduate Studies, and
Associate Professor of Journalism

Clarke L. Caywood, PhD
Chair, Integrated Marketing Communications Program and
Associate Professor

Jonathan Ziomek, MSJ
Director of Graduate Editorial Programs and Assistant Professor of Journalism

Jean Shedd, BA
Assistant Dean, Finance and Administration
Integrated Marketing/Communications

Martin P. Block (PhD Michigan State)
Professor

Tamara S. Brezen (PhD Michigan State)
Assistant Professor

Clarke L. Caywood (PhD Wisconsin)
Associate Professor; Chair, Integrated Marketing Communications

Richard C. Christian (MM Northwestern)
Professor; Associate Dean, Integrated Marketing Communications

E. Marla Felcher (PhD Northwestern)
Assistant Professor

Lisa Fortini-Campbell (PhD Washington)
Associate Professor

Thomas L. Harris (MA Chicago)
Visiting Associate Professor

Ronald B. Kaatz (MSJ Northwestern)
Associate Professor

Don E. Schultz (PhD Michigan State)
Professor

Edward J. Spiegel (MBA Dartmouth)
Associate Professor

Stanley I. Tannenbaum (BS Temple)
Associate Professor

Paul Wang (PhD Northwestern)
Assistant Professor

Editorial
David Abrahamson (PhD NYU)
Associate Professor

Hayward R. Blake (BA IIT)
Visiting Assistant Professor

Brenda Boudreaux (MSJ Northwestern)
Assistant Professor

Roger C. Boye (MSJ Northwestern)
Associate Professor; Assistant Dean and Director, Undergraduate Studies

Patrick J. Clinton (MA Northwestern)
Assistant Professor

Mary B. Coffman (MA Bowling Green)
Associate Professor; Co-Director, Washington DC Programs

Patricia K. Dean (BSJ Iowa State)
Associate Professor; Chair, Broadcast News Programs

Mary L. Dedinsky (MSJ Northwestern)
Associate Professor of Journalism; Associate Dean and Director of Teaching Media Program

Jack C. Doppelt (JD Chicago)
Associate Professor; Associate Dean

Sharon Downey (BA Cleveland State)
Lecturer

Robert M. Entman (PhD Yale)
Associate Professor; also Political Science and Communication Studies

James M. Franklin (MBA Stanford)
Assistant Professor

Ava Greenwell (MSJ Northwestern)
Assistant Professor

George H. Harmon (MBA Loyola)
Associate Professor; Chair, Newspaper Studies

Lee W. Huebner (PhD Harvard)
Professor

Michael C. Janeway (BA Harvard)
Professor; Dean, Medill School of Journalism

John Kupetz (MSJ Northwestern)
Assistant Professor

John M. Lavine (BA Carleton)
Professor; Director, Newspaper Management Center

Paul J. Lavrakas (PhD Loyola)
Professor; Director, NU Survey Lab

Robert K. LeBailly (MA Northwestern)
Senior Lecturer

Donna M. Leff (PhD California)
Professor

Robert J. McClory (MSJ Northwestern)
Assistant Professor

David L. Nelson (MSJ Northwestern)
Associate Professor

Michael O'Donnell (MS Iowa State)
Assistant Professor

Abe Peck (BA NYU)
Professor; Chair, Magazine Studies

Louis F. Prato (BA Penn State)
Associate Professor

David Protess (PhD Chicago)
Professor; Director, Gannett Urban Journalism Center
John Reque (MA Minnesota)
Senior Lecturer

Rick Rockwell (MA USC)
Assistant Professor

Leland F. "Buck" Ryan (MA Missouri)
Assistant Professor

Richard A. Schwarzlose (PhD Illinois)
Professor

Nancy Schwerzler (BA Skidmore)
Assistant Professor

Ellen Shearer (BA Wisconsin)
Associate Professor; Co-Director, Washington DC Programs

Mindy S. Trossman (JD Loyola)
Senior Lecturer

Mary Ann Damme Weston (MSJ Northwestern)
Assistant Professor

Charles Whitaker (MSJ Northwestern)
Assistant Professor

James Ylisela (BA DePaul)
Lecturer

Jonathan Ziomek (MSJ Illinois)
Assistant Professor; Director, Graduate Editorial Programs

School of Music

Page 249-50

Administration

Delete:
Paul A. Aliapoulous, MusAD
Associate Dean for Academic Affairs and Professor of Music Education

Terry L. Applebaum, DMA

Associate Dean for Administration and professor of Percussion

James Moore, PhD

Director of Field Services, Coordinator of Admissions, Director of Placement, and Associate Professor of Music Education

Marcia Bostis Norrmann, DMus

Interim Director of Undergraduate Studies and Associate Professor of Piano

Add:

Brennetta Simpson, (EdD. Columbia University)
Assistant Dean for Undergraduate Affairs

Heather A. Landes, (MM Northwestern University)
Coordinator of Undergraduate Admissions and Financial Aid

Wayne G. Gordon, (MM Northwestern University)
Coordinator of Graduate Admissions and Financial Aid

under Academic Studies and Composition

Music Education Program

Change, after Paul A. Aliapoulios (MusAd Boston): Associate Dean for Academic Affairs, School of Music to "Professor"

Delete:

James E. Moore (PhD Michigan)
Associate Professor, Director of Field Services, Coordinator of Admissions, and Director of Placement

Carol Richardson (EdD Illinois)
Assistant Professor

Add:
James Kjelland (PhD Texas)
Associate Professor
under Music Performance Studies
Conducting and Ensembles Program

Delete:
Larry Cook (PhD Iowa)
Chapel Choir Conductor

Page 251
Piano program
delete, following Marcia Bostis Norrman (DMus Northwestern):
"Interim Director of Undergraduate Studies"

Voice and Opera Program
Add:
Mignon Dunn
Professor

William Warfield
Lecturer

Winds and Percussion Instruments Program
Delete:
Terry Applebaum (DMusA Iowa)
Professor of Percussion; Associate Dean for Administration, School of Music

Page 252
Under Communication Sciences and Disorders
In the entry for Peter Dallos, add ÔHugh Knowles
Professor of AudiologyÔ after ÔJohn Evans Professor of NeuroscienceÔ.

dele:
Thomas Carrell.
Devera Klein
Under Communication Sciences and Disorders add:

Meryl Kobrin (PhD Northwestern)
Lecturer in Audiology and Hearing Science

Elizabeth Platt (MA Northwestern)
Lecturer in Speech and Language Pathology

Stuart Rosen (PhD University College London)
Associate Professor of Audiology and Hearing Sciences

Mario Ruggero (PhD University of Chicago)
Hugh Knowles Professor of Hearing Sciences and
Professor of Audiology and Hearing
Sciences

Therese K. Shanahan (MA Northwestern)
Lecturer in Speech and Language Pathology

J. Scott Yaruss (PhD Syracuse)
Assistant Professor of Speech and Language Pathology

Under Radio/Television/Film the entries for the
following personnel should read:

-Michelle Citron (PhD Wisconsin)  Associate Professor
-Laura Kipnis (MFA Nova Scotia College of Art and
Design)  Associate Professor
- Manjunath Pendakur (PhD Simon Fraser)  Professor
and Chair
- James G. Webster (PhD Indiana)  Professor; also
Communication Studies; Associate
Dean, School of Speech

Theatre
Add:  Joseph Appelt (MA University of Michigan)

William Siegenfeld (MA New York University)
Lily Strong

l-strong@northwestern.edu - (708)491-8438

Office of the Registrar, Northwestern University

Last Updated: September 1994
Add: Program for the Minor

The minor in African-American studies is intended to give students a thorough exposure to contemporary scholarship concerning the African-American experience. The minor consists of eight quarter-courses, two of which are chosen from a selection of B-level foundation courses, followed by six additional courses in African-American studies, one of which must be an approved history course and four of which must be at the C-level.

Requirements for the minor (eight units)

Two foundation courses chosen from: B10-1,-2 Survey of African-American Literature, B25-0 African-American Culture, B36-1,-2 Introduction to African-American Studies, B40-1, -2,-3 Survey of African-American Music. Only one quarter of B40 can be counted as a foundation course.

Six additional courses in the department or as approved by the department, four of which must be at the C-level, and one of which must be a history course chosen from the following:

- African-American Studies (404) B14-1,-2 History of Racial Minorities in North America, C26-0 Making of the Caribbean Peoples, C32-0 Introduction to African-American Historiography; History (427) C01-1,-2,-3 Survey of African-American History, or another history course approved by the Department of African-American Studies

For more information, consult the Department of African-
Replace "certificate(s)" with "minor(s)"

(Explanation: With the adoption of a program for minors in 1992-93, the College of Arts and Sciences changed the designation "certificate" to "minor." Unless noted, all requirements for the minor remain the same as those for the former certificate.)

Lily Strong
l-strong@northwestern.edu -(708)491-8438
Office of the Registrar, Northwestern University
Last Updated: September 1994
Anthropology

Pages 47-51

Page 47, paragraph 1, delete: "The ultimate aim is to find principles to which all cultures, social structures, and languages conform."

Page 48, change paragraph 1 to read:

Northwestern's Department of Anthropology has many strengths:
(1) the application of evolutionary, ecological, and other biological perspectives to the development of humankind;
(2) American, Middle Eastern and Southwest Asian prehistoric archaeology; (3) the study of North American Indian and African societies; (4) the study of complex and urban society; 
(5) political economy; and (6) gender. The department is strong in basic theory and refinements of qualitative and quantitative (mathematical) analysis of anthropological data as well as ethnography. Two field schools, one in archaeology and one in cultural anthropology, provide practical proving grounds for classroom theorizing.

Under Program of Study for Departmental Majors, Related courses, after "... other departments or programs," add: "At least two of these courses should be at the C-level."

After Four-Year BA/MA, add:

Program for the Minor

The goal of the minor in anthropology is to provide students in other fields a framework to pursue a particular
focus within the discipline. Such a focus might be within one of the sub-disciplines of anthropology (i.e., biological anthropology, archaeology, cultural anthropology, anthropological linguistics), or in area studies (e.g., Africa, the Middle East, the United States), or in some other field (e.g., ethnicity, gender, the origins of the state, urban studies). To fulfill this goal, the minor in Anthropology combines two of the four B-level courses required of majors in anthropology, one in the area of "ethnography" (B11 or B15) and one in the area of "origins" (B13, B14 or B16), with four C-level courses that constitute a coherent focus. The B-level courses provide a foundation for pursuit of specialized topics.

Requirements for the minor (6 units)

One unit: B11 Culture and Society, or B15 The Study of Culture through Language

One unit: B13 Human Origins, B14 Culture Origins, or B16 The Living Primates

A coherent combination of four C-level courses in anthropology with a specific focus.

Students pursuing the minor in anthropology must consult with the Director of Undergraduate Studies to establish their program and to be assigned a departmental adviser.

Sample programs: Students majoring in biology but with an interest in ecology and behavior would build a coherent minor in biological anthropology by taking B11 or B15 and B16 and a focused course selection such as C06 Evolution of Life Histories, C09 Primate Biology, C96-7 Junior Tutorial on Animal Sounds, and C99 Independent Study. Students majoring in history with an interest in pre- and early history would build a coherent minor in archaeology by taking B11 or B15 and B14 and a focused course selection such as C02 Origins of Civilization, C29 Near Eastern Prehistory, C81 North American Prehistory, and C21 Archaeological Field Methods, or C22 Introductory Archaeological Methods. Students majoring in political science with an interest in non-institutional or non-governmental political processes would
build a coherent minor in cultural anthropology by taking B13, B16 or B14 and B11 and a focused course selection such as C32 Strategies of Marriage and Reproduction, C47 Political Anthropology, C76 Socialization, and C91 Anthropology of Complex Societies. Other programs for the minor in Anthropology can be designed to meet a student's particular needs or interests. For more information, consult the Department of Anthropology, 1810 Hinman.

Under Courses Primarily for Freshmen and Sophomores, add:

403-B05-0 The Behavioral Biology of Women
Explores female behavior from an evolutionary perspective. Women's biosocial development from puberty, through pregnancy and lactation, to menopause and aging. Explores female life-history strategies in a variety of cultural settings including foraging, agricultural and industrial societies. Discusses issues of women's repression and autonomy, and roles of biology and culture in shaping women's lives.

Under Courses Primarily for Juniors, Seniors, and Graduates:

403-C12-0 Human Genetics
Change prerequisite to: "Anthropology B13, Biology B10, or permission of instructor."

Add:
403-C85-0 The Archaeology of State Societies
Examination of major theoretical and methodological issues in the origins and organization of prehistoric state societies. Case studies from the Old and New World are used to reconstruct political systems, elites, and regional economic organization in comparative perspective. Prerequisite: Anthropology C02 or equivalent.
Under Program of Study for Departmental Majors, Course requirements, following "Three B-level quarter-courses:
change "B01-1,2,3 Introduction to the History of Art" to "B10, B20 or B40, and B30 or B50"

Under Courses Primarily for Freshmen and Sophomores

Delete all listed courses (405-B01-1,2,3; 405-B02-0; 405-B050; 405-B60-0; 405-B65-0; 405-B89-0)

Add, in replacement:

405-B10-0 Introduction to Visual Culture
The course presents artworks in many media from varied cultures and time periods, and provides the beginning art history student with a range of conceptual, visual, and verbal skills essential to the description and analysis of visual forms.

405-B20-0 Introduction to African Art
A thematic and historical survey of the major periods of art-making in Africa, focusing on the analysis of a small number of exemplary works.

405-B30-0 Introduction to American Art
A survey of art in America broadly understood: the arts and architecture of the Americas from their first emergence in the pre-Columbian period, through the Conquest and the nineteenth century down to today.

405-B40-0 Introduction to Asian Art
This course introduces the arts of Asia--primarily of India, China, and Japan--through an exploration of selected major themes beginning with early devotional imagery in India and the transfer of Indic religions to East Asia, and concluding with European colonialism and its relationship to
the study of Asia.

405-B50-0 Introduction to European Art
Introduction to the leading centers and artists of Europe from ancient Greece to the twentieth century. Analysis of architecture, sculpture, painting, and graphic arts in relation to their social and cultural settings. Under Courses Primarily for Juniors and Seniors
Add:

405-C78-0 Architecture and Urbanism of the World City in the Twentieth Century. A critical examination of the modern city as a socio-economic system everywhere reproducible in our increasingly-unified world. We will examine how Western architectural and urban patterns are transformed and non-Western patterns confronted.

405-C84-0 African American Art
The art of the African-descended cultures of North and South America and the Caribbean in what it owes to its European context and to its African origins.

Change course number and description of 405-C86-1,2, to:

405-C86-0 Art of Africa
Thematic and historical survey of the arts and architecture of Africa from the ancient periods (Nubian Egypt) to the present.

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Last Updated: September 1994
Replace "certificate(s)" with "minor(s)"

(Explanation: With the adoption of a program for minors in 1992-93, the College of Arts and Sciences changed the designation "certificate" to "minor." Unless noted, all requirements for the minor remain the same as those for the former certificate.)

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Biological Sciences, Undergraduate Program in

Pages 55-59

Page 56:

Under "Biochemistry and Biophysics" Concentration: The required courses for this Concentration are now: C01, C22, C23, C54, and 411-C42-1.

Under "Neurobiology" Concentration: The required Concentration courses are now: C01, C02, C05, plus any two of: C03, C04, C06, C77.

Under "Physiology" Concentration: The appropriate Lab course is now 409-C92.

Page 57:

Under "Integrated Science Program", 409-C92 should be added to the list of appropriate lab courses, and the two courses listed for the "Biochemistry and Biophysics" Concentration should be changed to "409-C22, C23". The name of course 409-B10-1 has been changed to "Genetics and Evolutionary Biology".

After the descriptions of A70 and A90, add a note that "Credit is not allowed for more than one of: A70, A80, A90. Neither A70 nor A90 may be taken for credit once a student is enrolled in, or has taken, any part of the 409-B10 series."

Under Courses Primarily for Undergraduates, add:

409-A60-0 Human Reproduction
Basic biology of reproduction; relation between hormones, emotions, intelligence, and behavior; issues of public and private policy regarding family planning, abortion, population control, and religion.
409-A80-0 Introduction to Biology at the Molecular Level
The microworld of biological molecules; the diverse roles that they play in the lives of cells. Credit not allowed for both A80 and either A70 or A90. A80 cannot be taken for credit if a student is enrolled in, or has taken, Biology B10-2.

409-C22-0 Biochemistry of Macromolecular Complexes
Structure and behavior of membranes and complexes that function in association with membranes. Prerequisite: 409-C01 or instructor consent.

409-C23-0 Molecular Biophysics
Structure and function of biological molecules; the methodology of modern structural biology. Prerequisites: Physics A35, 409-C01.

409-C95-0 Molecular Genetics
An examination of how molecular genetics can be used to study biological problems. Examples are taken from the cell biology of yeast, the development of fruit flies, and genetic diseases of humans. Prerequisite: Biology B10-2.

Changes:

Page 59:

409-C54-0 is now entitled and described as follows: "Introduction to Biochemical and Molecular Research. Basic techniques of biochemistry and molecular biology, to probe fundamental problems in biology. Laboratory. Prerequisite: B10-3."

409-C90-0 is now entitled "Molecular Biology".

409-C91-0 is now entitled "Eukaryotic Regulatory Mechanisms".

Add to the description of course 409-C92-0: "With Laboratory".
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Replace "certificate(s)" with "minor(s)"

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Under Chemistry Program with Biochemistry Emphasis, in the last sentence, after "... are replaced by...," add: C22.

After The Teaching of Chemistry, add:

Program for the Minor

The minor in chemistry will provide students majoring in other fields with the opportunity to complete a significant portion of the course work required for a chemistry major. It is anticipated that the minor in Chemistry will be attractive to students with majors in life science, physical science, and engineering as well as premedical students with other majors. Such students are required to take three or more chemistry courses as part of their major or professional school requirements. By taking several additional B- or C-level courses, the student can complete the minor and receive recognition for their chemical studies. The minor permits the flexible selection of course work from the traditional chemical sub-disciplines; organic, inorganic, physical, and analytical chemistry. While selection of courses from each of these areas is encouraged by the department, a life science or premedical student might choose to emphasize organic chemistry while a physical science major might emphasize physical and analytical chemistry.

Prerequisites: Chemistry A03 or A72 or equivalent. Note that C-level chemistry courses have additional chemistry, physics, and mathematics prerequisites.

Requirements for the minor (6 units)
Six units of B- or C-level chemistry (exclusive of B01,
Minors must obtain permission from the department to register in B12-1,2,3, B15, and C35. Majors will have priority for registration in these courses which may have limited enrollments and in C99 independent study.

Sample Programs: Life science majors and premedical students are advised to take B10-1,2,3 or B12-1,2,3, C-43, and two additional courses. Physical science majors should take C42-1,2,3, C45, and two additional courses. Students with interests in materials science, geological science, environmental science, and chemical engineering should take B10-1,2, C35, C43 and two additional courses. Other programs for the minor can be designed to suit the needs of individual students.

Students interested in the minor in chemistry should consult the Department of Chemistry for further information and assignment of a adviser.

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Delete: Programs of Study for Departmental Majors and all material up to Study Abroad and add:

Programs of Study

The Classics Department offers a major in classics and minor in both Latin and Greek. A program which leads to certification in teaching is also available through the School of Education and Social Policy.

The Major in Classics

The major in classics, with emphasis in either Latin or Greek, provides extensive contact with classical literature in the original language and a broad knowledge of the classical world and its place in the Western tradition.

Requirements of the classics major can be satisfied by 18 or 19 courses, evenly divided between language courses and courses with readings in English. Even for students coming to Northwestern with little or no language background a classics major is a viable option.

Prerequisite: Latin B01-1,2,3 or Greek B01-1,2,3; Classics B10, B11, B12.

Major courses:

- Six C-level Latin or Greek courses in any combination, or three C-level courses in one of the languages and four at any level in the other.
- Three B-level courses in Classics in English (courses with the 414 prefix), Comparative Literary Studies B01-1, or related courses, as approved by the department.
- Three C-level Classics 414 courses. C-level courses in Greek or Latin may be substituted.

Related courses: Related courses may be drawn from the fields of art history, cultural anthropology, history, linguistics, philosophy, religion, or other languages and literatures.

The Minors in Greek and Latin

Classics offers two minor programs designed to provide a
solid foundation in language, literature, history and culture and to complement specialization in any other discipline. Each minor calls for six quarters of Greek or Latin and three approved C-level classics courses. Students planning to minor in Greek or Latin should meet with a departmental adviser.

Program for the Minor in Latin

Prerequisites: Latin 413-A01-1,-2,-3 or equivalent
Requirements for the minor (6 units):

Latin 415-B01-1,-2,-3 Introduction to Latin Literature
● Three C-level Classics courses as approved by the department.

Program for the Minor in Greek

Prerequisites: Greek 415-A01-1,-2,-3 or equivalent
Requirements for the minor (6 units):

● Greek 415-B01-1,-2,-3 Introduction to Greek Literature
● Three C-level Classics courses as approved by the department.

Delete:
414-B20-1,2,3 The Ancient World
414-C10-1,2 From Homer to Aristotle
414-C40-0 Women in Antiquity
414-C55-0 Greek Archaeology
415-A06-1,2,3 Modern Greek I
415-B06-1,2,3 Modern Greek II

Change:
413-B01-1,2,3 Introduction to Latin Literature
Change description to read: Review of grammar and vocabulary. Readings in Catullus, Horace, and other selected comedy and prose authors, with an emphasis on literary analysis. Prerequisite: A01 or department placement.

414-B10-0 Introduction to Greek Philosophy
Change course number to 414-B50-0

414-C15-0 History of Greece
Change course title to Aristotle's History of Athens

414-C21-1,2 Roman History
Add C21-3; change description to read: Politics, economics, and society. 1. The Republic, from the founding of Rome to the accession of Augustus (753-31 B.C.). 2. The Early Empire, from Augustus to the accession of Marcus Aurelius (31 B.C. to 180 A.D.) 3. Later Roman Empire, from Marcus
Aurelius to the death of Constantine (180 A.D. to 337 A.D.).

Add:

414-B10-0 Early Western Civilization
The origins and earliest form of Western civilization as developed by the Greeks, from the first Near Eastern civilizations to the Persian Wars, ending in 479 BC.

414-B11-0 Classical Greece
The political, social and intellectual history of Greece in the fifth and fourth centuries B.C.

414-B12-0 Roman Civilization
A history of the Roman Republic and selected topics of the Empire, with emphasis on political and social institutions.

414-B26-0 Women in Ancient Greece and Rome
The lives of women in ancient societies, as shown by histories, letters, plays and poetry of the times.

414-C30-0 Ancient Economy
Pre-industrial, Mediterranean economies of ancient Greece and Rome. Farming, transportation, settlement patterns, capitalism and trade, slavery, ending with a rustic Roman banquet.

414-C42-0 Early European Medicine
A study of the Greco-Roman origins of European medical thought from the cult of Asclepius to Galen, with emphasis on the ethical ideas, strengths and weaknesses of Greek science.

414-C45-0 Greek Tragedy
Readings in the plays of Aeschylus, Sophocles and Euripides, with emphasis on the social and institutional contexts of Greek theater as well as on its influence on Western drama.

414-C90-0 Topics in Greco-Roman Civilization
Content varies. Samples: Music and the City; Ancient Roman Gardens.

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Cognitive science is the scientific study of the mind with the goal of understanding the nature of human thought. The minor in cognitive science is designed to give students a broad foundation in this interdisciplinary field which encompasses cognitive psychology, linguistics, artificial intelligence, neuroscience, and related disciplines. Introductory courses survey basic phenomena and approaches; methods courses impart the core methods of cognitive science, while elective courses allow students to pursue more advanced study in particular disciplines.

Requirements for the minor (8 units)

- Two introductory courses chosen from Cognitive Science (452):
  * B07 Introduction to Cognitive Modeling
  * B10 Introduction to Cognitive Science: Language, Vision & Memory
  * B11 Introduction to Cognitive Science: Learning, Representation & Reasoning

- Two methods courses (at least one must be outside the student's major) chosen from:
  * Psychology 451-B01 Statistical Methods in Psychology, or an approved statistics course
  * Psychology 451-B05 General Experimental Design
  * EECS 727-A10 Introduction to Computer Programming in Pascal
  * EECS 727-A11 Fundamentals of Computer Programming

- Four courses chosen from at least two different areas as shown below. At least three of these must be at the C-level and at least three must be outside the student's major.
Courses counted towards the requirements for the student's major cannot be used to satisfy the requirements for the minor.

1. Artificial Intelligence

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>EECS 727-C25-1</td>
<td>Introduction to Artificial Intelligence Programming</td>
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<tr>
<td>EECS 727-C25-2</td>
<td>Artificial Intelligence Programming II</td>
</tr>
<tr>
<td>EECS 727-C37</td>
<td>Natural Language Processing</td>
</tr>
<tr>
<td>EECS 727-C44</td>
<td>Design of Computer-Based Problem Solvers</td>
</tr>
<tr>
<td>*EECS 727-C48-0</td>
<td>Introduction to Artificial Intelligence</td>
</tr>
<tr>
<td>EECS 727-D32</td>
<td>Advanced Topics in computer Vision</td>
</tr>
<tr>
<td>EECS 727-D37-1,-2</td>
<td>Advanced Natural Language Processing I, II</td>
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2. Cognitive Psychology

<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>LSCI 210-C21-0</td>
<td>The Psychology of Learning and Instruction</td>
</tr>
<tr>
<td>LSCI 210-D01-0</td>
<td>Cognition and Learning</td>
</tr>
<tr>
<td>LSCI 210-D39-0</td>
<td>Cognitive Science Models of Learning &amp; Problem Solving</td>
</tr>
<tr>
<td>Psych 451-C11-0</td>
<td>Human Learning and Memory</td>
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<td>Psych 451-C14-0</td>
<td>Cognitive Development</td>
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<td>Psych 451-C22-1,-2</td>
<td>Learning &amp; Motivation</td>
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<td>Psych 451-C24-0</td>
<td>Perception</td>
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<td>Psych 451-C27-1,-2</td>
<td>Formal Models of Cognition</td>
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<tr>
<td>*Psych 451-C28-0</td>
<td>Cognitive Psychology</td>
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<tr>
<td>Psych 451-C33-0</td>
<td>Psychology of Thinking</td>
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<td>Psych 451-C34-0</td>
<td>Psychology of Language</td>
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<td>Psych 451-C35-0</td>
<td>Heuristic Decision Processes</td>
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<td>Psych 451-C60-0</td>
<td>Human Memory and Cognition</td>
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<tr>
<td>Psych 451-D60-0</td>
<td>Analogy and Similarity</td>
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3. Cognitive Neuroscience

<table>
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<th>Course Title</th>
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<tr>
<td>*Biology 409-B10-3</td>
<td>Biology</td>
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<tr>
<td>N P 412-C02-0</td>
<td>Molecular Neurobiology</td>
</tr>
<tr>
<td>N P 412-C03-0</td>
<td>Cellular Neurobiology</td>
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<tr>
<td>N P 412-C04-0</td>
<td>Developmental Neurobiology</td>
</tr>
<tr>
<td>N P 412-C06-0</td>
<td>Central Nervous System Physiology</td>
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<tr>
<td>*N P 412-C08-3</td>
<td>Neuroanatomy</td>
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<tr>
<td>N P 412-C77</td>
<td>Sensory Neurobiology</td>
</tr>
<tr>
<td>*Psych 451-A12-0</td>
<td>Introduction to Neuroscience</td>
</tr>
<tr>
<td>Psych 451-C12-2</td>
<td>Neurobiology and Behavior</td>
</tr>
</tbody>
</table>
4. Linguistics

*Ling 434-B06-0 Formal Analysis of Words
*Ling 434-B07-0 Sound Patterns in Human Language
Ling 434-C05-0 Lexical Semantics
Ling 434-C06-0 Fundamentals of Syntax
Ling 434-C09-0 Psycholinguistics
Ling 434-C16-0 Phonetics
Ling 434-C29-0 Pragmatics
Ling 434-C46-0 Computers and Language Analysis
Ling 434-C71-0 Morphology

*Required if courses from this area are chosen

Students wishing to minor in cognitive science should consult the office of the Program in Cognitive Science, Swift Hall 102.

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Under Major courses, change last bulleted item to read:

At least 1 unit of Drama C80 Seminar in Drama, or an equivalent C or D-level course approved by the program adviser.

Under Courses, add:

420-C80-0 Seminar in Drama
Intensive analysis of playwright(s), dramatic and theatrical movements, and/or theoretical issues related to drama and theatre. Content varies.

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Under Program of Study for Departmental Majors, change text to read:

Economics majors are urged to take the first-year calculus sequence, Math B14-1,2,3, although only B14-1 is required. Some C-level electives may require Math B14-2 or B14-3.

Prerequisites: Econ B01, B02, and B81.

Required courses: Econ C10-1, C10-2, C11-1, and six additional C-level courses; C10-1, C10-2, and C11-1 should be completed before other C-level courses are taken.

Related courses: Math B14-1 (a prerequisite of Econ C10-1); Statistics B10 (a prerequisite of Econ B81); and three additional courses in the social sciences, mathematics, or statistics, no more than one at the A level.

Econ B60 may be offered in partial fulfillment of this requirement.

Under Courses Primarily for Juniors, Seniors, and Graduates, which should read Courses Primarily for Sophomores, Juniors, Seniors, and Graduates, the first paragraph should read:

Prerequisites: B01, B02, and B81 are normally required for C-level courses, except that C10-1 and C11-1 may be taken before, or concurrently with, B81. Additional prerequisites are indicated for specific courses. Prerequisites may vary somewhat, depending on the instructor.
Add:

417-C07-0 Economics of Medical Care
Effects of medical care on health; health insurance and public and private demand for medical care; the market for medical care; efficient organization and regulation of hospitals and physicians.

Change course description to read:

417-C10-1,2 Microeconomics
1. Consumer behavior and the theory of demand; production, cost, and supply functions; choices under uncertainty, insurance; competitive equilibrium in the short and long run; effects of subsidies, taxes, and price controls; monopoly and monopsony. Prerequisite: Math B14-1.

2. Price discrimination and public utility pricing; monopolistic competition, oligopoly, duopoly models; simple game theory; theory of factor demands in the short and long run; general equilibrium theory and welfare economics; information theory; externalities and public goods. Prerequisite: C10-1.

Under Related Course in Anthropology, the text should read:

The course below can be taken in partial fulfillment of the six elective courses in economics.
403-C41-0 Economic Anthropology

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Under English and American Literature major, page 74, under Major courses:

Delete first sentence and replace by:

Up to two C-level courses in Classics, Comparative Literary Studies, French and Italian, German, and Hispanic and Slavic Languages may be counted among the 11 additional courses. Courses involving English and American literature offered through other departments or schools may also be counted among the electives.

Replace last bulleted item description ("At least one course must be C98. . .") and replace by:
A Senior Seminar (C98) may be elected. The Seminar may not be used to meet an area requirement.

Under English Major in Writing, p. 75, under Prerequisites:

Delete last sentence ("Prospective writing majors. . . .")

After The Teaching of English, add:

**Program for the Minor**

Students who choose this minor will gain experience in reading literary texts and in writing critical analyses. They will take at least two courses in literature before the nineteenth-century to ensure historical perspective. They will be permitted to preregister in the department after registered English majors.
Requirements for the minor (7 units)

- **Prerequisites:** two B-level courses: B06 Reading and Writing Poetry and B07 Reading and Writing Fiction, or one English (419) B-level literature course followed by B98-0 Introductory Seminar in English.

- **Five C-level courses.** A minimum of two of these courses must be taken in Area 2 (Medieval and Tudor literature), Area 3 (Renaissance literature), or Area 4 (Restoration and eighteenth--century literature) of the English major. One of the courses may be a Comparative Literary Studies course.

For more information, consult the Department of English, University Hall.

**Under Courses Primarily for Freshmen and Sophomores**

Change description of 419-B98-0 Introductory Seminar in English to:

Practice in the close reading and analysis of one of the following genres--poetry, drama, fiction--in the context of its literary traditions. Prerequisite: any B-level 419 literature course except B05, B06, and B07.

**Under Courses Primarily for Juniors and Seniors**

Add:

419-C65 Studies in Postcolonial Literature
Themes, antecedents, and contexts of selected literature produced in societies now emerging from colonial rule, e.g., autobiography, initiation narratives, magical realism, Derek Walcott, Salman Rushdie.

419-C66 Studies in African-American Literature
Content Varies. Black Women's fiction; the slave narrative in modern African-American fiction; oral influences on 20th-century African-American poetry; the Black aesthetic; Black feminist literary theory; vernacular theories of African-American literature.
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Last Updated: September 1994
For the purpose of double majoring and determining the GPA in the Environmental Sciences major, the courses indicated on page 78 under the headings Foundations in Science and Foundations in Mathematics are not to be considered "major" courses but rather courses "related" to the major.

Under Foundations in Science, change item 4 to read "Biol A70 Concepts of Biology or A90 Characteristics of Living Organisms or Biol B10-1 Genetics and Evolutionary Biology"

Under Integrated Science Program, change item 3 from "Two of the following 3 courses. . ." to "Two of the following courses: CE B06, Geog B11, Geol B04, EnvSci B35"

After Integrated Science Program, add:

422-B35-0 Atmosphere and Climate
Nature and composition of the atmosphere, principles of atmospheric motion, precipitation processes, global patterns of climate and climatic change.
Prerequisite: Math B14-1,2,3 or equivalent.

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Program for the Minor in French

The goal of the minor in French is, first, to give students a solid grounding and a good fluency in the French language and, second, to give them a basic familiarity with various important aspects of French culture and society. Together these accomplishments will enable them to continue to pursue their interest in French, and in countries where French is used.

The minor is designed for students who have a strong interest in French, but who cannot fulfill the requirements of the French major, either because their knowledge of French was non-existent or elementary when they came to Northwestern, or because they are also engaged in another major with requirements which preclude pursuing a second major.

Except for one possible course at the C level, all courses are conducted in French, with class discussions and papers also in French, so that there is a constant practice of language skills in courses that are not "language" courses per se. The acquisition of competence in French is considered inseparable from the acquisition of a useful comprehension of French and francophone culture.

Prerequisites: Second-year college French, e.g., A02-3, or equivalent

Requirements for the minor (9 units)

- Three courses at the B level: B10 Introduction to
French Literature and two courses chosen from among the following:
* B02 Writing Workshop
* B03 Intermediate Conversation
* B71 Introduction to the French Novel
* B72 Introduction to French Theater
* B80-1,2 Introduction to French Civilization

Three language courses chosen from the following:
* C02-1,2 Advanced Grammar and Composition
* C03 Advanced Conversation
* C05 Phonetics
* C91-1,2 Translation

Three other C-level French courses in literature or civilization, of which one may be taken in English.

For more information, consult the Department of French and Italian, Kresge Hall.

Under Courses Primarily for Undergraduates, add:

455-B04-0 Advanced Intermediate Conversation
An Advanced intermediate course designed to build fluency in speaking and understanding French. Classes concentrate on increasing listening comprehension, building vocabulary and idiom use, and enhancing oral communication skills. Prerequisite: B02 or B03 or permission of instructor.

Under Courses with Reading and Discussion in English, add:

455-B76-0 Culture and Autobiography
An introduction to autobiography as a literary genre examining culture, race, and gender identity from a subjective perspective.

455-B77-0 The Literature of Existentialism
An introduction to existentialism in its literary, philosophical and cultural manifestations.

455-B78-0 From Novel to Film
An exploration of conceptual, aesthetic, and cultural dimensions of selected nineteenth and twentieth-century
Program for the Minor in Italian

The program for the minor in Italian is designed to give students a solid proficiency in the language and significant knowledge of the literature and culture of Italy which will complement a variety of major studies in the University. Prerequisite: Second-year college Italian, e.g., A02-3, or equivalent

Requirements for the minor (8 units)

- Two credits from B01 Italian through Newspapers, B02 The Culture of Regional Italy, B03 The Culture of Unified Italy
- C01 Advanced Grammar
- Five additional credits of Italian literature and culture, at least three offered in Italian, at least three at the C-level.

Students can count up to four units of study abroad credit to satisfy the requirements for the minor in Italian.

For more information, consult the Department of French and Italian, Kresge Hall.

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Change Program of Study to "Programs of Study;" replace current description by:

Programs of study may lead either to a major or a minor in geography. In addition to the following requirements, students majoring in geography also must complete a major in a related social or natural science field.

**Program for the Major**

**Required courses:** Geography B10, C41, and four additional geography courses, at least three of which must be at the C-level, including one unit of research (Geography C98 or C99).

**Related courses:** mathematics B14-1,-2; Economics B01, B02; Statistics B10, or equivalent.

**Program for the Minor**

The minor in geography is designed to supplement the academic programs of students who major in related social and natural sciences by training them in both the theory and the method of geographical analysis.

**Prerequisites:** Math B14-1,-2 or equivalent

**Requirements for the minor (7 units)**

- Statistics B10-0 Introductory Statistics
- Geography B10-0 The Natural Environment
- Geography C41-0 Principles of Cartography
- Four additional courses, including at least three
at the C-level of which one may be taken in a department or program other than Geography on the recommendation of the Geography Program Adviser.

For more information, consult the Program in Geography, 1810 Hinman Avenue.
Change course title and description:

423-C01-0 Environmental Biogeochemistry
Structure and composition of the Earth's surface environment. Biogeochemical processes on long and short time scales. Natural and human forcing functions. Biogeochemical cycles, their mechanisms and controlling processes. Prerequisite: Chemistry A03 or equivalent.

Add:

423-C18-0 Stable Isotope Geochemistry
Principles governing the fractionation and distribution of stable isotopes in the biosphere, hydrosphere, atmosphere and geosphere; topics in isotopic biogeochemistry; application of stable isotope geochemistry to environmental problems and global climate change. Prerequisites: Chemistry A01, A02, A03, A04; Geological Sciences A06, B04, C01 or equivalents.

Delete:

432-A08-0 History and Evolution of the Continents
432-A12-0 Energy Sources and the Global Environment
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German

Pages 86-88

Change name of department from German Language and Literature to "German"

After The Teaching of German, p. 87, add:

Program for the Minor

The minor in German is designed to give students a solid language proficiency at the upper level and to provide significant knowledge of German culture.

Prerequisites: German A02-3 or equivalent

Requirements for the minor (8 units)

- Four quarter courses in German language: B05, one unit chosen from B03, B08, or B80; two units chosen from C91 and C80.
- Four quarter courses in German literature and culture: two units of B01; two units chosen from C10-1,-2,-3,-4,-5, and C32-0.

Note: Students returning from a study abroad program in their junior year must enroll in one C-level quarter course in the department.

For more information, consult the Department of German, Kresge Hall.

Under Courses in Literature and Culture with Prerequisite in German

From description of 425-C14-0 German Contributions to World Literature, delete "modern German drama"

Add:
425-C24-0  Modern German Drama
In 1785, Freidrich Schiller defined the stage as a
"moral institution." Erwin Piscator still considered the
works of 20th century authors in a similar light.
From this perspective, plays by authors ranging from
Heinrich von Kleist to Peter
Weiss will be studied.

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Under Honors in Hispanic Studies, delete the existing paragraph and replace with:

Open to seniors. In order to participate, a GPA of 3.5 or above in the major and 3.3 overall are required. Superior students in any of the major programs in Hispanic studies may qualify for departmental honors by taking two quarter of Independent Study C99 (or in some cases a quarter of C99 and a D-level seminar) and writing a substantial research paper. During the first quarter of C99, work on the topic of an honors paper will begin with the professor of your choice. This involves the preparation of a bibliography and then the reading and research necessary to begin focusing on exactly how the topic will be approached. In the second quarter of C99, the results of the research will be organized and the paper written. As soon as one is admitted to the program, it is suggested that a prospective faculty advisor be identified.

Add: Program for the Minor in Spanish Culture and Civilization

The purpose of the minor in the culture and civilization of Spain is to provide students the opportunity to study seriously a foreign culture. It is designed to be useful for students with majors leading to careers in business, or medical, legal and service professions, for those simply desiring to become conversant with a foreign culture in addition to professional training in a selected field, or for students preparing for advanced degree programs in which the knowledge of Spanish culture is helpful. Prerequisites: Spanish A02-3 or equivalent

Requirements for the minor (8 units)
B01-1,-2,-3 Introduction to the Literature and Civilization of Spain
One unit from B03-1,-2,-3 Intermediate Course in Conversation and Composition
C50 Spanish Culture and Civilization
Three C-level courses on Spain given either by Hispanic Studies or by other departments when approved by the Department of Hispanic Studies.

Any of these requirements can be met by equivalent courses taken in the Northwestern program in Seville, the CIC program in Mexico, or by approved study abroad programs.

For more information, consult the Department of Hispanic Studies, Kresge Hall.

Program for the Minor in Spanish Language

The minor in Spanish language provides students the opportunity to achieve advanced competence and facility in the Spanish language. It is designed for students seeking careers in business, the medical, legal and service professions, or simply for those desiring proficiency in a second language or preparing for advanced degrees requiring knowledge of a foreign language. Prerequisites: Spanish A02-3 or equivalent

Requirements for the minor (8 units)

- B03-1,-2,-3 Intermediate Conversation and Composition
- C02 Advanced Grammar
- C03 Advanced Conversation
- Two quarter courses from B01-1,-2,-3 Introduction to the Literature and Civilization of Spain or B02-1,-2,-3 Introduction to the Literature and Civilization of Latin America
- One C-level Hispanic Studies course in the history of the language or in literature taught in Spanish

Any of these requirements can be met by equivalent courses taken in the Northwestern program in Seville, the CIC program in Mexico, or by approved study abroad programs.

For more information, consult the Department of Hispanic
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Last Updated: September 1994
History

Pages 91-94

Under Europe, page 92, add:

427-C43-0 Modern Italy
Italy from the Enlightenment to the present, concentrating on the Risorgimento, the World Wars, Mussolini and Fascism, the post-war economic miracle, and terrorism.

Under Middle East, page 93, add:

427-C74-0 Historical Background of Jewish-Muslim Relations Formation of Jewish-Muslim relations in the medieval Near East; process by which a common heritage became a basis for contention as well as mutual understanding,

Under Courses Primarily for Majors in History, page 94, add:

427-C75-1,- 2 Technology: History, Society, and Economy
An exploration of the economic, cultural, and intellectual aspects of the history of technological change from medieval Europe to America, including non-western technologies. Students are expected to enroll in both quarters and will receive a "K" grade for work completed in the first quarter and letter grades for both quarters as determined by the second-quarter final research project. Prerequisites: History B01 and B02, or Economics B01 and B02, or permission of the instructor.
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Last Updated: September 1994
Program for the Minor in Advanced Interdisciplinary Studies in the Humanities

The goal of the minor in advanced interdisciplinary studies in the humanities is to train humanities and social science majors in interdisciplinary methods, topics, and theories, and to expose them to contemporary developments and debates in disciplines other than their own.

The minor is designed to complement existing majors, especially in small departments, which are often restricted in the diversity and range of their seminar offerings; but also of large departments, which often find it difficult to make special provision for the smaller cohort of their students planning to go on to graduate studies.

Requirements for the minor (6 units)

- Two credits of Humanities 410-C95-1,-2,-3, Humanities Seminar. Note: students must complete two of these year-long seminars (each year-long program earns one credit).
- Four 410 Humanities courses, chosen from 410-C01-0 Topics in the Humanities, 410-C02-0 New Perspectives in the Humanities, 410-C99-0 Independent Studies. Note: Any of these courses may be repeated with change of topic.

Students pursuing a minor in advanced interdisciplinary studies in the humanities must consult with the Associate Director of the Center for the Humanities to establish their program.

Sample program: two year-long Humanities seminars C95 on
"Authenticity and Identity" and "Culture and Resistance.
Four courses such as C01 "Fictions of Identity in Post-
Revolutionary Russian Literature: or "Ethnography and
Literature," and C02 "Female Divinity in the Christian
Tradition" and "Bandits, Criminals, and Outcasts."

For more information, consult the Center for the
Humanities, Harris Hall.

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Under Second year, change course title of both Physics C39-1 and C39-2 to "Quantum Mechanics, Nuclear and Particle Physics"

Under Third year, change last line to read: "Biological Sciences C01, C10 or C11"

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Jewish Studies Program

Pages 95-96

Replace "certificate(s)" with "minor(s)"

(Explanation: With the adoption of a program for minors in 1992-93, the College of Arts and Sciences changed the designation "certificate" to "minor." Unless noted, all requirements for the minor remain the same as those for the former certificate.)

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Latin American and Caribbean Studies Program

Pages 96-97

Replace "certificate(s)" with "minor(s)"

(Explanation: With the adoption of a program for minors in 1992-93, the College of Arts and Sciences changed the designation "certificate" to "minor." Unless noted, all requirements for the minor remain the same as those for the former certificate.)

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Under Program of Study for Departmental Majors, replace requirements by:

- Prerequisites: B05, B06, B07
- Core courses: Three from: C05, C06, C16, C29, C71; one from C02, C17; one from C09, C10
- Four additional linguistics courses at the C-level (with certain exceptions, e.g., Cognitive Science B10, by permission of undergraduate adviser)
- Four related courses selected from other departments in consultation with the linguistics undergraduate adviser

After Program of Study for Departmental Majors, add:

**Program for the Minor**

The goal of the minor in linguistics is to broaden the academic background of students majoring in related fields (e.g. anthropology, cognitive science, communication sciences and disorders, computer science, philosophy, psychology, a language or language and culture area) by offering training in the theory and methods of linguistic analysis.

**Requirements for the minor (8 units)**

- B05 Meaning, B06 Structure of Words and Sentences, B07 Sound Patterns in Human Language
- Three courses chosen from C05 Lexical Semantics, C06 Fundamentals of Syntax, C16 Phonetics, C29 Pragmatics, C71 Morphology
- Two additional C-level courses in linguistics

For more information, consult the Department of Linguistics, 2016 Sheridan Road
Under Courses Primarily for Undergraduates

Add:

434-B05-0 Meaning
Introduction to the study of linguistic meaning: basic concepts in word and sentence meaning (e.g., sense and reference, prototype, metaphor, presupposition, implicature); philosophic and psychological issues; influence of culture on language and vice-versa; "truth" in linguistic meaning; how children acquire meaning.

Change title:

434-B06-0 to Structure of Words and Sentences

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Mathematics

Pages 99-103

Under Courses Primarily for Undergraduates, add:

435 C17-1,2 Experimental Math

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Program for the Minor

The minor in philosophy requires students to be well-grounded in the history of philosophy, especially ancient and early modern, covering the major texts of ethical and political theory as well as the major texts of epistemology and metaphysics. The emphasis on argument and logical structure in philosophy requires students to be familiar with contemporary logic, at least up to the level of the first-order predicate calculus. Beyond this foundational requirement, the student will take four courses tailored to his or her individual interests and, typically, to complement work being done in the major. To provide the greatest latitude for this, only three of the four remaining courses need be at the C-level.

Requirements for the minor (8 units)

- Four foundation courses: A50-0 Elementary Logic I, B10-1 The History of Philosophy: Ancient Philosophy, B10-3 The History of Philosophy: Early Modern Philosophy, B61-0 Classics of Ethical and Political Theory
- Four elective courses in Philosophy: no A-level courses, at least three C-level courses

For more information, consult the Department of Philosophy, 1818 Hinman Avenue.
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Last Updated: September 1994
Program for the Minor in Physics

The purpose of the minor in physics is to give students a basic understanding of the most essential concepts in the field. To this end, the basic calculus-physics sequence is required, along with one course in classical mechanics, one course in classical electrodynamics, and one course in modern physics. These requirements insure that students will be exposed to all the major ideas of classical and modern physics. Two additional C-level courses in physics are required which will allow students to broaden their knowledge or to delve more deeply into one topic.

Prerequisites: Math B14-1,-2,-3; Math B15, B17; B21, or the equivalent.

Requirements for the minor (8 units)

- Physics A25-1,-2,-3 General Physics, or A35-1,-2,-3
General Physics, or A90-1,-2,-3 General Physics
- Physics C30-1 Advanced Mechanics, Physics C33-1 Advanced Electricity and Magnetism, 
  and either C35-0 Modern Physics for Non-majors or C36-1 Introduction to Quantum Mechanics
- Two courses selected from:
  * C30-2 Advanced Mechanics
  * C31-0 Thermodynamics
  * C32-0 Kinetic Theory
  * C33-2 Advanced Electricity and Magnetism
  * C34-0 Introduction to Relativity
  * C36-2 Introduction to Quantum Mechanics
  * C37-0 Introduction to Solid State Physics
  * C38-0 Introduction to Nuclear and Particle Physics

For more information, consult the Department of Physics and Astronomy, 1377 Tech.

After Program of Study for Astronomy Majors, page 107, add:

Program for the Minor in Astronomy

The minor in astronomy is designed to give students a good understanding of modern astronomy, without the necessity of taking seven C-level classes in physics, as is required of majors in astronomy. The minor in Astronomy requires the same astronomy classes as the major; the difference is that only one C-level physics course is required.
Prerequisites: Math B14-1,-2,-3 or equivalent.

Requirements for the minor (9 units)
- Physics A25-1,-2,-3 General Physics, or A35-1,-2,-3 General Physics, or A90-1,-2,-3 General Physics
- Physics C35-0 Modern Physics for Non-majors or C36-1 Introduction to Quantum Mechanics
- Astronomy B10-1,-2 General Astronomy, and C61-0 Astronomical Observing Methods;
- Two courses selected from:
  * Astronomy C25-0 Stellar Structure and Evolution
  * Astronomy C28-0 Interstellar Matter
* Astronomy C29-0 Galactic Structure

For more information, consult the Department of Physics and Astronomy, 1377 Tech.

Under Integrated Science Program, p. 107, change third bulleted item to read: "407-C28 or 407-C29."

Under Astronomy, Courses Primarily for Undergraduates, add:

407-A03-0  Solar System
Study of our solar system, including the planets and their moons, the Sun, comets, asteroids, the Earth and the Moon. Especially suited for nonscience majors seeking to follow up Astronomy A20 with a more detailed astronomy course. No math prerequisites except high school algebra.

407-B20-0  Highlights of Astrophysics
Intended for science majors. Topics include the physical processes behind stellar birth, the origin of black holes and neutron stars, the formation of spiral galaxies, and the expansion of the Universe. Particularly well-suited for engineering students interested in the interaction of matter and radiation under astrophysical conditions. Prerequisites: Math B14-1,-2,-3 and Physics A35-1,-2,-3.

Delete:

407-B10-1,-2  General Astronomy

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After Honors in Political Science, add:

Program for the Minor

The minor in political science offers students the opportunity to acquire a solid foundation in the discipline, as well as a significant exposure to advanced courses. It is also designed to allow students to develop specialized competencies.

Requirements for the minor (6 units)

- At least two B-level courses selected from:
  * B01 Introduction to Political Theory
  * B20 American Government and Politics
  * B21 Urban Politics
  * B30 Introduction to Law in the Political Arena
  * B40 Introduction to International Relations
  * B50 Comparative Political Systems
- Four additional courses in Political Science, at least three at the C-level.

It is very desirable for students to begin pursuing the minor with the B-level gateway courses. The gateway courses provide students with a general introduction to major subfields of political science. The C-level courses assume a background in the appropriate gateway courses. Within the minor students may pursue specialized interests. For example, many non-majors aspire to legal careers. An appropriate pathway for a minor concentrating on law in the political arena would begin with B30 Law in the Political Arena, and include some combination of C30 The Politics of Local Justice, C31 Appellate Processes, C32 Constitutional Law I,
or C33 Constitutional Law II: Civil and Political Rights. Similar pathways can be followed for concentrated study of political philosophy, urban politics and policy, international relations, comparative politics, and American political processes. Students may choose to take an array of classes that cut across subfields rather than concentrate on one or two areas. Students opting to pursue a minor in political science must consult with the Director of Undergraduate Studies in the department to develop a tailored program of study.

For more information, consult the Department of Political Science, Scott Hall.

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Last Updated: September 1994
Psychology

Second paragraph, page 114, in sentence beginning "Psychology is a useful major for students...," delete: "the psychology of law." Under Program of Study for Departmental Majors, Major courses, delete: "(except B06)"

Addition of C62 in following list:
At least two of the seven must be selected from the cognitive and physiological category of C11, C12-1, C12-2, C21, C22-1, C22-2, C24, C27-1, C27-2, C28, C33, C34, C35, C60, and C62

Deletion of "developmental" and "C10" and addition of "C06" in following list:
At least two of the seven must be selected from the personality/clinical and social courses of B04, C01, C03, C06, C15, C16, C26, and C4().

Add: Program for the Minor

The minor in psychology reflects the view that the most appropriate undergraduate study of psychology combines a methodological core with breadth of content. The minor therefore contains the general prerequisite (A10 or A12), the two central methods courses (B01 and B05), and at least one course from each of the two main content areas as defined for the major.

Requirements for the minor (7 units)

- Psychology A10 or A12.
- Psychology B01 and B05
- Four additional B- or C-level courses in psychology: at
least one must be selected from among these courses in the personality/clinical, developmental and social category: B04, C01, C03, C10, C15, C40; at least one must be selected from among these courses in the cognitive and physiological category: C12-1, C22-1, C27-1, C27-2, C28, C35; at least two of the courses must be at the C level.

For more information, consult the Department of Psychology, 102 Swift Hall.

Under Courses Primarily for Freshmen and Sophomores

Delete:

451-B06-0 Computer Programming in Psychology

Add:

451-C06-0 Introduction to Clinical Psychology
A comprehensive overview of clinical psychology. Topics include the definition and history of clinical psychology, personality theory in clinical psychology, diagnosis and classification of disorders, assessment, psychotherapy, and ethical issues. Prerequisite: A10.

451-C37-0 Human Sexuality
Sexual development and differentiation, deviations, dysfunctions, and controversies in sexology. Prerequisite: A10.

451-C62-0 Cognitive Development
The development of cognition and perception. Topics include infant perception, the development of human memory, concepts, language, and expertise. Prerequisites: A10 and either C10 or C28.

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Add: Program for the Minor

The minor in religion provides a coherent and balanced set of courses, with work on general theories of religion, on Western religious traditions, and on Eastern traditions. Enrollment in Religion C95 (Theories of Religion) will ensure that students completing the minor will have the opportunity to meet and interact with majors in religion. Students minoring in religion will be entitled to preregister for courses along with majors.

Requirements for the minor (6 units)

- Religion A10 Religion in Human Experience
- Religion C95 Theories of Religion
- Four other courses in religion of which at least two are at the C or D level and including at least one in Western religions (Christianity, Islam, Judaism) and one in Eastern religions

For more information, consult the Department of Religion, 1940 Sheridan Road.

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Page 118, after the listing for Religion, add:

Romance Languages

Program for the Minor

The goal of the minor in Romance languages is to give students competence in two of the four Romance languages offered at Northwestern: French, Italian, Spanish, and Portuguese. It is designed for students who, although majoring in neither of the two languages of the minor, wish to gain a practical competence in both. Although the primary aim is to provide useful proficiency in speaking, comprehension, reading, and writing, students will also acquire some basic familiarity with the society and cultures of the regions where those languages are spoken.

Prerequisites: A02-3 or equivalent in two Romance languages

Requirements for the minor (9 units)

- Five courses from one of the following lists. These form the "primary language" of the minor. For French: at least three must be at the C-level; for Spanish: at least two must be at the C-level.

Note: Currently only French or Spanish offer enough courses to form the "primary language." It is hoped that in the future Italian and Portuguese will qualify as well.

- Four courses from a second list below, at least one of which must be at the C-level. These form the "secondary language" of the minor.

French
French B02 Intermediate Grammar and Composition
French B03 Intermediate Conversation
French B10 Introduction to Literature
French B80-1,-2 Introduction to French Civilization
French C02-1,-2 Advanced Grammar and Composition
French C03 Advanced Conversation
French C05 French Phonetics
French C91-1,-2 Topics in Language
French C93 Topics in Civilization

Italian
Italian B01 Italian through Newspapers & Magazines: Conversation and Composition
Italian B02 The Culture of Regional Italy: Conversation
Italian B03 The Culture of Unified Italy: Composition
Italian C01 Advanced Grammar and Composition

Spanish
Spanish B03-1,-2,-3 Intermediate Conversation and Conversation
Spanish C02 Advanced Grammar
Spanish C03 Advanced Conversation

Portuguese
Portuguese C03 Advanced Portuguese
Portuguese C05 Brazilian Literature
Portuguese C06 20th-Century Brazilian Literature
Portuguese C97 Topics in Luso-Brazilian Culture and Civilization

The adviser for the minor in Romance languages will be from the department of the primary language.

For more information, consult the Department of French and Italian, Kresge Hall, or the Department of Hispanic Studies, Kresge Hall.

Source: University Relations - Publications
webmaster@northwestern.edu
Last Updated: September 1994
Replace "certificate(s)" with "minor(s)"

(Explanation: With the adoption of a program for minors in 1992-93, the College of Arts and Sciences changed the designation "certificate" to "minor." Unless noted, all requirements for the minor remain the same as those for the former certificate.)

Source: University Relations - Publications
webmaster@northwestern.edu
Last Updated: September 1994
Add: Program for the Minor in Russian Language

The minor in Russian language is designed for students who wish to study the Russian language intensively (perhaps for later use in such fields as political science, international relations, law, or business), but who do not wish to take the range of literature courses required for a major in Slavic languages and literatures.

Pre-requisites: Completion of two years of college-level language or equivalent as demonstrated by course work (for example, Russian A02-3), or equivalent.

Requirements for the minor (7 units)
- Slavic B03-1,-2,-3 Intermediate Russian
- Slavic C03-1,-2,-3 Advanced Russian
- Any C-level literature course requiring reading in Russian

Under "Courses in Language and Linguistics," change the following course descriptions:

467-B03-1,2,3 Russian Language and Culture
A third-year, multi-skill course of study, aimed at developing ability in conversation, listening comprehension, reading, and composition. Unabridged readings from a range of contemporary sources focusing on Russian culture and society. Prerequisite: A02-3 or equivalent.

467-C03-1,2,3 Advanced Russian Language and Culture
A fourth-year course emphasizing conversation and listening comprehension, and with continued development of skills in reading and composition. Study of Russian culture and society through unabridged contemporary sources and work with a variety of media, including television.
Prerequisite: B03-3 or equivalent.

Under "Courses in Language and Linguistics," add:

467-A06-1,2,3 Elementary Czech
A largely oral approach to the basic grammar and vocabulary necessary for reading, speaking, and writing simple Czech.

467-B06-1,2,3 Intermediate Czech; Language & Culture
A continuation of A06, with reading on topics in Czech culture. Prerequisite: A06-3.

Under "Courses with Reading and Discussion in English," add:

467-C13-0 Nabokov
Vladimir Nabokov's major Russian and American prose, from his _migr_ years (such novels as The Defense, The Gift, and Invitation to a Beheading) to his celebrated English language works (Lolita, Speak Memory, and Pale Fire).

467-C19-0 The Philosophical Story
An examination of a key form of Russian and East European fiction, the story about abstract philosophical issues. Explores the role this form played in more general philosophical debates, examines how it works as literature, and considers in detail the specific philosophical issues raised by each work.

467-C50-0 Folklore, Music, Poetry
A study of traditional folk and religious folklore and poetry, expressed in rhythms which also produced great music. Proceeds chronologically, starting with Biblical and Greek origins, and continuing through East Slavic, Russian, and Western European works. An examination of the forms themselves, implications for literary and political problems, and the interrelations between Russian and Western European poetic and rhythmic forms.

467-C67-0 Russian Film
An introduction to the development of Russian film and
film theory from the silent era to the 1980's. The course has a dual focus, and is based around a series of major Russian films by directors such as Eisenstein, Vertov, and Tarkovsky, as well as Russian theoretical writings on film from the formalists of the 1920's to the semioticians of the 1960's.

467-C72-0 Introduction to Eastern European Jewish Culture
An introduction to the cultural heritage of the Jewish communities of Russia and Eastern Europe from the 18th to the 20th centuries. The works of great writers like Sholom Aleichem and Isaac Bashevis Singer; the relations of Jewish culture to the surrounding European cultures.

467-C91-0 The Rise and Fall of Yugoslavia
Yugoslavia from its origins as a dream to its existence as a multi-national state and its collapse in the late 1980s; nationalism, interrelationship of politics and culture; readings from historians, cultural critics and literary works. All readings in English.

Under "Courses in Literature with Prerequisite in Russian:"

Delete:

467-B01-0 Readings in Russian Literature

Add:

467-C59-0 Russian Prose
Reading and discussion of selected works of the Russian masters. Content varies; course may be repeated for credit. All reading in Russian. Prerequisite: A02-3 or equivalent.
Add: **Program for the Minor in Sociological Research**

The minor in sociological research prepares students to carry out their own research by offering an introduction to the discipline followed by an array of methodological courses in quantitative and qualitative methods. Students will learn how data are gathered and prepared for analysis and a variety of techniques and methods for presenting information, arguments, and conclusions. Two C-level courses will allow students to see how these methods are used in practice.

**Requirements for the minor (6 units)**

- A10 Introduction to Sociology, or a B-level sociology course
- B26 Sociological Analysis
- C03 Analysis and Interpretation of Social Data, or C30 Basic Statistics for Social Research, or equivalent
- C29 Field Research and Methods of Data Collection
- Two C-level sociology courses approved by the Director of Undergraduate Studies (Note: Only one credit may be counted towards the minor for each of the following courses: C76, C99, GLA C93, although they may be taken more than once.)

Students seeking the minor in sociological research must consult with the Director of Undergraduate Studies.

For more information, consult the Department of Sociology, 1810 Chicago Avenue.

**Program for the Minor in Sociological Studies**

The minor in sociological studies introduces basic
information about the social world and provides the rudimentary tools to understand it. It prepares students to compare, evaluate and critically analyze information about various institutions, processes of stratification, and social change.

**Requirements for the minor (7 units)**

- A10 Introduction to Sociology, or a B-level sociology course
- B26 Sociological Analysis
- Five C-level sociology courses (Note: Only one credit may be counted towards the minor for each of the following courses: C76, C99, GLA C93, although they may be taken more than once.)

Students seeking the minor in sociological studies must consult with the Director of Undergraduate Studies.

For more information, consult the Department of Sociology, 1810 Chicago Avenue.

Under "Courses Primarily for Undergraduates", add:

471-C16-0 Economic Sociology
The sociological approach to the study of production, distribution, consumption and markets. Classic and contemporary approaches to the economy compared among social science disciplines. Historical emergence of sociology and economics as separate disciplines. Topics may include: industrial organization, labor markets, capitalism in non-western societies, power relations in business, and the organization of professions such as law and medicine. Prerequisites: B15 or Economics B02 or equivalent.

471-C33-0 Law, Norms, and Power
Relations of laws and informal social rules to the exercise of power by some groups and individuals over others. Reciprocity and power, norms and market relations, gender norms and interpersonal power, social control institutions, colonial legal systems, justice and domination, alternative legalities and resistance.
Prerequisites: A- or B-level sociology course or permission of instructor.

471-C47-0 Sociology of Time and Space
The social construction of time and space. The standardization of time, maps as ideological documents, capitalist time and space, personal and social spaces and memories. Prerequisites: A- or B-level sociology course

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Last Updated: September 1994
Add: Program for the Minor

Students who complete the minor in statistics will receive serious exposure to probability theory, statistical estimation theory, statistical analysis, and the design of statistical data collection.

Prerequisites: Math B14-1,-2,-3 or equivalent.

Requirements for the minor (6 units)

- One unit: Statistics B02 Introduction to Statistics, B03 Statistics and Public Policy, or C03 Concepts in Statistics with Public Policy Applications
- One unit: Math C30-1 Probability and Statistics, or Industrial Engineering and Management Science C02 Probability
- Two units: Statistics C20-1,-2 Statistical Methods or Industrial Engineering and Management Science C03 Statistics I and C04 Statistics II
- One unit: Statistics C50 Regression Analysis, or Economics C81-2 Introduction to Econometrics
- One unit: Statistics C25 Survey Sampling, or C51 Design and Analysis of Experiments

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Women's Studies Program

Program of Study for Majors in Women's Studies

- The women's studies major is an adjunct major. Students majoring in women's studies must also fulfill the requirements of another major that may be in CAS or in any other school in the University.
- Core courses:
  * 480-B10-0 Introduction to Women's Studies: Life as Women Know It
  * 480-B30-0 The Roots of Feminism
  * 480-B31-0 Feminisms: Voices and Visions
  * 480-C98-1,-2,-3 Research Seminar in Women's Studies
- Electives:
  Six courses selected in consultation with the undergraduate adviser, that are either offered by Women's Studies or are cross-listed with the program. At least four must be at the C-level. No more than two courses may double-count for the student's other major.

The Minor in Women's Studies

Students who wish to focus their interest in women's studies may earn a minor in women's studies while simultaneously pursuing a departmental major in any undergraduate school. The minor program offers students an opportunity to integrate required courses in their major with electives in related fields as the basis for an independent research project in the senior year.

Students qualify for the minor in women's studies by satisfactorily completing the nine quarter-courses listed below. The electives in women's studies may be in their major. The women's studies faculty committee publishes each
quarter a list of all elective courses approved for the minor. Students are encouraged to enroll in freshman seminars with a focus on women, which may count as basic introductory courses. Students applying for the CAS minor in women's studies must present records showing a minimum of five courses not double-counted in their majors.

Requirements for the minor (9 units)

- Two quarters of basic introductory courses in the social and behavioral sciences, historical studies, or the humanities, chosen in consultation with a women's studies adviser. These courses need not focus on women.
- Two courses chosen from Women's Studies B01, B30, B31. Prerequisite: one quarter of the required courses listed above.
- Electives: five one-quarter courses, at least three at the C-level, chosen from the list of courses approved for the minor in women's studies.

Note: Various departments and programs, such as anthropology, comparative literary studies, English, history, linguistics, philosophy, and sociology, regularly offer courses that fulfill the elective requirement. Examples of applicable courses include, but are not limited to, the following:

- Anthropology C54 Gender and Anthropology
- English C24 Studies in Medieval Literature: Women in Medieval Literature
- History B40 Women in West European History
- Linguistics C30 Topics in Language and Behavior: Language and Gender
- Philosophy C23 Studies in Contemporary Philosophy: Theory of Feminism
- Sociology B16 Sociology of Sex Roles

Students should check quarterly updates of approved courses.

Under Courses, add:

480-B10-0 Introduction to Women's Studies: Life as Women Know It.

A gateway course for students considering the major or
minor. Theoretical, personal, and political issues; connections between gender, race, class, and sexual orientation.

Change titles of:

480-B30-0 to The Roots of Feminism
480-B31-0 to Feminisms: Voices and Visions

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Biomaterials
The growth of biotechnology has stimulated interest in the interface of the materials and life sciences. The field of biomaterials spans three broad areas: (a) biomedical implant materials to replace natural structures, (b) biomimetic materials applying biological concepts to the design of new engineering materials, and (c) application of materials science principles to the understanding of structure and function in biological systems.

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All students earning a BME degree must obtain a minimum of 18 total course credits and have obtained a substantial training in design as defined in the statement below.

"Engineering design is the process of devising a system, component, or process that (often iterative), in which the basic sciences, mathematics, and engineering to meet a stated objective. Among the fundamental elements of the design process synthesis, analysis, construction, testing, and evaluation. The engineering design includes some of the following features: development of student creativity, use of open-endedness, formulation of design problem statements and specifications, considerations, and detailed system descriptions.

Further, it is essential to include a variety of realistic constraints such as ethics, and social impact."

Under Basic Sciences--5 courses:
Add after A72: "plus one additional basic science course"

Under Basic Engineering--6 courses:
Add after 6 courses: "from 7 areas; no more than one course per area" Under * Fluids and Solids add: BME B70
Under * Computer Sciences delete: EECS C29-1 Add: *
Probability, Statistics and Quality Control: BME B20 or ChE C12 or EECS
Under Computer Programming--1 course
Add: EECS A11

Under * Areas of specialization--9 courses Change Imaging to "Biomedical Signals and Images"

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Under Areas of Specialization
Change:
Imaging to "Biomedical Signals and Images"

- Pages 154-156

Under Courses Primarily for Undergraduates Delete:

765-C32 Introduction to Optical Holography 765-C33 Hologram Interferometry and Nondestructive Testing 765-C40 Introduction to Biomaterials

Add:

765-B20 Introduction to Biomedical Statistics Basic statistical concepts will be presented with emphasis on their relevance to

765-B70 Introduction to Biomedical Fluid Mechanics Introduction to the fundamentals of fluid mechanics and their applications to bi

765-C14 Models of Biochemistry and Molecular Biology Mathematical modeling of biochemical and molecular biological problems, e.g., al reaction, study of DNA fibers. Prerequisite: Consent of instructor.

765-C17 Biochemical Sensors Theory, design and applications of chemical sensors used in medical diagnosis and cal sensors will be studied. Prerequisite: Chemistry through B10-2; physics thr

765-C24 Computational Neuroscience The primary goal of this course is to introduce the
theoretical and mathematical electrochemical behavior of the brain. Computer simulations using biophysical prerequisites: Math B21 and BME C01 or equivalent or consent of instructor.

765-C78 Transport in the Vascular Circulation This course discusses the principles of convective diffusion in liquids and mass circulation. Examples from vascular research that are pertinent to the course nics and/or mass transfer.

765-C79 Artificial Organs Description of current artificial organs. Review of basic transport process ana artificial organs, e.g. kidneys, lungs, hearts, pancreas, liver. Comparison of 765-C02/D02 and C03/D03 or equivalent; 710-C21 or 740- B41 or equivalent; exposu

Change:

765-C44 Biological Performance of Materials Prerequisites: Change to "MSc B01 or equivalent."

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Under Biomedical Courses in Other Departments Delete:

760-C81 Models in Biochemistry and Molecular Biology on NUINFO. It should go under McCormick School of Engineering (p23), immediately before "Civil Engineering Curriculum." Thank you.

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Chemical Engineering

Pages 157-158

710 B12 Equilibrium Separations Replace prerequisites with: ChE B10 with grade of "C-" or better; ChE B11

710 C07 Kinetics Replace prerequisites with: ChE B10 with grade of "C-" or better; ChE C43

710 C21 Fluid Mechanics Replace prerequisites with: Completion of Math requirements with no grades of "D"; CE B12

710 C22 Heat Transfer Replace prerequisite with: Completion of Math requirements with no grades of "D"

710 C51 Chemical Engineering Design I Replace prerequisites with: ChE B12, C07, and C23

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Civil Engineering Curriculum

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Replace Basic Sciences section with:
5 courses, including Phys A35-1,2; Chem A01, A02 (or equivalent). The 5th course must be Chem A03 or Phys A35-3. (Completion of Chem A71, A72 satisfies 3 course units.)

Replace Major Program section with:
16 courses
Ten must be CE courses.
Basic Civil Engineering - 6 courses
CE B21 Theory of Structures I
CE B22 Structural Steel Design
CE B50 Introductory Soil Mechanics
CE C40 Fluid Mechanics II
CE C64 Sanitary Engineering
CE C71 Introduction to Transportation Planning and Analysis

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Computer Engineering curriculum:
under - Design Requirement, add EECS C96 to the list of acceptable courses.

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Electrical Engineering curriculum:
under - Design Requirement, add EECS C96 to the list of acceptable courses.

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under n Design Requirement, add EECS C96 to the list of acceptable courses

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Under Courses Primarily for Undergraduates

Delete 738 B01-1,2 Introduction to Industrial Engineering.

738 C05 Statistical Methods for Quality Improvement -- new prerequisites are: IE B03, IE C03, or equivalent.

738 C24 Engineering Management I,II - drop the statement: No P/N. Prerequisites should say: Junior or senior standing; IE C24-1 is NOT a prerequisite for IE C24-2.

738 C36-1,2 Industrial Engineering Design Project I,II -- new prerequisites are: Senior standing and either C13 and C15 (for IE majors) or IE C19 (for MfE majors).

750-C16-1,2 Microstructural Dynamics
Principles underlying the development of microstructures. Defects, diffusion, phase transformations, nucleation and growth, thermal and mechanical treatment of materials. Lectures, laboratory. Prerequisite: C21 or equivalent.

750-C32-0 Mechanical Behavior of Solids
Plastic deformation and fracture of metals, ceramics, and polymeric materials; structure/property relations. Role of imperfections, state of stress, temperature, strain-rate. Lectures, laboratory. Prerequisites: C16-1,2. C16-2 may be taken concurrently.

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under n Design Requirement, add EECS C96 to the list of acceptable courses

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Last Updated: September 1994
Under Courses Primarily for Undergraduates, the following courses have been changed or added:

727-C02-0 Probabilistic Systems and Random Signals
Basic concepts of probability theory, random variables, moments; Multiple random variables, conditional distributions, correlation; Sequence of random variables.
Prerequisite: Math B15.

727-C13-0 Telecommunication Networks for Multimedia
An introduction to modern technologies used to represent and transmit multimedia information such as voice, music, documents, still images and video. Emerging network applications of multimedia in the home, academia and business. Not open to EE, CS, or Computer Engineering majors.

727-C16-0 Mini/Microcomputers and Real-Time Applications
Change last sentence before prerequisite to read: Not open to Electrical Engineering, Computer Engineering, Computer Science or Computer Studies majors.

727-C53-0 Digital Electronic Circuits and Systems
Add 727-B01 as a prerequisite.

727-C54-0 Introduction to the Theory of Parallel Computation
Design and analysis of parallel algorithms. Arithmetic, matrix and graph algorithms for arrays, trees, hypercubes, and related

727-C96-0 Engineering Design and Entrepreneurship
Senior capstone design course to teach the principles of launching and operating a company which produces electronic products and services. The design process from concept to marketing will be followed. Students participate in the day-to-day workings of an actual small engineering business. Prerequisite: Senior standing in EE, CS, or Computer Engineering. May be taken as an EE or Computer Engineering design or technical elective once, then as an unrestricted elective repeatedly.

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Under Courses Primarily for Undergraduates,

insert, after C21-1,2,3 Models in Applied Mathematics:
760-C22-0 Applied Dynamical Systems
An example-oriented survey of nonlinear dynamical systems, including chaos. This course combines numerical exploration of differential equations describing physical problems with analytic methods and geometric concepts. Applications to mechanical, fluid dynamical, electrical, chemical and biological systems will be emphasized.

Prerequisites: Equivalent of ESAM 760-C11-1,2, or consent of instructor.

Delete:
760-C81-0 Models in Biochemistry and Molecular Biology.

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Add to -Fluids and Solids:
BME B70 Introductory Biomedical Fluid Mechanics

Add to-Probability, Statistics, and Quality Control
BME B20 Introduction to Biostatistics

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Industrial Engineering Curriculum

Basic Sciences - 5 courses, including Phys A35-1,2
Plus three additional courses
satisfying the McCormick School requirement and
resulting in three quarters of
chemistry or three quarters of physics.

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Under International Education add paragraph:
The adviser for Study Abroad in McCormick is located in Tech Room 2810. Please consult with this office regarding information and planning.

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Major Program – 16 courses  
Under Senior Design Project  
Two courses from: EECS C41, C47, C91, C98.  
should be replaced with: Two units of EECS C99.  

Probability and Statistics – 1 course  
IE B03 Probability and Statistics for Engineers or  
IE C01 Introduction to Statistics  

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Under Basic Engineering:
Remove "Mechanics:  CE B12 recommended"

Add -Fluids and Solids: CE B16 or CE B19

Change "Electives:" section to read, "selected from mechanics, electrical science, systems engineering and analysis (IEC26 recommended), and computer science."

Under Major Program:
Change -Required Courses from "9" to "10 courses"
Change title of MSc C16-1,2 to "Microstructural Dynamics"
Add:  MSc C90 Materials Design

Under -Technical Electives:
Change "Technical Electives" from "7" to "6" courses each time it appears -- in heading and in the paragraph.

Under Areas of Concentration
Add "biomaterials" before "electronic materials."

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Reinsert the following course description:
CE C40 Fluid Mechanics II (1)
Civil Engineering applications of fluid mechanics.
Turbulent flow in pipes, pipe networks, and open channels. Water waves and coastal engineering. Prerequisite: ME B41 or equivalent.
add course:
0555 C30-0 Selected Topics in Keyboard Studies
Topics vary; announced before registration. May be repeated.

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Music Technology Program

add, following first paragraph:
Professional Studies Requirement
for specialization on music technology, 12 course units are required:
● C-level music technology (8 units)
● Terminal Project, C75 (1 Unit)
● Departmental Core (3 Units)

add:
0533 C30-0 Selected Topics in Music Technology
Topics vary; announced before registration. May be repeated.

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add course:
0533 C75 Terminal Project
Independent project in music technology.
Prerequisite: Permission of Department

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add course:
0570 C51-1, 2, 3 Techniques for the Singing Actor
First and second quarters: Basics of stage movement, relaxation, and focusing techniques, creativity and imagination exercises, and exercises in physicalizing a character. Third: Creation of short theater pieces through improvisation and the application of improvisatory technique to operatic plot lines.

0570 C52-1, 2, 3 Opera Laboratory
Acting and performance techniques through the rehearsal and performance of opera and works for music-theater. Repertoire ranges from Baroque opera through contemporary opera and music theater.

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Under courses open to undergraduates add:
0525 B30-0 Flute Class

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Last Updated: September 1994
Under "Speech and Language Pathology," "Courses Primarily for Undergraduates," please add these courses:

624-C39-0 Introduction to Neurogenic Communication Disorders
Overview of neurological correlates and behavioral symptomatology associated with developmental and acquired neurogenic communication disorders.

624-C44-0 Multicultural Perspectives on Speech and Language Disorders
An ethnographic approach to understanding speech and language disorders. A primary objective is to distinguish "different" from "disordered" by understanding linguistic variation, bilingual and bidialectal language acquisition, and cultural perspectives on disorders. In addition, a framework for non-biased diagnosis and remediation of language, fluency, voice, and neurogenic disorders among culturally and linguistically diverse groups will be discussed.

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Last Updated: September 1994
The multidisciplinary Integrated Arts Program, which crosses the boundaries of the different art forms and utilizes faculty from different schools within the university, has been designated a minor by the College of Arts and Sciences. Students in any school in the university may choose to pursue Integrated Arts as a minor. The requirements of the minor are met by completing 5 courses in the program and 2 elective courses, as specified in the undergraduate catalogue. The program's introductory course A90 Art Process is offered each winter quarter.
Requirements for a Major in Performance Studies

- Introductory courses: one quarter of either 601-A01 or A02; 601-A03.
- B-level courses: a minimum of three courses in speech, including at least two quarters of B-level courses in the department.
- Production courses in theatre: two units selected from 630-A40-1,2,3; 630-B40-1,2,3; or one unit selected from preceding courses and one registration for 630-A19.
- An additional ten courses in speech, including at least six courses at the C level or above in the department. It is desirable that courses be distributed among the various forms and media.
- Six courses at the B level or above outside speech, including at least three C-level courses in literature. If they apply, courses taken to meet the distribution requirement may be used to satisfy this requirement.
- Electives in speech and other areas.

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Under "Requirement for a Major in Radio/Television/Film": change:
B-level courses: BO1; B20; two from B80, B81, B82, B93.
to: B-level courses: BO1; B20; B80-1, B80-2.

Delete classes and descriptions for 615-B80-0, 615-B81-0, 615-B82-0, and 615-B93-0
and insert:
615-B80-1, -2, -3 Production Arts
Survey of media production practices in audio, writing, film, television, video, and computer graphics. B80-1, -2 are required for the major. B80-3 is a prerequisite to all C-level production courses.

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Courses Primarily for Juniors and Seniors

Add the following courses:

C31 Summer Dance Institute (1)

C38 Theatre Practicum (1 or 2)

C39 Advanced Acting (1)

C53 Topics in Stagecraft (1)
Seminars with guest or resident faculty on topics in stagecraft. Consent of instructor.

C57-1,2 Freehand Drawing for the Stage Designer (1)
(1) Drawing for scenery, costume, and lighting designers. A lecture and studio course examining and exercising the principles of drawing and composition, using a variety of drawing materials. Consent of instructor.

C58 Improvisation for the Theatre (1)
A discussion-participation course, investigating the use of improvisational techniques and theatre games. Special focus upon group interplay in both formal and environmental theatre.

C59 Directing for the Open Stage

C60 Problems in Stagecraft
Comprehensive examination of the techniques, materials, and sources of physical production. Specific attention given to individuals stagecraft problems in elementary and secondary
drama programs.

C62 20th-Century Stage Design (1)
Surveys the major stylistic development in the art of scene design, costume design, lighting design, and scenography in the 20th century. Emphasis is placed on the American artist in context with the major influences that have shaped the craft.

C68 African Theatre and Drama
Examines theatrical and dramaturgic practices that lie outside Western canons; reinterpretations of that canon by African playwrights. Major theatrical and dramaturgic practices deployed in African theatre and drama, with a focus on artists from Nigeria and South Africa. Topics include: festival practices, traveling and popular theatres, drama in English and the development of appropriate analytic terminology. Prerequisite: 630-C45, 404,B59 or consent of instructor.

C72 Teaching of Dramatics
Drama in the secondary school. Relation of theatre to the individual, society, and arts; process of acting; study of the dramatic text through improvisation; organizing the play for production. Lecture, class participation, peer teaching, and field experiences in local high schools.

C73 Computer Graphics for the Theatre Artist (1)
Computer graphics for the stage designer. Lecture/laboratory. Participation in center productions. Investigation of available software programs and strategies for use in the theatre.

C74 Text Analysis for Theatrical Production
Seminar in analysis of dramatic and nondramatic texts as it relates to the problems of realized theatrical production.

C75 Puppetry

C80 Internship in Theatre Practice (1, 2, or 3)
Full-time participation in production and/or management
activities in a theatre company. Open to graduate students with department approval. Normally only one unit of 630-C80 may be applied toward candidacy for the MA degree. Up to three units may be applied toward candidacy for the MFA degree. Cannot count toward PhD residency.

Change in course numbering for Theatre:

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change "C65-0" to "C65-1,2"
change "C75-0" to "C71-0"

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Last Updated: September 1994
Center for Writers

A new curriculum that will stress the relation of writing to other arts and disciplines. Courses, which are open to undergraduates from all schools within the University, will be taught by prominent writers who will come to campus for residencies of one term or more. All Center for Writers courses provide extensive writing practice as well as supplemental readings.

Prerequisite: One writing-intensive course at Northwestern. Admission to courses by application only. Each class will be limited to 15 students, all of whom apply by submitting a manuscript along with a description of the required prerequisite course. For more information, contact Professor Gary Saul Morson, Chair, the Committee on Writing, Department of Slavic Languages and Literatures, Kresge Hall.

Courses

486-C01-0 The Art of Fiction
Quarterly courses to be taught by the Center's Writers in Residence, designed to focus on the fundamental skills of narrative in the creation of fictional works of all kinds. Prerequisite: see above.

486-C02-0 The Art of Poetry
Quarterly courses to be taught by the Center's Writers in Residence, designed to focus on the writing of poetry in light of the poetic, linguistic and historical tradition. Prerequisite: see above.

486-C03-0 The Art of Expository Prose
Quarterly courses to be taught by the Center's Writers in Residence, designed to focus on the writing as a
fundamental skill in a particular field of endeavor such as science, law, journalism, literature, or political commentary. Prerequisite: see above.

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Replace "certificate(s)" with "minor(s)"

(Explanation: With the adoption of a program for minors in 1992-93, the College of Arts and Sciences changed the designation "certificate" to "minor." Unless noted, all requirements for the minor remain the same as those for the former certificate.)

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Last Updated: September 1994
Under Program of Study, Core electives, item 2, change History and Literature of Religion A10 to "Religion A10"

Under Courses

Add:

495-B02-0 International Ethics
An examination of the moral finalities of foreign policy using classic texts.

495-C90-0 Topics in International Studies
Advanced seminars on topics international in scope. May be repeated with change in topic.

495-C91-0 Lectures in International Studies
Lecture courses on topics international in scope. May be repeated with change in topic.

495-C99-0 Independent Study
Advanced research carried out under the supervision of a professor in a department related to the area of study. Only one quarter may count toward the requirements of the adjunct major. Prerequisite: approval of the Director of the undergraduate major following the submission of a written proposal. Open only to international studies majors.