



Undergraduate Bulletin Supplement

For Spring Semester, 1985
Compiled in October 1984

For Reference
Not to be taken from this room

with

Prime Time Program

Contents

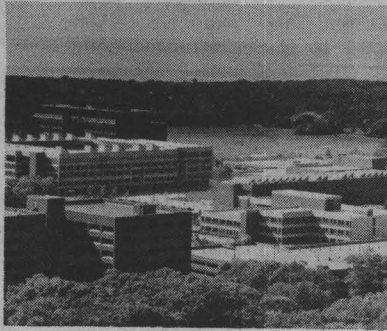
Prime Time Program/1
General Academic Information/6
College of Arts and Sciences/10
College of Engineering and
Applied Sciences/31
Health Sciences Center/37
Marine Sciences Research
Center/38

A Word about the Supplement

The *Bulletin Supplement* is published in November and April at Prime Time to provide students with information that will help them to plan their programs and to advance register for the following semester. It contains both the schedule of Prime Time activities and a cumulative update of the 1983-85 *UNDERGRADUATE BULLETIN*. New courses and minors, revisions in old courses, revised major and minor requirements, and changes in academic regulations and procedures approved since the *BULLETIN* went to press (January 1983) are printed in the *Supplement*. Not every course listed in this issue of the *Supplement*, however, will be offered in Spring 1985; those actually being offered appear in the *Class Schedule*. The *Supplement* announces what courses are not scheduled in Spring 1985 (as of October 10) that appear in the *BULLETIN* as being available in the fall semester; by the time the Spring 1985 semester begins, a few of these courses may become available. Special topics being offered in Spring 1985 are also announced in the *Supplement*.

Courses that do not appear in the *BULLETIN* at all are designated "NEW" in the *Supplement*, except for rare courses that were removed from the curriculum, then "REINSTATED." Courses designated "REVISED" may have had only one element changed—the title or the description or the prerequisites or the credits or the number. In many cases several of these elements are different. Descriptions and prerequisites are listed only if they have been revised. (If no prerequisite appears, it means that the prerequisite remains the same as in the *BULLETIN*, not that the course no longer has a prerequisite.) Expected semester of offering and course credits are shown for new courses but not for revised courses unless the credit value has been changed.

Further information about the courses and programs mentioned in the *Supplement* may be obtained from the departments or instructors offering them.



Prime Time Program

Prime Time is Your Time November 7—November 16

Prime Time is ten days of departmental activities and advising, offered every semester before and during advance registration. It is the time when your attention is necessarily focused on your academic plans for the next semester and beyond. To plan well, you need to consult faculty members. During Prime Time, academic departments and programs schedule events and additional advising hours to maximize your contact with the faculty. You can talk formally and informally with professors about your choice of a major, a minor, course selection, graduate school, and any other questions you have relating to your academic interests and program. If you have already chosen a major, you should seek faculty advice concerning the completion of that major and University graduation requirements. You can use Prime Time to explore research opportunities, internships, study abroad, and honors programs.

You are encouraged to attend any program you find helpful or interesting. Faculty and staff of the sponsoring departments will be in attendance. Enjoy the camaraderie with them and other students.

The following schedule of faculty advising hours is for the period of Prime Time only, November 7-16. Faculty advising schedules for the weeks before and after Prime Time are posted in department offices.

Special thanks to the Stony Brook Foundation for providing funds for Prime Time open houses and events.

College of Arts and Sciences

Advancement on Individual Merit

AIM Program/EOP
Library W3520
246-4016

Panel Discussion: "Life after Stony Brook: AIM Graduates Talk about Their Careers"
Tues., Nov. 13, 3:00-5:00
Library W3520

Advising: AIM staff are available daily from 9:00-5:00

Africana Studies

Social & Behavioral Sciences S245
246-6737

Discussion: "Exploring African Heritage around the World"
Tues., Nov. 13, 1:00-4:00
SBS S226

Advising: Offices are in SBS
Wed., Nov. 7 and 14
12:30-1:30, C. Brown/S255
2:30-4:00, C. Brown/S255
Thurs., Nov. 8 and 15
11:15-12:40, E. Dube/S251
12:45-3:00, L. Owens/S247
Mon., Nov. 12
12:30-1:30, C. Brown/S255
2:30-3:30, C. Brown/S255
Tues., Nov. 13
11:15-12:40, E. Dube/S251
12:45-3:00, L. Owens/S247

Anthropology

Social & Behavioral Sciences S507
246-7726

"Anthropology—A Multi-Media Event"
Wed., Nov. 7, 3:00-5:00
SBS S102

Advising: Offices are in SBS
Wed., Nov. 7 and 14
3:00-6:00, E. Stone/S507
Thurs., Nov. 8 and 15
10:00-12:30, E. Stone/S507
Fri., Nov. 9
10:00-12:30, E. Stone/S507
Mon., Tues., Nov. 12 and 13
2:00-4:00, E. Stone/S507

Art

Fine Arts 2225
246-7070

Reception:
Tues., Nov. 13, 2:00-4:00
Fine Arts 2nd floor lobby

Lecture: "Jackson Pollock's Primitivism," by Prof. Steven Polcari
Wed., Nov. 14, 1:30
Fine Arts 1st floor gallery

Advising: Offices are in Fine Arts
Wed., Nov. 7 and 14
9:30-7:00, M. Pekarsky/2221
1:00-4:00, J. Guilmain/2226A
Thurs., Nov. 8 and 15
11:00-12:30, J. Guilmain/2226A
12:30-2:15, J. Rubin/4213
3:30-4:00, J. Rubin/4213
Fri., Nov. 9
11:00-1:00, J. Guilmain/2226A
Mon., Nov. 12
9:30-7:00, M. Pekarsky/2221
Tues., Nov. 13
11:00-12:30, J. Guilmain/2226A
12:30-2:15, J. Rubin/4213
3:30-4:00, J. Rubin/4213

Biochemistry Biological Sciences

Life Sciences 130
246-5031

Advising Fair:
Wed., Nov. 7, 1:00-4:00
Life Sciences lobby

Advising: Scheduled faculty office hours are posted in Life Sciences 130.

Chemistry Engineering Chemistry

Chemistry 104
246-5050

Lecture: "Options in Careers in Chemical Sciences and Technology" by Prof. Cynthia Burrows
Thurs., Nov. 8, 1:00
Chemistry 2nd floor commons

Lecture: "The Interdisciplinary Nature of Chemistry—Sex and the Single Moth" by Prof. G. Prestwich
Thurs., Nov. 8, 2:00
Chemistry 2nd floor commons

Informal Discussion with Chemistry faculty
Thurs., Nov. 8, 2:30-4:00
Chemistry 2nd floor commons

Advising: Offices are in Chemistry

Wed., Nov. 7
11:00-12:00, T. Goldfarb/529
11:30-1:00, T. Bell/777
Thurs., Nov. 8
10:00-12:00, I. Ojima/739
11:30-12:30, S. Koch/721
Fri., Nov. 9
1:00-3:00, A. Haim/657
1:30-2:00, H. Friedman/413
1:30-3:00, R. Kerber/103
Mon., Nov. 12
10:30-11:30, F. Johnson/607
3:30-4:30, D. Hanson/569
Tues. Nov. 13
9:30-11:00, R. Kerber/103
9:45-11:30, M. Kandel/735
Wed., Nov. 14
2:30-4:00, P. Herley/451

Comparative Literature, Classics, Judaic Studies, and Humanities

Library E4310
246-6059

Lecture: "Why Study Portuguese?" by Prof. Maria Luisa Nunes
Mon., Nov. 12, 1:00-1:30
Library N4006

Reception:
Mon., Nov. 12, 1:30-3:00
Library, 3rd floor commons

Advising: Offices are in Library
Wed., Nov. 7 and 14
10:00-1:00, H. Gross/E4310
10:30-11:20, R. Hoberman/E4325
1:30-2:30, K. Gabbard/E4316
2:00-4:00, L. Vasvari/E4317
Thurs., Nov. 8 and 15
10:30-11:15, C. Kessner/E4323
11:30-12:30, C. Lasker/E4326
12:00-1:00, R. Goldenberg/E4330
12:40-1:40, R. Hathorn/E4308
Fri., Nov. 9 and 16
10:30-11:20, R. Hoberman/E4325
1:30-2:30, K. Gabbard/E4316
Mon., Nov. 12
10:30-11:20, R. Hoberman/E4325
2:00-4:00, L. Vasvari/E4316
2:00-5:00, H. Gross/E4310
5:00-6:30, K. Gabbard/E4317

Tues., Nov. 13
8:30-9:30, R. Hathorn/E4308
10:00-11:00, R. Goldenberg/E4330
10:30-11:15, C. Kessner/E4323
11:30-12:30, C. Lasker/E4326
2:00-5:00, H. Gross/E4310

Earth and Space Sciences

Earth & Space Sciences 235
246-6541

Open House: "Talk with Faculty and Tour Research Labs"
Wed., Nov. 14, 4:00
ESS foyer

Advising: Offices are in ESS
Mon., Nov. 12

8:30-10:00, P. Bretsky/230
Tues., Nov. 13
1:00-2:30, P. Bretsky/230
Wed., Nov. 14
8:30-10:00, P. Bretsky/230
1:00-2:00, W. Sharp/334
Thurs., Nov. 15
2:00-3:00, W. Sharp/334

Economics

Social & Behavioral Sciences S601
246-5070

Open House and Reception:
Wed., Nov. 7, 3:30-5:30
SBS 6th floor lobby

Advising: Offices are in SBS
Wed., Nov. 7 and 14

11:00-2:00, D. Zschock/N635
11:30-12:30, W. Dawes/S641
1:15-2:15, M. Zweig/S645
Thurs., Nov. 8 and 15
9:00-11:00, C. Staley/N639
9:15-11:15, M. Kristein/N641
Fri., Nov. 9
11:00-12:30, W. Dawes/S641
Mon., Nov. 12
11:00-2:00, D. Zschock/N635
1:15-2:15, M. Zweig/S645
Tues., Nov. 13
9:00-11:00, C. Staley/N639
12:30-2:30, M. Kristein/N645
Fri., Nov. 16
1:15-2:15, M. Zweig/S645

English

Humanities 245
246-5080

Discussion: "SINC PROJECT (Stony Brook Instructional Network Computer)—Uses of Computers in the Humanities" led by George Pidot, Director of SUSB Computing Center
Wed., Nov. 7, 3:00
Humanities 283

Student Readings and Open House:

Thurs., Nov. 8, 3:00
Humanities 283

Informal Talk: "Strangers in Paradise: Foreigners in Shakespeare's London" by Prof. C. Huffman
Wed., Nov. 14, 12 noon (bring lunch)
Humanities 283

Film and Open House:

Wed., Nov. 14, 3:00
Humanities 283

Advising: Offices are in Humanities
Wed., Nov. 7 and 14

10:00-2:00, C. Gleason/259
Thurs., Nov. 8 and 15
11:00-5:00, S. Squier/258
Mon., Nov. 12
10:00-2:00, C. Gleason/259
Tues., Nov. 13
10:00-2:00, C. Gleason/259
11:00-4:00, S. Squier/258

Federated Learning Communities

Educational Communications Center
237
246-6107

"Introduction: FLC's America in Transition Program"

Thurs., Nov. 8, 12:30
ECC 237

Advising: Offices are in ECC

Weekdays
9:30-12:00, J. McKenna/237
9:30-12:00, E. McSherry/237
2:00-4:00, J. McKenna/237
2:00-4:00, E. McSherry/237

Foreign Languages

Lecture: "Why Study Portuguese?" by Prof. Maria Luisa Nunes
Mon., Nov. 12, 1:00-1:30
Library N4006

Reception:
Mon., Nov. 12, 1:30-3:00
Library 3rd floor commons

French and Italian

Library N4004-4008
246-8676

Advising: Schedule of faculty advising hours is posted in department office.

Germanic and Slavic Languages

Library N3009
246-6830

Advising: Offices are in Library
Weekdays

9:00-12:00, J. Russel/N3010
2:30-4:00, T. Kerth/N3006
Wed., Nov. 7 and 14
10:30-11:30, L. Vogel/N3088
11:30-1:30, N. Rzhnevsky/N3087
3:30-4:30, L. Vogel/N3088
Thurs., Nov. 8 and 15
2:00-3:30, N. Rzhnevsky/N3087
Mon., Nov. 12
11:00-11:30, L. Vogel/N3088
11:30-1:30, N. Rzhnevsky/N3087
Tues., Nov. 13
2:00-3:30, N. Rzhnevsky/N3087

Hispanic Languages

Library N3017
246-5685

Advising: Offices are in Library
Wed., Nov. 7 and 14

9:30-12:00, M.L. Nunes/N3028
1:45-3:15, J. Giordano/N3018
3:00-4:00, R. de la Campa/N3020
3:30-5:00, L. Deutsch/N3026
Thurs., Nov. 8 and 15
11:00-12:00, R. de la Campa/N3020
11:30-1:30, A. Montoro/N3027
2:00-5:00, R. de la Campa/N3020
2:30-4:30, P. Lastra/N3030
7:00-8:00, A. Montoro/N3027
Fri., Nov. 9 and 16
11:00-12:00, R. de la Campa/N3020
Mon., Nov. 12
9:30-2:00, M.L. Nunes/N3028
1:45-3:15, J. Giordano/N3018
Tues., Nov. 13
11:00-12:00, R. de la Campa/N3020
11:30-1:30, A. Montoro/N3027
2:00-5:00, R. de la Campa/N3020
2:30-4:30, P. Lastra/N3030
7:00-8:00, A. Montoro/N3027

History

Social & Behavioral Sciences S301
246-6500

Open House and Reception:

Wed., Nov. 14, 11:30-1:00
SBS 3rd floor lobby

Lecture: "Collaboration: The Dilemma of Wartime" by Prof. Richard Kuisel

Wed., Nov. 14, 1:00-2:00
SBS N303

Film: "The World at War: Occupation"

Wed., Nov. 14, 2:30-3:30
SBS N303

Advising: Offices are in SBS

Wed., Nov. 7 and 14
10:30-11:30, R. Lee/S329
1:00-2:15, N. Tomes/N337
3:00-5:00, B. Larson/S349
3:30-4:30, M. Barnhart/N321
Thurs., Nov. 8 and 15
11:15-12:00, P. Alin/S333
5:00-6:00, N. Landsman/S353
Fri., Nov. 9 and 16
10:30-11:30, R. Lee/S329
1:30-2:15, N. Tomes/N337
Mon., Nov. 12
10:30-11:30, R. Lee/S239
1:00-2:00, M. Barnhart/N321
1:00-2:15, N. Tomes/N337
Tues., Nov. 13
11:00-12:00, N. Tomes/N337
11:15-12:00, P. Alin/S333
1:00-3:00, N. Landsman/S353

International Programs

Central Hall 101
246-7711

Presentation: "Study Abroad Programs—Information and Application Procedures"

Thurs., Nov. 15, 2:00
Central Hall 101

Advising: Offices are in Central Hall

Fri., Nov. 16
2:00-5:00, M. Giron/101

Linguistics

Social & Behavioral Sciences N517
246-3431

Lecture and Discussion: "Teaching English as a Second Language in Public School"

Thurs., Nov. 8, 3:00
SBS N514

Advising: Offices are in SBS

Wed., Nov. 7
9:30-10:30, M. Aronoff/N509
12:00-1:00, S.N. Sridhar/N527
1:00-3:00, S. Ansara/N513
2:00-4:00, F. Anshen/N513
Thurs., Nov. 8 and 15
1:30-2:50, E. Broselow/N525
2:00-4:00, A. Carton/N527
Fri., Nov. 9 and 16
12:00-1:00, S.N. Sridhar/N527
Mon., Nov. 12
9:30-10:30, M. Aronoff/N509
2:00-4:00, F. Anshen/N513
Tues., Nov. 13
9:00-12:00, S. Ansara/N521
10:00-12:00, M. Aronoff/N509
1:30-2:50, E. Broselow/N525
Wed., Nov. 14
9:00-4:00, A. Carton/N517
9:30-10:30, M. Aronoff/N509
1:00-3:00, S. Ansara/N521
2:00-4:00, F. Anshen/N513

Mathematics

Mathematics P143
246-6520

Discussion: "Career Opportunities in Mathematics"

Open House following

Thurs., Nov. 8, 3:00-4:30
Mathematics P131

Transfers: "Questions and Answers about Math Courses" (bring catalogue from your previous college)

Thurs., Nov. 8, 5:00
Mathematics P131

Advising: Faculty are available daily,
11:00-3:00, in Mathematics P143

Music

3312 Fine Arts Center
246-5671

Mini-concert by the Stony Brook Chamber Singers

Discussion following: The Music Major and Minor
Wed., Nov. 7, 4:30

Fine Arts I, undergraduate lounge

Advising: Offices are in Fine Arts

Wed., Nov. 7 and 14
11:30-1:00, P. Winkler/3322
2:00-3:00, G. Fisher/3332
2:30-4:00, J. McCalla/3330

Thurs., Nov. 8 and 15

9:30-11:00, E. Linfield/3324

Fri., Nov. 9 and 16

10:30-12:00, J. McCalla/3330

11:30-1:00, P. Winkler/3322

Mon., Nov. 12

10:30-11:30, G. Fisher/3332

11:30-1:00, P. Winkler/3322

Tues., Nov. 13

1:00-2:30, E. Linfield/3324

Philosophy

Old Physics 221
246-6560

Lecture: "Weird World of Perception: What Science Overlooks," by Prof.

P.A. Heelan, author of *Space Perception and the Philosophy of Science*

Wed., Nov. 7, 12:00

Old Physics 249

Discussion: "The Value of Majoring in Philosophy—Information on Departmental Programs and Career Options"

Wed., Nov. 14, 1:00

Old Physics 249

Open House:

Wed., Nov. 14, 2:00-4:30
Old Physics 249

Advising: Offices are in Old Physics
Wed., Nov. 7

9:00-11:00, M. Rawlinson/221

2:00-4:00, R. Nolan/247

2:00-4:00, H. Silverman/237

4:45-7:00, R. Howard/239

Thurs., Nov. 8

12:35-2:00, C. Martin/248

6:00-7:00, A. deNicolas/247A

Mon., Nov. 12

3:00-3:30, R. Howard/239

Tues., Nov. 13

9:00-11:00, M. Rawlinson/221

11:15-12:15, R. Nolan/247

12:35-2:00, C. Martin/248

2:00-3:00, P. Grim/235

Thurs., Nov. 15

2:00-3:00, P. Grim/235

2:30-3:30, H. Silverman/237

5:00-6:00, M. Rawlinson/221

6:00-7:00, A. deNicolas/247A

Physics

Physics P110
246-6580

Discussion: "Curriculum and Career Opportunities in Physics"

Wed., Nov. 7, 2:00

Physics C120

Advising: Offices are in Physics
Wed., Nov. 7

9:30-11:30, H.R. Muether/A102

Thurs., Nov. 8 and 15

9:30-11:30, H.R. Muether/A102

1:00-3:00, R.A. Mould/A109

Fri., Nov. 9 and 16

10:30-12:30, R.A. Mould/A109

Mon., Nov. 12

9:30-11:30, H.R. Muether/A102

Tues., Nov. 13

9:30-11:30, H.R. Muether/A102

Wed., Nov. 14

9:30-11:30, H.R. Muether/A102

3:00-4:00, R.A. Mould/A109

Political Science

Social & Behavioral Sciences S701
246-6550

Open House:

Wed., Nov. 14, 2:00-4:00

SBS 7th floor lobby

Advising: Offices are in SBS

Wed., Nov. 7

1:00-2:00, P. Baumann/N709

2:00-3:30, A. Abramowitz/S719

Thurs., Nov. 8

8:30-9:45, A. Cover/S735

10:00-11:00, M. Lodge/S717

Fri., Nov. 9

11:15-12:15, R. Petrick/S737

Mon., Nov. 12

1:30-2:30, H. Scarrow/S743

3:30-5:00, J. Scholz/N741

Tues., Nov. 13

1:00-4:00, J. Euelow/S723

1:30-3:00, M. Schneider/N725

Wed., Nov. 14

3:30-5:00, R. Hamill/S733

5:00-6:00, F. Myers/S711

Thurs., Nov. 15

9:00-11:00, B. Tursky/N715

1:00-2:00, R. McDonald/S753

Psychology

Psychology B 116
246-3300

Meet the Faculty: "Advising about
Special Courses, Internships, and
Research Opportunities"

Mon., Nov. 12, 2:00-4:00

Psychology A 253 and 257

Advising: Offices are in Psychology B
Daily

9:00-4:00, M. Levine & Staff/114

Religious Studies

Old Physics 103

246-7783

Open House:

Wed., Nov. 14, 2:00-4:00

Old Physics 112

Advising: Old Physics 103

Wed., Nov. 7

2:30-4:30, P. Manchester

Thurs., Nov. 8

10:00-2:00, R. Goldenberg

2:00-5:00, T. Altizer

Fri., Nov. 9 and 16

2:30-4:30, P. Manchester

Mon., Nov. 12

2:30-4:30, P. Manchester

Tues., Nov. 13

10:00-1:00, R. Goldenberg

2:00-5:00, T. Altizer

2:15-3:30, W. Chittick

2:15-3:30, S. Murata

Thurs., Nov. 15

10:00-1:00, R. Goldenberg

2:00-5:00, T. Altizer

2:15-3:30, W. Chittick

2:15-3:30, S. Murata

Returning Student Network

Office of Undergraduate Studies

Library E3320

246-3420

Returning Student Reception and General Academic Advising:

Thurs., Nov. 8, 12:00-3:00

SBS S216

Advising: Staff in Center for
Academic Advising, Library E3310, are
available daily from 9:00-5:00

Social Sciences Interdisciplinary

Social & Behavioral Sciences S201
246-8443

Slide Presentations:

"Child Care: Crises and Questions"

Wed., Nov. 14, 3:00-3:30

SBS S207

"Images of China"

Wed., Nov. 14, 4:00-4:30

SBS S207

Advising: Offices are in SBS

Wed., Nov. 7 and 14

10:30-1:30, S. Sternglanz/S215

Thurs., Nov. 8 and 15

9:00-10:30, E. Seifman/S201

11:15-12:15, J. Wishnia/S213

Mon., Nov. 12

11:00-12:00, J. Wishnia/S213

Tues., Nov. 13

9:00-10:30, E. Seifman/S201

11:15-12:15, J. Wishnia/S213

1:00-3:00, D. Lichtenstein/S231

2:00-4:00, S.M. Hu/S219

3:00-4:00, F. Cash/S227

Sociology

Social & Behavioral Sciences S401

246-6720/8681

Lectures: "America in the Eighties—And
After"

"Political Change" by Prof. L. Coser

"Technology and Work" by Prof. J.

Rule

"Gender Cultures" by Prof. D. Barthel

Reception following

Thurs., Nov. 8, 4:00

SBS 4th floor lobby

Advising: Offices are in SBS

Wed., Nov. 7 and 14

12:30-2:00, I. Chase/N449

1:40-3:10, K. Feldman/N431

Thurs., Nov. 8 and 15

10:00-12:00, H. Selvin/S428

Fri., Nov. 9

9:00-11:00, D. Barthel/S406

1:30-2:30, E. Goode/N447

Mon., Nov. 12

2:00-3:30, B. Hare/N419

3:30-4:30, L. Coser/S429

Tues., Nov. 13

9:00-11:00, D. Barthel/S406

2:30-4:00, B. Hare/N419

Fri., Nov. 16

1:30-2:30, E. Goode/N447

Theatre Arts

Fine Arts II 3045

246-5670

Open House and Variety Show:

Tues., Nov. 13, 3:00-5:00

Fine Arts Theatre III

Advising: Scheduled faculty office
hours are available in Fine Arts 3045

College of Engineering and Applied Sciences

Applied Mathematics and Statistics

Mathematics P139

246-6773

Acceptance into the AMS Major:

"Prospective Majors: Entering the

Applied Mathematics Major"

Mon., Nov. 12, 12 noon

Prof. A. Tucker

Mon., Nov. 12, 4:00

Prof. D. Jensen

Math Tower P131

Advising: Offices are in Mathematics

Thurs., Nov. 8

1:30-3:30, T. Hagstrom/I-105

Fri., Nov. 9

1:00-3:00, D. Jensen/I-117

Tues., Nov. 13

3:00-5:00, E. Weitzman/P-138

Computer Science

Lab Office Building 1401
246-7146

Acceptance into the CSE Major:
See *BULLETIN*, page 185.

Current CSE Majors

Advising: Offices are in Lab Office Building. Students are assigned alphabetically by last name to faculty advisors as follows:

A-C, H. Badr, Rm. 1424
Thurs., 11:30-1:00

D-H, J. Hsiang, Rm. 1421
Tues., 3:00-5:00

I-M, S. Smolka, Rm. 1423
Tues., Thurs., 11:15-12:15

N-R, M. Srivas, Rm. 1425
Mon., 3:30-5:00

Thurs., 2:00-3:30

S-W, D. Warren, Rm. 1422
Mon., 12:00-1:30

Wed., 1:00-2:30

X-Z, Z. Zorat, Rm. 1418

Tues., Thurs., 10:00-11:00

Acceptance into an Engineering Major: Electrical Engineering, Mechanical Engineering, Engineering Science

If you wish to take your degree in an engineering program but you have not been signed into the major of your choice, you should register during Prime Time in Old Engineering 127. During the January intercession, the Fall 1984 transcripts of those who registered will be reviewed, and each department will accept as many in its major as are qualified and can be accommodated. The decision will be based on grades in mathematics and the sciences.

Electrical Engineering

Light Engineering Y273
246-6757

Acceptance into the ESE Major Information Session:

Tues., Nov. 13, 12:00-1:00
Light Engineering 202

Current ESE Majors

Advising: Held in Light Eng. 267
Mon., 2:30-3:00, G. Choudhury
Tues., 11:00-12:00, C.C. Yeh
Wed., 9:00-10:00, H. Dhadwal
Thurs., 1:00-2:00, S. Bajpai
Fri., 2:00-3:00, J. Hantgan

Additional Advising: Held in Light Eng. 267

Wed., Nov. 7, 1:00-4:00, C.C. Yeh

Thurs., Nov. 8, 1:00-4:00, S. Bajpai

Fri., Nov. 9, 9:00-12:00, J. Hantgan

Mon., Nov. 12, 1:00-4:00, G. Choudhury

Tues., Nov. 13, 9:00-12:00, H. Dhadwal

Engineering Science

Engineering E314
246-6759

Open House: "Making Course Selections in Engineering Science"
Wed., Nov. 7, 4:00-6:00
Engineering 301

Advising: Consult department office

Mechanical Engineering

Light Engineering 113
246-6771

Acceptance into the ESC Major and Current ESC Majors

Open House:

Wed., Nov. 7, 11:30-12:30
Heavy Engineering 205

Acceptance into the ESC Major Advising:

Mon., Nov. 12

9:00-12:00, E. O'Brien/LE 113

Thurs., Nov. 15

9:00-12:00, E. O'Brien/LE 113

General Advising:

Wed., Nov. 7 and 14

9:00-11:00, R. Drubka/HE 216

10:30-12:00, A. Rubinstein/LE 141

Thurs., Nov. 8

11:10-12:00, R. Drubka/HE 216

4:00-5:30, J. Fox/LE 161

Fri., Nov. 9 and 16

10:30-12:00, A. Rubinstein/LE 141

Mon., Nov. 12

9:00-11:00, R. Drubka/HE 216

10:30-12:00, A. Rubinstein/LE 141

Tues., Nov. 13

11:10-12:00, R. Drubka/HE 216

4:00-5:30, J. Fox/LE 161

Minor in Technology and Society

Engineering 210
246-8427

Open House: Demonstration of Microcomputers, Simulations, and Programming
Tues., Nov. 13, 10:00-1:00
Engineering E214

W. Averell Harriman College for Policy Analysis and Public Management

Old Physics 314
246-8280

Open House for the Accelerated Program: "The Best Buy on Campus"

Thurs., Nov. 8, 4:00-6:00
Old Physics 312

Advising:

Weekdays, 9:00-5:00

Health Sciences Center

School of Allied Health Professions

(Cardiorespiratory Sciences, Medical Technology, Physical Therapy, Physician's Assistant Education)
Health Sciences Center L-2 040
444-2250

Open House:

Sat., Nov. 10, 2:00-5:00

General Information Session:

Sat., Nov. 10, 2:00-3:00

Open Labs and Demonstrations:

Sat., Nov. 10, 3:00-5:00

Individual Advising:

(bring copy of your transcripts)

Sat., Nov. 10, 3:00-5:00

Health Sciences Center Level 2

School of Nursing

Health Sciences Center L-2 242
444-3200

Information and Advising Session:

Wed., Nov. 7, 3:00-5:00

HSC, Level 2, Office of Student Affairs
1st Wednesday of each month

School of Social Welfare

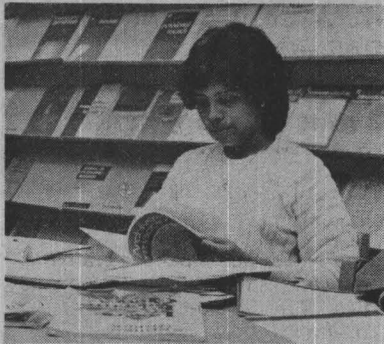
Health Sciences Center L-2 093
444-2138

Discussion: "Consider a Career in Social Welfare: Educational Preparation and Career Opportunities"

Wed., Nov. 14, 1:00-2:00

HSC L-2 089 faculty lounge

Advising: Consult Main Office



New Declaration of Major Policy

The University's new policy and procedures for declaring majors are now in place. Part of this innovation is the introduction of "Areas of Interest," to be declared by second-semester freshmen and more advanced students (subject to the restrictions noted in the procedures) who are not yet ready to declare a major.

The declaration-of-major procedures outlined below will provide information to improve academic advising throughout the campus, to plan properly for allocating and shifting resources, and to guide students towards serious consideration of their educational goals from their freshman year on, without prematurely pressuring them to declare a major when they are genuinely undecided.

Procedures

A. Declaration of Area of Interest

All newly admitted freshmen, except those accepted into majors with approved limited access, are placed in the GEN (general student) category. At Freshman Orientation they may (but are not required to) declare one of the following areas of interest:

- GAH - pre-Allied Health Professions
- GAM - pre-Applied Mathematics and Statistics
- GCS - pre-Computer Science
- GEE - pre-Electrical Engineering
- GES - pre-Engineering Science
- GFH - pre-Fine Arts and Humanities
- GME - pre-Mechanical Engineering
- GNS - pre-Nursing
- GSB - pre-Social and Behavioral Sciences
- GSC - pre-Natural Sciences and Mathematics
- GSW - pre-Social Welfare

General Academic Information

New freshmen who do not wish to declare an area of interest will remain in the GEN (general student) category.

Each student must declare an area of interest or specifically elect to remain in the GEN category at the point of registering for the first semester of the sophomore year (i.e., at Advance Registration in the second freshman semester) if he or she has not already declared either a specific major or an area of interest. New transfer students who matriculate as sophomores or higher must declare either a major or an area of interest (or specifically elect to remain in the GEN category) upon registering for their first semester at Stony Brook. Students who have declared an area of interest (or who have elected to stay in the GEN category) may change to another area of interest if their intentions change. Continuing students who have earned 85 credits or more may not retain an area of interest; at that point they must declare a major.

Declaration of an area of interest indicates a student's expectation; it does not guarantee a place in any limited-acceptance major.

The Change of Major/Minor/Area of Interest form, available from the Office of Records, is used to designate an area of interest officially; an advisor's signature is not required.

B. College of Arts and Sciences Majors

Freshmen in the College of Arts and Sciences usually wait to select a major officially until after they have had an opportunity to

test various academic interests by taking college-level courses in those fields. They may, however, declare a major as early as the Advance Registration period for their second semester.

All students are expected to declare a major no later than the end of the second semester of their sophomore year or before attaining upper-division status. Failure to do so may result in a delay in meeting graduation requirements. The Change of Major/Minor/Area of Interest form, available from the Office of Records, is used to designate a major officially; the signature of a departmental advisor is required. Students should not attempt to record both a specific major and a GFH, GSB, or GSC area of interest.

Students whose first choice of major is in one of the Engineering and Applied Sciences or Health Sciences programs and who have not been accepted into the major of their choice by the end of the sophomore year are expected to choose a major in the College of Arts and Sciences. Should the student subsequently be accepted into the College of Engineering and Applied Sciences or the Health Sciences Center, the originally declared major may be changed or completed under the double major (see below) or double degree regulations (see *BULLETIN*, p. 37). Continuing students who expect to apply to an Engineering and Applied Sciences or Health Sciences undergraduate program after declaring an Arts and Sciences major may retain the appropriate area of interest along with the major until they have earned 85 credits. At that time, if they have not been accepted into the major related to their area of interest,

they must drop the area of interest.

Students who have declared a specific major may change majors at any time up to graduation. In order to do this they should discuss the change with an advisor in the desired program and secure his or her signature on a Change of Major/Minor/Area of Interest form and return it to the Office of Records.

C. College of Engineering and Applied Sciences Majors

Some freshmen and transfer students who indicated an interest in a Bachelor of Engineering program on their application to the University are accepted directly into the electrical engineering, mechanical engineering, or engineering science major when they are admitted to the University. Continuing students may apply in the Engineering Undergraduate Student Office during Prime Time each semester for acceptance into one of these programs.

All applicants for the applied mathematics and statistics or computer science programs must have completed at least one semester at Stony Brook and a specified set of courses. New freshmen and transfer students are not accepted directly into these majors. (See p. 183 of the *BULLETIN* for further details about acceptance into the applied mathematics and statistics major and p. 185 for acceptance into the computer science major.)

The College of Engineering and Applied Sciences officially designates the major for all students accepted into the majors noted above. The Change of Major/Minor/Area of Interest form is not used.

Declaration of an area of interest related to one of the Engineering and Applied Sciences majors does not guarantee later acceptance into the major.

D. Health Sciences Center Majors

Some freshmen who indicated an interest in a Health Sciences Center program on their application to the University are

accepted directly into the appropriate major when they are admitted to the University. Continuing and transfer students who wish to enter one of the upper-division programs in the Health Sciences Center must apply for admission to that program during the fall semester and be formally accepted in the spring. Applications to Health Sciences programs may be submitted in the sophomore year or later. Admission to any of the Health Sciences Center programs is not accomplished through the change-of-major-form mechanism.

Declaration of an area of interest related to one of the Health Sciences majors does not guarantee later acceptance into the major.

E. Advising for Declaration

The Center for Academic Advising is primarily responsible for advising students in the GEN and all area of interest categories, although academic departments will be called upon to advise students seeking information about their majors and courses.

Academic departments are responsible for advising interested students about their courses and majors, signing students into majors, and advising students about their entire academic program once the major has been declared.

Double Majors

Students who wish to complete two majors within their work toward one baccalaureate degree must obtain the approval of the two departments involved. The Change of Major/Minor/Area of Interest form is used for adding a second major in all cases where that second major is in the College of Arts and Sciences. This form is not used if the second major is in the College of Engineering and Applied Sciences; instead, the college administration will officially designate the second major.

Double majors may be composed of any two majors in the College or Arts and Sciences or any Arts and Sciences major with either Computer Science or Applied Mathematics and Statistics. Within the College of

Engineering and Applied Sciences double majors may be formed of Computer Science and Applied Mathematics and Statistics or by adding either to any one of the engineering majors. It is not possible to have two engineering majors. Students accepted into the School of Allied Health Professions may pursue either a double major or a double degree with an Arts and Sciences major. Any other combination of majors involving a Health Sciences Center program must be pursued as a double degree (see "Two Baccalaureate Degrees," *BULLETIN*, p. 37).

When a double major includes one Bachelor of Science program in the College of Arts and Sciences and one in the College of Engineering and Applied Sciences, the student may fulfill either college's set of graduation requirements. If, however, the Arts and Sciences major is one that leads to a Bachelor of Arts, the student must decide which degree he or she wishes to be awarded. In this case, the graduation requirements of the College of Arts and Sciences would have to be satisfied if the Bachelor of Arts is chosen; the graduation requirements of the College of Engineering and Applied Sciences would have to be satisfied for the Bachelor of Science.

Whatever the pair of majors, the number of credits taken to fulfill the requirements of both must total at least 60. Students wishing to pursue a concentration in a third area should consider selecting a minor.

Selection of Minor

Although students are not required to pursue a minor in order to graduate, a number of minors are available for those wishing to select them. The Change of Major/Minor/Area of Interest form is used to designate a minor officially; the signature of the minor coordinator is required.

University Writing Requirement

The writing requirement described below applies to all first-time freshmen who matriculated in Fall 1984 and who matriculate later. It does not affect continuing students or new transfers entering in 1984-85; these two groups will follow the requirements printed in the 1983-85 BULLETIN.

This requirement assumes that instruction in writing is a central part of a university education. Therefore, all students will take at least one university course in writing—even if they already have strong high school skills and even if they write copiously in other university courses.

All students must take a diagnostic placement examination upon entry and begin their writing requirement during their first two semesters at Stony Brook. Students who receive a grade of C- or lower in EGC 101 must repeat that course in the following semester. Students who are assigned to EGC 100 or ESL courses must take those courses in sequence in successive semesters until they have satisfied the writing requirement.

Placement will be indicated on the student's record in the following way:

Placement 1 refers to students who score "Weak" and are required to pass an ESL course, followed by EGC 100, and then to pass EGC 101 with a grade of C or higher.

Placement 2 refers to students who score "Weak" and are required to pass EGC 100 and then to pass EGC 101 with a grade of C or higher.

Placement 3 refers to students who score "Satisfactory" as to their preparation for college composition study and are required to pass EGC 101 with a grade of C or higher.

Placement 4 refers to students who score "Strong" and are required to pass any designated advanced writing course.

Freshmen

Freshmen who score "Strong" on the placement examination may choose among the designated advanced writing courses (below).

If they score "Satisfactory," they will be placed in EGC 101. If they score "Weak," they will be placed in EGC 100 or an ESL course. Students scored "Weak" may not take EGC 101 until they do satisfactory work in the preparatory course.

To satisfy the University Writing Requirement, all freshmen must take EGC 101 for a letter grade and earn a grade of "C" or higher, or pass one of the designated advanced writing courses. Those freshmen whose writing skills are weak will have to take more than one writing course, since they must take at least one preparatory course before EGC 101.

Transfers

Transfer students who score "Strong" on the placement exam and have already taken a course judged equivalent to Stony Brook's EGC 101 or one of the designated advanced writing courses will have satisfied this requirement. If they score "Strong" but do not bring credit for an equivalent of EGC 101 or one of the designated advanced writing courses*, they may choose among the designated advanced writing courses and pass one to satisfy this requirement. If they score "Satisfactory," they will be placed in EGC 101, which must be taken for a letter grade and passed with a grade of "C" or higher. Those transfer students who score "Weak" on the placement exam must take EGC 100 or an ESL course and go on to EGC 101, which must be taken for a letter grade and passed with a grade of "C" or higher to satisfy this requirement.

Designated Advanced Writing Courses

Designated advanced writing courses may be offered by any academic department. The guidelines under which such courses are approved include the following:

- the course should have a maximum of 30 students per section;
- some writing should be handed in each week;
- the course need not focus on the teaching of writing but considerable attention should be paid to it;
- grades should take writing ability into account.

Designated Advanced Writing Courses are: EGC 102; EGL 191, 192, 193, 199, 202, 204; HIS 214, JDH/RLS 230; PHI 100, 103, 104, 105, 108. The following Fall 1984 courses were also on the list: HIS 233, 250, 295; HUM 100, PHI 101, 102, 106; RLS 122; SOC 104. As courses are added to this list, they will be noted in the *Undergraduate Bulletin Supplement*.

Grading System

In the discussion of "Temporary Reports of I and NR" on p. 35 of the BULLETIN, the grades that will be recorded if appropriate action has not been taken are incorrect. In the case of an I (Incomplete), if the instructor does not report the final grade by the applicable or extended deadline, the final grade of I/F, U, or NC, as appropriate, will be assigned. In the case of an NR, if this temporary report has not been replaced by a W or a final grade by the applicable deadline, the NR will be changed to N/F, U, or NC, as appropriate.

Pass/No Credit Academic Record Option

A limit has been placed on the number of credits for which the Pass/No Credit option may be elected. No more than 20 percent of all credits taken at Stony Brook, including F and NC courses (but excluding courses in which a W is received) may be taken for P/NC.

This rule does not apply to students who matriculated in Spring 1983 or earlier. It does apply to students who matriculated in Fall 1983 and later.

Dean's List for Part-Time Matriculated Students

A new Dean's List for part-time matriculated students has been established. The criteria for this Dean's List are:

A grade point average of 3.50 or above for at least six credits in a semester of letter-graded work (not including S or P grades) with no I's, U's, NR's, NC's, or F's.

University Honors

The criteria for University honors have been changed to the following:

Degrees with distinction are conferred upon candidates for Bachelor of Arts, Bachelor of Science, or Bachelor of Engineering who have completed at least 60 credits at Stony Brook, have letter grades assigned to at least 80 percent of their course work, and attain the requisite grade point average. The levels of distinction include summa cum laude, magna cum laude, and cum laude and constitute approximately the 98th percentile, the 93rd percentile, and the 85th percentile respectively. Attainment of a degree cum laude is indicated on the student's diploma and permanent academic record. The grade point average cut-offs for the three levels of distinction are: summa cum laude, 3.85; magna cum laude, 3.70; cum laude, 3.50. The cut-offs are reviewed at two-year intervals to reflect changes in grading patterns.

Upper-Division Elective Courses

Students are expected to fulfill their upper-division credit requirement with a combination of electives and major courses. All the Spring 1985 courses listed below make good upper-division electives for students majoring outside the department offering the course. These courses have either no specific prerequisites or call for one or two 100-level courses as prerequisites or (in a few cases) a popular 200-level course as a prerequisite. The last group lists courses having prerequisites that are not easily classified in a general way but that are likely to have been met by many students. The general prerequisite for all upper-division courses is completion of three courses (including any that are specified) in the same distribution area: such courses are designed for upper-division students.

No specific prerequisites:

AFS 420
HIS 303, 312, 316, 329, 331, 334,
341, 370, 371, 376, 378
LIN 425
POL 350
SOC 302
SSI 333

One specific prerequisite:

ARH 307, 320, 335, 338, 342
ECO 317
HIS 322, 337, 339, 353, 379, 396
MUS 309, 315
PHI 312, 340, 360, 384, 392
POL 311, 317, 320, 323, 327, 343, 346
PSY 354
RLS 330, 335, 341, 350, 370
SSI 339

Two specific prerequisites:

AFH 330
AFS 337
ANT 301, 304, 307, 318, 354, 363,
391
ARH 324, 349
CLT 332, 333, 334, 361, 362
EGL 362, 364, 366, 368, 372, 374
FRN 381
ITL 381
LIN 363
MAT 300
MUS 316
PHI 300, 306, 330, 366, 380
POL 325, 337, 366
PSY 309, 311, 312, 315
SOC 304, 309, 310, 315, 323, 337,
352, 353, 356, 360, 373, 380, 381,
382, 383, 384, 390

Other prerequisites:

CLS 311
EST/POL 370
SOC 338

Center for Continuing Education Courses

The following C.E.D. courses, to be offered in Spring 1985, are open to qualified undergraduates. See *BULLETIN*, p. 49, for information about undergraduates taking C.E.D. courses.

CEE 532, Sec. 21 Workshop in Teaching Reading for Elementary School Teachers

CER 510 Classic Religious Texts: Suffism

1985-87 Undergraduate Bulletin

The *Undergraduate Bulletin* for the next two academic years, Fall 1985 through Spring 1987, will be published in April 1985. Watch for announcements in March about how to obtain a copy.

Guide to Academic Help

The Office of Undergraduate Studies has produced a pamphlet, entitled *HELP*, that identifies opportunities and resources for advisory and tutorial help on campus. It is available in the Center for Academic Advising (one of the resources!), Library E-3310.

A.I.M.

AIM 102 Textual Analysis

(REVISED)

Training in analysis of college-level texts.

Prerequisite: Placement by English Placement Examination

Corequisite: EGC 100

Fall and spring, 3 credits

AIM 103 The Learning Process

(REVISED)

Understanding the methods of acquiring knowledge, retaining and processing information, and using and disseminating information effectively. Topics include effective time use, psychological factors influencing learning, the learning process, and developing logical thinking.

Fall and spring, 3 credits

AIM 104 Research Paper Techniques (Formerly AIM 101)

(REVISED)

An introduction to basic research techniques with emphasis on understanding and use of library facilities, analysis and development of research topics, documentation requirements and techniques, organization of information, and writing techniques.

Fall, 3 credits



College of Arts and Sciences

Proficiency Requirements

English

The English Proficiency and Placement Examinations will be given on Saturday, December 8 and January 26, from 10:00 a.m. to noon in the Javits Lecture Center. Bring your I.D., a pen, a pencil, and a dictionary. (There is no advance registration for the tests.)

Mathematics

The Mathematics Proficiency Examination will be given on Tuesday, January 29, 1985, from 3:30 to 5:00 p.m. in Math Tower, Room P-131. Students are advised to review seriously the topics of "elementary algebra," which make up the bulk of the examination. Bring your I.D. and a No. 2 pencil to the test.

For further information about the proficiency requirement go to the Math Undergraduate Office, Mathematics P-143 or call 6-6520.

Foreign Language

Another means of satisfying this proficiency requirement has been added. In the absence of a Regents score, a score of 75 or higher on the third-level high school language New York City Competency Test will satisfy the requirement.

Note that literature and culture courses taught in English translation under the auspices of the foreign language departments do *not* satisfy the foreign

language proficiency requirement. These include FRN 381; GER 141, 199; ITL 381; RUS 109, 110, 141, 142, 201, 291, 292, 293; SWE 141.

American Sign Language, although not offered on this campus, may be used to satisfy this requirement by means of the regular transfer credit procedure.

Distribution Requirements

The list of disciplines that satisfy the Natural Sciences and Mathematics requirements is incomplete in the *BULLETIN*, p. 46. Offerings in astronomy (AST), atmospheric sciences (ATM), and geology (GEO) also satisfy it.

EST 441, if taken in Spring 1984 only, may be used to satisfy the Natural Sciences and Mathematics requirement; it may not be used if taken in later semesters.

Intermediate foreign languages taught under the LAN 191, 192 rubric will satisfy the Arts and Humanities requirement. See the Linguistics section for course description.

Internships

Several changes have taken place in the Internship Program. The minimum grade point average for admission is now 2.5. Students must have completed 69 credits, of which at least 12 credits must have been taken at Stony Brook. Two letters of recommendation are required. The credit range for internship courses has been changed to 3 to 12 credits. A new course, EXT 488 Internship,

has been created to accommodate students when there is no appropriate department to sponsor a particular internship. (See Unaffiliated Courses section.) The deadline for completing applications for Spring 1985 is January 25; the deadline for submitting a completed contract is January 31. No exceptions!

Departmental Announcements and Courses

Africana Studies

Changes in expected semester of course offerings: AFS 225, 319, and 372 will not be offered in Spring 1985. AFS 490, listed as a fall course, will be offered in the spring.

AFS 239 Introduction to the Caribbean Experience (REVISED)

An introduction to the political economy of contemporary Caribbean societies with emphasis on the historical roots of their present underdevelopment.

AFS 240 Issues in Caribbean Society (REVISED)

An analysis of the process of social change in the English, Spanish, and French Caribbean with special emphasis on those societies undergoing rapid transformation.

AFH 249 African-American Music and Literature in the Nineteenth and Twentieth Centuries (NEW)

A general and detailed look at black literature and music and its importance for literature and music generally in the nineteenth and twentieth centuries. Topics will include: country blues, city blues, New Orleans music, rag and boogie woogie, big band, be bop, and the new music of the sixties and beyond, Frederick Douglass, folk literature, the Slave Narratives, James Baldwin, and Langston Hughes.
Fall or spring, 3 credits

AFS 275 Black Women and Social Change: A Cross-Cultural Perspective (NEW)

A cross-cultural survey of the history of black women in the context of the struggles for social justice in the Caribbean (English- and Spanish-speaking), Africa, and the U.S. Several major topics will be covered: the slave resistance and the anti-slavery movement; the anti-colonial struggle in Africa and the Caribbean; the trade union movement in the U.S. and Africa; the struggle against underdevelopment in Cuba, Puerto Rico, and Jamaica; and the anti-apartheid movement in South Africa.
Spring, 3 credits

AFS 319 The Politics of Race (REVISED)

An analysis of political concepts often associated with racism and the tracing of the origins of the concept of race. Three forms in which racism manifests itself today will be identified and discussed: overt, covert, and reactive racism. Examples of these three forms and the groups involved with them will be identified and discussed showing the similarities and differences where they exist.

AFS 463, 464 The Media and Black America, I, II (NEW)

An historical examination in a seminar format of the major media characterizations of black Americans and the Black Experience, and the impact of these portrayals on American society at large. The roles of newspapers, books, magazines, plays, radio, movies, television, and advertisements will be studied. Students will have the opportunity to develop hands-on experience and technical skills in video filming and production. AFS 463 covers the period from the pre-Civil War era to 1920; AFS 464, from 1920 to the present.
Prerequisites for AFS 463: Two AFS courses; permission of instructor
Prerequisites for AFS 464: AFS 463, permission of instructor
Fall (463) and spring (464), 4 credits each semester

Special Topics for Spring 1985

AFS 420 Topics in Africana Studies Sec. 1: Black Health Care

A seminar on the contributions that black health care professionals have made to the development of health care in American society, as well as the difficulties the black community has in utilizing those developments.
(Y. Singletary)

Sec. 2: Social Issues in the Black Experience

An exploration (using some statistical and quantitative methods) of social, political, and economic issues affecting black lifestyles. Household structures and voting patterns will be studied using data bases gathered from federal and state census reports.
Prerequisite: Permission of instructor (L. Owens and W. McAdoo)

Anthropology

A brochure with extended descriptions of anthropology courses for Spring 1985 is available in Social and Behavioral Sciences S-507.

The Department of Anthropology has largely revised its schedule of course offerings from what appears in the BULLETIN. ANT 203, 216, 320, 350, 352, 356, 357, 366, 421, and 492 will not be offered in Spring 1985. ANT 312 and 368 have been deleted from the curriculum.

Revised Major Requirements

ANT 401, 402, 410, and 421 have been removed from the list of topical courses from which to choose. A new requirement has been added: to take at least one course from among ANT 401, 402, 403, 410, and 421. This will apply to students who will have completed fewer than 45 credits by the beginning of the Fall 1985 semester.

Students who have taken the discontinued course ANT 200 may use it as a substitute for ANT 300 (formerly 395) in prerequisites and in satisfying major requirements.

Honors Program

ANT 475 is no longer required for departmental honors in anthropology.

ANT 220 Human Evolution and Adaptation (NEW)

The evolution of the human species from earliest origins. The development, both biological and cultural, of human beings and their interaction and adaptation to physical and social environments.

Prerequisite: ANT 102 or 120

Note: This course may be used toward fulfillment of the topical courses requirement of the major and minor in anthropology.

Fall, 3 credits

ANT 300 Approaches to Anthropological Theory (Formerly ANT 395) (REVISED)

Designed for majors, this course is a systematic and comparative treatment of the various theoretical approaches in social and cultural anthropology, including functionalism, structuralism, evolutionism, cultural ecology, etc. The various theories are applied to specific ethnographic data. Current theoretical issues in the field will be discussed.

Prerequisites: ANT 102 or 103; two other anthropology courses

ANT 307 Indians of Modern Mexico and Guatemala (REVISED)

Only the title has been changed.

ANT 360 Ancient Mesopotamia (NEW)

The organization and development of the Mesopotamian social, economic, political, and religious systems. Both archaeological and textual data deriving from ancient civilizations will be used; and the judicious use of ethnographic analogy will be explored as an aid in understanding this past culture.

Prerequisite: ANT 216

Fall or spring, 3 credits

ANT 391 Topics in Anthropology (NEW)

Discussion of a topic of current interest in anthropology. Topics will vary from year to year, for example, symbolism, human biology, comparative religion, and patterns of empire. May be repeated for credit as the topic varies.

Prerequisites: At least two courses, to be specified when topic is announced
Fall or spring, 3 credits

ANT 392 Ethnographic Areas in Anthropology (NEW)

Discussion of the ethnographic or archaeological data from a particular part of the world. Topics and areas will vary from year to year, for example, Long Island, North America, China. May be repeated for credit as the topic varies.

Prerequisites: At least two courses, to be specified when topic is announced
Fall or spring, 3 credits

ANT 401 Anthropological Theory
(REVISED)

May be repeated as the topic varies.

ANT 402 Problems in Archaeology
(REVISED)

May be repeated as the topic varies.

ANT 403 Problems in Physical Anthropology (NEW)

Research and discussion about selected topics in physical anthropology. Specific problem areas will vary each year. May be repeated as the subject matter differs.

Prerequisite: ANT 220

Fall or spring, 3 credits

ANT 410 Problems in Ethnology
(REVISED)

May be repeated as the topic varies.

ANT 411 Law and Conflict Resolution: Socio-Legal Perspectives
(NEW)

Major theoretical issues in the study of law in society. Empirical data and research will illustrate ideas and theories. Topics include: folk law and state law, the legal profession, legal ethics, litigating for social change and human rights.

Prerequisites: POL 220; two other courses in socio-legal studies minor; permission of instructor

Fall or spring, 3 credits

ANT 487 Independent Research in Anthropology (NEW)

Independent research projects carried out by upper-division students in the Department of Anthropology. The student must propose the research project, carry it out, analyze the data, and submit the results in a written form acceptable to the sponsor. An outline of the research project and written agreement outlining the responsibilities of the faculty member must be filed with the Undergraduate Office in Anthropology. May be repeated up to a limit of six credits.

Prerequisites: 15 credits in anthropology; permission of instructor and department

Fall and spring, 3 to 6 credits

ANT 488 Internship (REVISED)

The credit range for this course is now 3 to 12 credits.

ANT 491, 492 Special Seminar in Anthropology (REVISED)

May be repeated as the topic varies.

Special Topics for Spring 1985

ANT 391 Topics in Anthropology: Human Evolution

Through the examination of popular literature concerned with human evolution, specialized issues such as the fate of the Neanderthals, inherent aggression in humans, and development of bipedalism will be examined.

Prerequisites: ANT 120; one other ANT or BIO course
(R. Moore)

Art

Changes in expected semester of course offerings: ARH 204, 211, 301, 304, 313, 322, 329, 331 and ARS 150 and 271 will not be offered in Spring 1985. ARH 209, 212, 309, 310, 311, 314, 316, 325, 327, and ARS 355, 356, 381, 382, 383, 420, and 430 have been deleted from the curriculum.

The Photography minor and the printmaking concentration of the Studio Art minor have been discontinued.

ARS 259 and 475 have been added to the list of studio/theory courses in the BULLETIN "Notes on the ARS Major."

Students are reminded that in the studio program only those courses designated as studio/theory courses may count toward the 90 liberal arts credits required for the B.A. degree. In some cases, more than 120 credits may be needed to complete the requirement for the B.A. with a studio art major.

ARH 101 Art in Culture from Prehistoric Times to the Age of the Cathedrals, ca. 1400 A.D. (REVISED)

A survey of the history of painting, sculpture, and architecture from its beginnings in prehistoric times to the end of the Middle Ages. Works of art are studied both as individual monuments with intrinsic aesthetic appeal and as expression of the needs, ideals, and aspirations of the particular society in which they were created.

ARH 102 Art in Culture from the Early Renaissance, ca. 1400, to Post-Modernism (REVISED)

A survey of the history of painting, sculpture, and architecture from the Renaissance to the present day. Works of art are studied both as individual monuments with intrinsic aesthetic appeal and as expression of the needs, ideals, and aspirations of the particular society in which they were created.

ARH 204 History of Photography (REVISED)

There is no longer a prerequisite for this course.

ARH 304 The Art and Architecture of the High and Late Middle Ages, ca. 1050-1400 (REVISED)

The study of Romanesque, Byzantine, Gothic, and Late Gothic art and architecture. Monuments and art objects are examined in terms of their intrinsic aesthetic appeal as well as in their historical, religious, technological, and cultural contexts. The emphasis will be on the development in northern Europe.

ARH 305 Early Netherlandish Painting (NEW)

The development of painting in the Netherlands during the fifteenth century will be studied from its origins in the late Gothic manuscript illumination to its last manifestations in the early sixteenth century. Major emphasis will be placed on the founders of the Netherlandish school (the Master of Flemalle, Jan van Eyck, and Roger van der Weyden) and on the great figures of the end of the century (Hugo van der Goes, Geertgen, and Bosch). May not be taken for credit in addition to the discontinued ARH 212.

Prerequisites: ARH 101 or 102; two other courses in the humanities
Alternate years, 3 credits

ARH 338 Baroque Art (NEW)

Painting and sculpture of the seventeenth century in Italy, Flanders, Holland, France, and Spain. Emphasis will be placed on the major figures of this period in each country, such as Caravaggio, Bernini, Rubens, Rembrandt, Poussin, and Velazquez.

Prerequisites: ARH 102; two other courses in the humanities
Spring, 3 credits

ARH 341 Art of the Nineteenth Century (Formerly ARH 221)

(REVISED)

Prerequisites: ARH 102; two other courses in the humanities

ARH 342 Art of the Twentieth Century (Formerly ARH 224)

(REVISED)

Prerequisites: ARH 102; two other courses in the humanities

ARH 488 Internship (NEW)

Participation in the work of galleries, museums, and art historical societies. Students will be required to submit written progress reports and a final report of their experience to the faculty coordinator and the department. May be repeated up to a limit of 12 credits, but no more than 6 credits may count toward the major in art history/criticism, and none toward the major in studio art. Grading in this course shall be

Satisfactory/Unsatisfactory only.

Prerequisites: 15 credits in the Art Department, of which at least 6 shall be in art history/criticism;

upper-division standing with preference given to seniors; permission of instructor, department, and Office of Undergraduate Studies.

Fall and spring, 3 to 12 credits

ARS 150 Fundamentals of Drawing (NEW)

An introductory course intended for non-art majors. Emphasis will be on drawing techniques, through the study of the figure and still-life.

Fall and spring, 3 credits

ARS 161 Introduction to Sculpture for Non-Art Majors (NEW)

A beginning sculpture course intended for non-art majors. Emphasis will be on the exploration of basic sculpture techniques—modeling, casting, molding, carving, construction—as well as three-dimensional composition and design.

Fall or spring, 3 credits

ARS 258 Intermediate Drawing: The Human Body (REVISED)

May be repeated once.

Prerequisites: ARH 101, 102; either ARS 150 or 151, 152

ARS 259 Intermediate Drawing: Conceptual Problems (Theory) (REVISED)

Prerequisites: ARH 101, 102; either ARS 150 or 151, 152

ARS 281 Photography I (REVISED)

An intensive course with extensive practice and experimentation in the aesthetics, techniques, and materials of black and white photography. It will be expected that the student's academic program or vocational objectives require a legitimate need for photographic training, and the course will be structured accordingly. Students must provide their own 35mm or 2¼x2¼ camera with the ability for full manual operation and expect to spend approximately \$250 on materials.

ARS 371 Intermediate Graphics: Intaglio Process (REVISED)

Increasing development of craft in etching and engraving, with growing emphasis on technical specialization and individual growth as an artist.

ARS 372 Intermediate Graphics: Lithography (REVISED)

Increasing development of craft in lithography, with growing emphasis on technical specialization and individual growth as an artist.

ARS 373 Intermediate Graphics: Relief Process (NEW)

Increasing development of craft in linoleum and woodcut, with growing emphasis on technical specialization and individual growth as an artist.

Prerequisites: ARS 271; permission of department
Fall or spring, 3 credits

ARS 374 Intermediate Graphics: Silkscreen (NEW)

Increasing development of craft in silkscreen, with growing emphasis on technical specialization and individual growth as an artist.

Prerequisites: ARS 272; permission of department

Fall or spring, 3 credits

ARS 392 Textile Arts: Weaving (NEW)

The techniques, theory, application, and critique of textile arts including weaving, dyeing, and fiber manipulation. Techniques will include designing, drafting, loom dressing, loom and hand pattern development in four harness structure. Design problems will emphasize color relationships, surface texture, and fibers in the growth of technical and conceptual skills. May be repeated once.

Prerequisites: ARH 101, 102; ARS 151, 152

Summer, 3 credits

ARS 475 Undergraduate Teaching Practicum, Theory and Practice (REVISED)

Only the title has been changed.

ARS 482 Intermediate Independent Studio Projects (REVISED)

ARS 373 and 374 have been added to the list of alternate intermediate-level courses that may be used as the prerequisite.

Special Topics for Spring 1985

ARS 421 Special Topics in Studio/Theory and Practice: Monotypes and Monoprints

The student will be exposed to the manipulation of inks as well as objects for the creation of singular graphic works. The course is designed for the painter and sculptor as well as for the printmaker.

Prerequisite: Permission of department (D. Weiden)

Biochemistry

BIO 363 Recombinant DNA Technology, taken in Fall 1983 or later, may not be used to satisfy the elective requirement for the biochemistry major.

Biological Sciences

Changes in expected semester of course offerings: BIO 347, 376, 385, and 386, normally fall courses, and BIO 374, noted to be excluded in 1984-85, will be offered in Spring 1985. The following spring courses will be omitted: BIO 104, 327, and 379. BIO 204, 207, 282, 340, 346, 378, 380, 421, and 440 have been deleted from the curriculum.

Secondary education students are reminded that they must complete one lecture or seminar course in each of the five areas of inquiry for a letter grade.

BIO 105 Human Reproduction (NEW)

Human reproduction is examined from a biological viewpoint. This includes anatomy, physiology, conception, pregnancy, intrauterine development, contraception, disorders and diseases, attitudes and values. For students not majoring in the biological sciences.
Fall, 3 credits

BIO 207 Field Botany (NEW)

A study of the diversity, functional morphology, and ecology of the vascular plants through local field collections and identification methods.

Prerequisites: BIO 151, 152

Summer, 4 credits

Note: BIO 207 is a non-area major elective course, which satisfies the "third lab" requirement of section A-4 in the BULLETIN, p. 65.

BIO 313 Genetic Engineering and Recombinant DNA (Formerly BIO 363) (REVISED)

This course may not be taken for credit after BIO 362.

BIO 322 Animal Development (REVISED)

An introductory analysis of the development of form and function in animals emphasizing the experimental evidence underlying general principles. Topics covered include differentiation, determination, positional information, molecular developmental genetics, cell-cell interactions, and hormonal regulation.

Prerequisite: BIO 220

Pre- or corequisite: CHE 321 or 331

This is now a 3-credit course.

BIO 324 Laboratory in Animal Development (NEW)

Laboratory studies designed to complement BIO 322, emphasizing the use of live invertebrate organisms in the analysis of developmental events. One hour of recitation and one three-hour laboratory per week.

Pre- or corequisite: BIO 322

Spring, 2 credits

BIO 347 Botanical Technology

An introduction to the development, origin, structure, and growth of the higher plant body as a basis for understanding the broader principles of plant biology and biosynthesis of useful products as well as the relations of plants to human life. Economically important plants and their products, especially as sources of food, shelter, clothing, drugs, and industrial raw materials are stressed. Current problems in agriculture, medicine, plant industry, and biotechnology, as well as the use, conservation, and appreciation of plants are included. May not be taken for credit in addition to the discontinued BIO 240.

Prerequisites: BIO 151, 152

Pre- or corequisite: CHE 321 or 331
Fall, 3 credits

BIO 359 Animal Behavior (Formerly BIO 332) (REINSTATED and REVISED)

A consideration of observed patterns and underlying mechanisms of animal behavior in relation to ecological circumstances and evolutionary history, with examples mainly from the vertebrates.

Prerequisite: BIO 230

Fall or spring, 3 credits

Note: Under its new number, *Animal Behavior* becomes an Area V course.

BIO 379 Developmental Neurobiology (REVISED)

Prerequisite: BIO 230

BIO 409 Current Research in Structure and Function of Proteins (NEW)

A series of reports by members of the Department of Biochemistry on their current research on structural and functional aspects of proteins, including enzymes, structural proteins, and membrane proteins.

Prerequisite: BIO 361

Fall or spring, 2 credits

BIO 410 Current Research in Nucleic Acids and Molecular Genetics (REVISED)

A series of reports by members of the Department of Biochemistry on their current research on nucleic acids, protein synthesis, and molecular genetics.

Business

The course entitled Business Policy: Formulation and Administration, which may be used to complete the minor requirements, has been reinstated as EST 441. See the Technology and Society section for description.

Approved substitutes for minor requirements:

For AMS 102: AMS 310, ECO 320, PSY 201

For SOC 381: POL 364, PSY 309

For CSE 105: CSE 111, CSE 112, CSE 113, 114

Chemistry

CHE 348 has been deleted from the curriculum.

Effective with the Class of 1986, any 3-credit CHE lecture course numbered above 340 (instead of just CHE 355), including graduate courses, may be used to satisfy requirement A.8 for the B.S. program in chemistry.

CHE 301 Physical Chemistry I (REVISED)

Equations of state. The principles of thermodynamics and their application to chemical reactions, phase equilibria, ideal and nonideal solutions, and electrochemical systems. Transport properties.

Prerequisites: CHE 132 or 142; MAT 132

Corequisite: PHY 101 or 103

CHE 302 Physical Chemistry II (REVISED)

Introductory quantum mechanics, with applications to atomic and molecular systems. The Schrodinger equation will be solved for simple systems and the general theory applied in the discussion of chemical bonding, molecular structure, and spectroscopy. Statistical thermodynamics.

Prerequisites: CHE 301 or 312; MAT 231

Corequisite: PHY 102 or 104

CHE 327 Organic Chemistry Laboratory (REVISED)

CHE 333, 334 Organic Chemistry Laboratory B (REVISED)

Safety considerations make it necessary to prohibit wearing contact lenses in these laboratories.

CHE 347 Physical Chemistry of Metal-Gas and Metal-Liquid Interfaces (REVISED)

The behavior and chemical properties of solid-gas and solid-liquid interfaces. Adsorption, and the specific factors influencing (a) heterogeneous catalysis on gas-solid interfaces, and (b) oxidation and reduction processes at metal-liquid interfaces will be described. Examples will be drawn from industrial processes to describe these effects. May not be taken for credit in addition to the discontinued CHE/ESM 346 or 348. This course is identical to ESM 347.

Prerequisites: CHE 302; PHY 102

CHE 355 Physical Chemistry III (REVISED)

Kinetic theory of gases. Molecular and electrochemical transport phenomena. Molecular theories of chemical kinetics. Introductory statistical mechanics. Partition functions and spectroscopic determination of thermodynamic quantities.

CHE 365 Chemical Ecology (NEW)

The organic chemistry and biochemistry underlying the interactions of plants and insects with each other and with their environment. Topics include: plant-herbivore relationships; chemical defense; pheromonal communication; orientation and perception mechanisms; biosynthesis and release of chemicals; adaptive significance of chemical systems; plant and insect hormones; agrochemical products and the environment.

Prerequisites: CHE 322, BIO 151, 152. BIO 350 or 351 recommended

Classics

Changes in expected semester of course offerings: CLS 311 will be offered in Spring 1985; CLS 215 will not be offered.

LAT 251 Readings in Latin Literature (REINSTATED)

Readings in classical Latin literature of the Republic. The course will include a brief intensive review of grammar and the sampling of a number of authors, including Catullus, Cicero, Virgil, and Livy.

Prerequisite: LAT 112

Fall or spring, 3 credits

Comparative Literature

A brochure of Comparative Literature, Classics, Humanities, and Judaic Studies courses is available in Library, E-4309, starting November 12.

Changes in expected semester of course offerings: CLT 120, 202, 212, 331, and 352 will not be offered in Spring 1985.

Special Topics for Spring 1985

CLT 332 Literary Genres—Drama: Ibsen's Influence, the Later Plays (L. Sjoberg)

CLT 333 Literary Genres—Novel: Novels Between the World Wars

Crosslisted with EGL 372, Sec. 3, for Spring 1985.
(M. Sprinker)

CLT 334 Other Literary Genres: Autobiography and the Writing of One's Own Life

Crosslisted with PHI 380 for Spring 1985.
(H. Silverman)

CLT 361 Literature and Society: Christians and Jews

Crosslisted with EGL 374, Sec. 3, for Spring 1985.
(S. Spector)

CLT 362 Literature and Ideas: Surrealism

Crosslisted with ITL 381 for Spring 1985. See French and Italian section for description.
(L. Fontanella)

Earth and Space Sciences

Changes in expected semester of course offerings: GEO 107 will be offered in the spring each year instead of the fall. GEO 323 will be offered in the spring this year instead of the fall. GEO 303 will be offered in the fall instead of the spring. AST 105 and 108 will be offered in both semesters. AST 204, 246, 348, GEO 106, 116, 301, 364 have been deleted from the curriculum.

Revised Major Requirements:

Geology Major

Students who will have completed fewer than 45 credits by the beginning of Fall 1985 will be required to take GEO 307.

Astronomy/Planetary Sciences Major

ATM as well as AST courses numbered 300 or higher are now permitted in satisfaction of item A.

Atmospheric Sciences/Meteorology Major

AST 203 is no longer required.

Geology Honors Program

Both GEO 302 and 306 are now required for departmental honors; GEO 301, having been deleted from the curriculum, is no longer required.

Revised Geology Minor Requirement

GEO 226 replaces the deleted course GEO 106 as a requirement.

GEO 103 Energy and Mineral Resources (NEW)

A survey of the origin, distribution, and importance to modern civilization of the fuels and minerals won from the Earth. Problems of finding, extracting, and supplying fossil fuels, metallic ores, water, and non-metallic commodities to industry and community as well as the ultimate limits of their abundance will be considered.

Fall or spring, 3 credits

GEO 306 Petrology (REVISED)

This is now a 4-credit course.

GEO 307 Petrology Laboratory (REVISED)

Corequisite: GEO 306

GEO 311 Analytic Geophysics Laboratory (NEW)

Laboratory course to develop computational skills solving earth science problems.

Prerequisites: MAT 127 or 132 or 142; GEO 122

Corequisite: GEO 310

Fall, 1 credit

GEO 321 Mineral Deposits (REVISED)

Prerequisites: GEO 306, 307, 312; CHE 301 or GEO 323

GEO 352 Seismology (REVISED)

An advanced course in the study of earthquakes, earth structure, and tectonics. Topics include wave propagation, body and surface waves, faulting, plate tectonics, and earthquake prediction.

Prerequisites: MAT 306 or 307; PHY 102

GEO 363 Sedimentation and Sedimentary Rocks (REVISED)

Prerequisites: GEO 306, 307

AST 105 Introduction to the Solar System (REVISED)

This course may now be taken by students who have credit for AST 203 or 204.

AST 344 Black Holes, Quasars, and Cosmology (REVISED)

Prerequisites: PHY 102; MAT 127 or 132 or 142

Corequisites: PHY 251; MAT 221 or 231 or 241

AST 443 Observational Techniques in Optical Astronomy (NEW)

An introduction to modern astronomical instrumentation and data handling, and to the use of telescopes. Emphasis will be placed on techniques and equipment

appropriate for wavelengths shorter than one micron. Extensive laboratory and observing exercises will be required.

Prerequisites: AST 341 or PHY 301; MAT 341

Spring, 4 credits

ATM 348 Atmospheric Physics (REVISED)

An investigation of the relationship between atmospheric phenomena and the nature of matter as expressed in the principles of physics. Topics studied include gravitational effects, thermodynamic properties of atmospheric gases, formation and growth of cloud particles, atmospheric electricity, solar and terrestrial radiation, atmospheric signal phenomena, atmospheric motions, and heat and mass transfer in the atmosphere. Crosslisted with ESC 348.
Prerequisite: PHY 102

ATM 397 Air Pollution and Its Control (REVISED)

A detailed introduction to the causes, effects, and control of air pollution. The pollutants discussed include carbon monoxide, sulfur oxides, nitrogen oxides, ozone, hydrocarbons, and particulate matter. The emissions of these gases from natural and industrial sources and the principles used for controlling the latter are described. The chemical and physical transformations of the pollutants in the atmosphere are investigated and the phenomena or urban smog and acid rain are discussed. Crosslisted with ESC 397.

Prerequisites: PHY 102; CHE 131 or 141; upper-division standing

Economics

Changes in expected semester of course offerings: ECO 318 and 395 will not be offered in Spring 1985. ECO 336, 341, and 381 have been deleted from the curriculum.

ECO 104 Introduction to Economic Analysis: Honors

An introduction to economics that emphasizes the analytical and quantitative nature of the discipline. Microeconomics (the study of individual, firm, industry, and market behavior) and macroeconomics (the study of determinants of national income, employment, prices, and economic growth) are covered in more depth than in a traditional introductory course. May not be taken for credit in addition to ECO 101 or 105.

Prerequisite: Permission of department. Priority given to Scholar Incentives Students

Corequisite: MAT 125 or 131 or 141
Fall, 4 credits

ECO 335 Economic Development
(NEW)

An examination of problems and prospects facing developing countries in the transition from traditional, predominantly rural economic systems to modern, largely urban-oriented economies. Theories of economic growth and development will be presented in the light of the actual experience of developing countries. May not be taken for credit in addition to the discontinued ECO 225.

Prerequisite: ECO 252

ECO 348 Analysis for Managerial Decision Making (REVISED)

This is now a 4-credit course.

ECO 385 American Economic History I (REVISED)

Only the title has been changed.

ECO 386 American Economic History II (NEW)

Intensive study of selected topics in U.S. economic history. Topics may include: (1) long-term growth, (2) technical change, (3) monetary history, (4) institutional change and growth, and (5) cyclical economic phenomena. Emphasis will be placed on interrelating economics and history and upon student research.

Prerequisite: ECO 385

Corequisite: ECO 321

Spring, 3 credits

ECO 488 Internship (REVISED)

The credit range for this course is now 3 to 12 credits.

Special Topics for Spring 1985

ECO 400 Topics in Economic Theory

Sec. 1: Topics in International Trade and Finance

A close examination of the major models of international economics. The emphasis will be on theory rather than policy. Two-thirds of the course will be devoted to international trade and one-third to international monetary economics. The following topics will be covered: the exchange model, the Ricardian model and the neo-classical theory; trade and economic growth; the theory of tariffs; the balance of payments and the foreign exchange markets; the adjustment mechanism.

Prerequisite: ECO 251

(A. Nairay)

Sec. 2: International Finance

Macroeconomic theory and policy in open economies, emphasizing models and analysis of the foreign exchange market, balance of payments, and real and financial interaction among open economies. Traditional and current analysis of consequences of foreign exchange market intervention, commercial policy, monetary and fiscal policies, foreign inflation and recession, international capital transfers, and economic growth.

Prerequisite: ECO 252

(B. Hool)

ECO 402 Topics in Applied Economics: Urban and Regional Economics

The relationship between economic activity and geographical location: the effects of location-based external economies of scale called agglomeration effects such as neighborhood segregation of people and production; sudden or chaotic change; difficulties in providing public services and, at the same time, often dramatic growth, creativity, and prosperity. The SINC Lab will be an integral part of the course. Some course time will be devoted to helping students gain quantitative proficiency. The main prerequisite is an interest in studying economic and social problems analytically.

Prerequisite: ECO 251

Corequisite: ECO 321

(T. Muench)

ECO 404 Topics in Development and Comparative Systems
Sec. 1: Aspects of Third-World Development

Human resource aspects of economic development, including population, employment, education, health, and income distribution issues. Participants will undertake individual and group research projects and report on them both orally and in writing.

Prerequisite: ECO 225

(D. Zschock)

Sec. 2: China's Economy Since 1949

Economic development policies in the People's Republic of China from the revolution in 1949 to the present. Topics include treatment of sectoral balances, foreign trade and technology, population policies, property forms in socialism, and attempts to reconcile planning with market forces.

Prerequisite: ECO 251

(M. Zweig)

English

A brochure with extended descriptions of courses offered by the Department of English is available in Humanities 245.

Students taking EGL 487 and 495 must have proposals for these courses approved before the spring semester begins. Proposal forms are available in Humanities 258.

Revised Major Requirements

EGL courses taken to fulfill major requirements must be taken for a letter grade, and only two with grades in the D range may be counted.

Either EGL 207 History and Structure of the English Language or LIN 101 Introduction to Linguistics may be used to satisfy requirement A.3, *BULLETIN*, p. 93.

EGL 320 may now be used to satisfy the requirement (A.6) for three period courses.

Honors Program

A grade of A- (as well as A) in an Honors Section is acceptable for departmental honors in English.

EGC 100 Introduction to the Writing Process (REVISED)

Extensive practice in writing to help students develop clear thinking and more fluent use of language. Writing from experience will be emphasized. There will be less emphasis on expository writing and formal revision than in EGC 101. Grading in this course shall be Satisfactory/Unsatisfactory only.

EGC 101 Composition I (REVISED)

Prerequisite: Placement by English placement examination or by EGC 100 or ESL instructor. (The course is also open to students who score "Strong" on the Placement Examination).

EGL 191 Introduction to Poetry (REVISED)

EGL 192 Introduction to Fiction (REVISED)

EGL 193 Introduction to Drama (REVISED)

Prerequisite: EGC 101 or "Strong" on English Placement Examination or passing English Proficiency Examination

EGL 199 Freshman Honors Seminar in English (NEW)

Intensive reading and discussion of related works of imaginative literature. Enrollment limited to 15. For freshmen with exceptionally strong records in high school.

Prerequisites: Permission of department; EGC 101 or "Strong" on the English Placement Examination. Priority given to Scholar Incentives students
Fall, 3 credits

EGL 285 Writing Workshop: Fiction (REVISED)

A workshop in the development of skills in writing fiction through practice supplemented by readings.

EGL 289 Readings in Journalism
(REVISED)

The study of writing by journalists such as Mencken, Orwell, Dickens, and Tom Wolfe as well as writings on topics such as racism in America, capital punishment, and ecology. Prerequisite: EGC 101 or "Strong" on English Placement Examination or passing English Proficiency Examination

EGL 450 Supervised Secondary School Student Teaching
(CORRECTION)

The sentence, "Grading in this course shall be Satisfactory/Unsatisfactory only" was inadvertently left out of the BULLETIN description.

EGL 488 Internship (NEW)

Participation in local, state, and national public and private organizations. The work must involve skills related to the educational goals of the department. Students will be required to submit written progress reports and a final written report on their experience to the faculty sponsor and the department. Grading in this course shall be Satisfactory/Unsatisfactory only. May be repeated up to a limit of 12 credits. This course will not fulfill English major requirements.

Prerequisites: 12 credits in English; 2.5 G.P.A.; permission of instructor, department, and Office of Undergraduate Studies
Fall and spring, 3 to 12 credits

Special Topics for Spring 1985

EGL 348 Major Writers of the Romantic Period in England: Coleridge

(D. Erdman)

EGL 349 Major Writers of the Victorian Period in England: Dickens and His Circle

(A. Munich)

EGL 350 Major Writers of American Literature: Major Black American Writers

Richard Wright, Amiri Baraka, Ishmael Reed, and Toni Morrison.
(W. Harris)

EGL 352 Major Writers of Modern British and American Literature
Sec. 1: Faulkner, Woolf, and Stevens

(S. Sears)

Sec. 2: Yeats

(J. Ludwig)

EGL 362 Poetry in English: Modern British and American Poetry

(P. Dolan)

EGL 364 Drama in English: Comedy

(H. Goldberg)

EGL 366 Fiction in English: The Beginnings of the Novel

(T. Maresca)

EGL 368 Prose in English: Literature of Political Dissent

(J. Harvey)

EGL 372 Literature in English and Its Relation to Other Literatures
Sec. 1: Modern Greek Literature in Translation

(T. Kranidas)

Sec. 2: The Male/Female Imagination

(J. Stampfer)

Sec. 3: Novels Between the World Wars

Crosslisted with CLT 333 for Spring 1985.

(M. Sprinker)

Sec. 4: Arthurian Romance

(A. Munich)

EGL 374 Literature in English and Its Relation to Other Disciplines: Christians and Jews

Crosslisted with CLT 361 for Spring 1985.

(S. Spector)

EGL 385 Advanced Creative Writing

Sec. 1: The Art of the Essay

(J. Jordan)

Sec. 2: Poetry

(W. Harris)

EGL 490 English Seminar: The Victorian Novel Poem

Honors course.

(H. Cooper)

English as a Second Language

The name of this program has been changed from "English as a Foreign Language"; all its course designators are now ESL.

Federated Learning Communities (FLC)

Flyers describing current FLC programs in detail are available in the program office, Educational Communications Center 237.

America in Transition (ATS)

This FLC program explores various important aspects of the changing nature of life in America. The federated courses for Spring 1985 are:

SOC 302 Contemporary Society
HIS 379 American Legal History
INT 224 The Science Establishment (see "Unaffiliated Courses" section for description)
ATS 302 Program Seminar (for at least 1 credit)
ATS 326 Core Course

ATS 302 Program Seminar (NEW)

This seminar will integrate the material of its three corequisite courses. The agenda of the seminar will be determined by the problems, difficulties, and interests of the students. Discussions, frequent written and oral reports will focus on (a) assisting the students in learning how to learn; (b) deepening understanding of the concerns and ideas of the corequisite courses; (c) comparing, contrasting, and synthesizing the material of these courses; (d) developing confidence to think and write independently and productively. Corequisites: SOC 302, HIS 379, INT 224

Spring, 1 to 3 credits

ATS 326 Core Course (NEW)

This course aims to develop a comprehensive view of America in Transition and of the issues raised and resources offered by each participating discipline. This course will focus specifically on the nature of academic disciplines, how they relate to each other, and how the common theme of America in Transition is illuminated by interdisciplinary study. Corequisites: SOC 302, HIS 379, INT 224

Spring, 1 credit

Environmental Science and Public Policy (EPP)

Environmental Studies and the Planning Sciences (EPS)

Students who participated in either the EPP or EPS minor may continue related work under one of the following courses:

EPP/EPS 487 Interdisciplinary Independent Study Project (NEW)

Advanced level research under the direction of two of the faculty participants in the Environmental Sciences (EPP)/Environmental Studies (EPS) program. The project, while drawing upon the interdisciplinary base of the program, is more focused within the single discipline of the project director than is work done in the Core Course. Field components to these

projects may be approved. May be repeated up to a limit of six credits.
Prerequisites for EPP 487: At least 12 credits of EPP minor; permission of instructor and department
Prerequisite for EPS 487: Completion of EPS minor
Fall and spring, 1 to 3 credits

EPP/EPS 488 Environmental Internship

Participation in local, state, and national public and private agencies and organizations. Students will be required to submit written progress reports and final written report on their experience to the faculty sponsor and to the department (FLC). Grading in this course shall be Satisfactory/Unsatisfactory only. May be repeated up to a limit of 12 credits.
Prerequisites for EPP 488: At least 12 credits in EPP minor; permission of instructor, department, and Office of Undergraduate Studies
Prerequisites for EPS 488: At least 12 credits in EPS minor; permission of instructor, department, and Office of Undergraduate Studies
Fall and spring, 3 to 12 credits

French and Italian

A brochure with extended descriptions of courses offered by the Department of French and Italian is available in Library N 4004.

Changes in expected semester of course offerings: The spring courses, FRN 111, 195, 295, ITL 111, 113, 221, 329, 330 will not be offered in Spring 1985. The following courses will not be given this academic year, as indicated in the BULLETIN: FRN 301, 320, 343, 351, 361, ITL 322, 324, 331, 351, 361, 373, 390.

Revised Major Requirements: French

Concentration A—in Language and Literature—has been changed to include *FRN 221 Conversation and Composition*, raising the total number of credits in specifically required courses to 18. The number of additional major elective courses (Item A.1.b.) has been reduced to 18 credits, of which 12 credits must be in literature.

Concentration B has been changed to "French and a Second Discipline." The requirements remain the same as

those shown in the *BULLETIN* through FRN 390. The rest of the requirements have been revised as follows:

1.
 FRN 390
 FRN 447 Directed Readings in French in the student's second discipline (to be undertaken after completion of FRN 322 and 390).
2. Elective courses:
 12 additional credits (nine of which must be at the 300 level) to be chosen with the help of the designated advisor and approved by the department. Students will normally choose a sequence of four courses in a department or program other than French and Italian.

Revised Major Requirements: Italian

Concentration A—in Language and Literature—has been changed to include *ITL 221 Italian Conversation and Composition I*, raising the total number of credits in specifically required courses to 15. The number of additional major elective courses (Item A.1.b.) has been reduced to 18 credits, of which 12 credits must be in literature.

Concentration B has been changed to "Italian and a Second Discipline." The requirements remain the same as those shown in the *BULLETIN* through ITL 321, 322. The rest of the requirements have been revised as follows:

1.
 ITI 321, 322
 One course in Italian literature numbered 300 or above.
 ITL 390 The Italian Scene
 ITL 447 Directed Readings in Italian in the student's second discipline (to be undertaken after completion of ITL 322 and 390).
2. Elective courses:
 12 additional credits (nine of which must be at the 300 level) to be chosen with the help of the designated advisor and approved by the department. Students will normally choose a sequence of four courses in a department or program other than French and Italian.

FRN 111, 112 Elementary French I, II (REVISED)

This is now 4 credits each semester.

ITL 111, 112 Elementary Italian I, II (REVISED)

This is now 4 credits each semester.

FRN 225 French Drama Workshop (NEW)

The development of self-expression and effective communication in French through the medium of the theatre. Students will participate in theatrical exercises and improvisations, scene and play analysis, writing dialogues for the stage. The second half of the course will be devoted to rehearsing a play for performance before an audience. Meetings beyond the regular class schedule may be required.
Prerequisites: FRN 221 or four years of high school French; permission of instructor
Spring, 3 credits

Special Topics for Spring 1985

FRN 373 Studies in Twentieth-Century Literature: Modern French Fiction

Critical readings with emphasis on Gide, Mauriac, Malraux, Sartre, Camus, Vercors, Butor, Robbe-Grillet.
(K. Bieber)

FRN 381 French Literature in Translation: French Realism

Examination of the works of Balzac, Stendhal, Flaubert, and Zola in the context of the major transformations of Western aesthetics accomplished by the realist movement.
(S. Petrey)

ITL 381 Italian Literature in Translation: Surrealism

Starting from the historical avant-garde movements of Futurism and Dadaism, the course will focus on Italian surrealism and its relationship and reciprocal influence on French surrealism. Readings will include works of Breton, Tzara, Marinetti, Palazzeschi, De Chirico, and Landolfi. The approach will be interdisciplinary, including the cinema of Bunuel, Dali, Fellini, and Zavattini.
(L. Fontanella)

Germanic and Slavic Languages and Literatures

Changes in expected semester of course offerings: GER 195, SWE 192, YDH 192, EEL 112, 192, RUS 142, 302, 339, and 394 will not be offered in Spring 1985.

The following courses have been deleted from the curriculum: GER 113, 115, 116, 241, 242, SGL 111, 112, 204.

Revised Major and Minor Requirements

Some changes have been made in both the German and Russian majors. These will apply to all students who have completed fewer than 45 credits by the beginning of Fall 1985 and are optional for more advanced students. The minors have also been modified. See department for details.

GER 111, 112 Elementary German I, II (REVISED)

This is now 4 credits each semester.

GER 141 German Literature in Translation (Formerly GER 200) (REVISED)

Only the number has been changed.

GER 200 Landeskunde (In English) (NEW)

Cultural and physical geography of Central Europe with emphasis on German-speaking areas. Particular emphasis will be placed on the definition of cultural units and their reflections in regionalism and particularism. The course will be conducted in English, but German reference materials will be used.

Prerequisite: GER 112
Spring, 3 credits

GER 338 History of the German Language (Formerly GER 202) (REVISED)

Only the number has been changed.

GER 488 Internship (REVISED)

The credit range for this course is now 3 to 12 credits.

RUS 110 Soviet Culture Today (NEW)

An introduction to contemporary life in the Soviet Union viewed through literature, theatre, music, video, and other art forms.

Spring, 1 credit

RUS 111, 112 Elementary Russian I, II (REVISED)

This is now 4 credits each semester.

RUS 323 Russian Literary Texts (NEW)

Literary analysis and its application to representative texts chosen from various periods of Russian literature. Readings and discussions will be in Russian.

Prerequisite: RUS 321
Spring, 3 credits

YDH 447 Special Author (NEW)

A tutorial demanding intensive study of the works of a specific

Yiddish-language author. All work will be done in Yiddish. May be repeated.

Prerequisites: YDH 192; permission of instructor and department
Fall and spring, 3 credits

YDH 448 Special Period (NEW)

A tutorial demanding intensive study of Yiddish-language literature of a specific period. All work will be done in Yiddish. May be repeated.

Prerequisites: YDH 192; permission of instructor and department
Fall and spring, 3 credits

Special Topics for Spring 1985

RUS 291 Special Author in Translation: The Brothers Karamazov—Dostoevsky's Final Vision

The Brothers Karamazov will be discussed in terms of Dostoevsky's final vision: man's relationship to man, to the universe, and to God.
(E. Czerwinski)

Hispanic Languages and Literature

A brochure with extended descriptions of Spanish courses is available in Library N-3017.

Changes in expected semester of course offerings: POR 113 will be offered instead of POR 112 in Spring 1985, and SPN 463 will be offered instead of SPN 462.

Courses not to be offered at all

this academic year are SPN 323, 411, 421, 432, 441, and 461. SPN 113 has been deleted from the curriculum.

POR 113 Intensive Elementary Portuguese (NEW)

Introduction to spoken and written Portuguese, stressing pronunciation, speaking, comprehension, reading, and writing. No student who has had two or more years of Portuguese in high school or who has otherwise acquired an equivalent proficiency will be permitted to register without permission of faculty.

Spring, 6 credits

SPN 111, 112 Elementary Spanish I, II (REVISED)

This is now 4 credits each semester.

SPN 301 Advanced Spanish Grammar and Composition (REVISED)

Prerequisites: SPN 222; permission of instructor

SPN 303 Topics in Practical Spanish (NEW)

A course for students who wish to become more proficient in reading, writing, and translating Spanish, to be used in business, administration, and in other fields of everyday professional life. Emphasis will be placed on the idiomatic peculiarities of the Spanish language and the relation of Spanish to the structure of English.

Prerequisite: SPN 222
Fall or spring, 3 credits

Special Topics for Spring 1985

SPN 442 Topics in Spanish-American Literature and Culture from 1880 to the Present: Spanish-American Short Story

Reading and discussion of relevant works in the Spanish-American short story, from naturalism to the contemporary period. Works by Horacio Quiroga, J.L. Borges, Alejo Carpentier, Julio Cortazar, Juan Rulfo, Augusto Monterroso, and Gabriel Garcia Marques.

(P. Lastra)

SPN 444 Topics in Caribbean Literature and Culture: Spanish, French, and English Literature of the Caribbean

A survey of selected modern authors of the Caribbean including Nicolas Guillen, Francisco Arrevi, Alejo Carpentier, Jacques Roumain, Philippe and Toby Marcellin, Aime Ceseri, V.S. Naipaul, George Lamming, and Derek Walcott. A Caribbean vision of life in the several cultural traditions of the area.

(M. Nunes)

History

A brochure with extended descriptions of History courses will be available in Social and Behavioral Sciences S-301 starting November 7.

Changes in expected semester of course offerings: HIS 216, 226, 234, 263, 271, 292, 310, 318, 319, 320, and 367 will not be offered in Spring 1985. The fall courses HIS 101, 103, 371, and 378 will be offered in Spring 1985, as will HIS 231. HIS 107, 296, 307, and 321 have been deleted from the curriculum.

Revised Major Requirements

The following requirements for the History major apply to students who will have completed fewer than 45 credits by the beginning of Fall 1985:

- A. Study Within the Area of the Major
A minimum of ten courses (30 credits) distributed as follows:
1. Two courses at the 100-level (6 credits)
 2. A primary field of five courses to be selected from one of the following: United States, European, Latin American, Ancient and Medieval, or non-Western history (primary fields developed along topical or thematic lines may be selected with approval of the Department's Undergraduate Committee).
The primary field, to be selected and filed with the Department no later than the end of the first full semester after declaring the major, shall be distributed as follows:
Two courses at the 200-level
Two courses at the 300-level
One course at the 400-level, excluding HIS 447 (15 credits)
 3. Three courses selected from outside the primary field and above the 100-level, with at least one of these courses at the 300- or 400-level. (9 credits)

- B. Study in a Related Area
Two upper-division courses in a related discipline, the discipline to be selected with Department approval no later than the time limit specified for choosing the primary field. (6 credits)

(The notes on the major requirements in the BULLETIN still apply, except for item 1 under Group A.)

HIS 135, 136 Science, Technology, and Medicine in Western Civilization I, II (REVISED)

The development of Western civilization through the intellectual and social development of Western science, technology, and medicine. The first semester will begin with a discussion of the twentieth century and will then cover the period from the ancient Greek civilization to the Scientific Revolution of the seventeenth century. The second semester will cover the eighteenth, nineteenth, and twentieth centuries.

HIS 214 Modern Latin America (REVISED)

From independence to the present: the evolution of nineteenth- and twentieth-century Latin America. Emphasis on current social, economic, and political issues.

HIS 216 History of U.S.-Latin American Relations (NEW)

An examination of the impact of U.S. economic and political relations with Latin America from the mid-nineteenth century to the present. The course will consider changes in American policy toward Latin America, as well as the varying responses of Latin American nations to U.S. intervention and influence.

Spring, alternate years, 3 credits (not offered in 1984-85)

HIS 250 The Second World War, 1939-1945 (NEW)

A comprehensive examination of the ordeal of total war. Military history forms the background for a study of how societies mobilized to meet the demands of total war; how people faced foreign occupation and persecution; and how the war changed political, economic, and social institutions, inspired moral reflection and cultural expression, and altered the global balance of power.

Fall, 3 credits

HIS 291, 292 History of Science, Technology, and Medicine (NEW)

A survey of the history of Western science, technology, and medicine from Plato (the ancient Greek philosopher) to PLATO (the modern computer language), taught through a close reading of some of the classic texts and biographies of their authors. No specialized knowledge of the sciences is required.

Fall (291) and spring (292), 3 credits each semester

HIS 308 The History of the Physical Sciences (NEW)

An investigation in depth of a limited number of topics in the history of mathematics, physics, and astronomy; for example, the relationship between experiment and theory in ancient and modern physics, physics as method, revolution versus evolution in the development of modern physics.

Prerequisite: PHY 102 or 104

Spring, alternate years, 3 credits (not offered in 1984-85)

HIS 322 History of Astrology Through the Seventeenth Century (NEW)

The development of astrology and astronomy in their cultural setting with emphasis on the period from ancient times to the Scientific Revolution in the seventeenth century. The course is not concerned with astrology as a belief system, but as it existed in the historical and scientific cultures of the times. Works by Ptolemy, Brahe, Kepler, John Dee, and William Lilly will be studied as well as modern historical commentaries on the discipline and its practice.

Prerequisite: One course in European history or in the history of science
Fall, alternate years, 3 credits (not offered in 1985-86)

HIS 323 History of Medicine (NEW)

The history of medicine from Hippocrates to the present. Three major themes will be traced throughout this period: (1) ideas (theories of disease, therapeutics); (2) institutions (hospitals, role of state, role of corporate sector); (3) people (practitioners, patients, scientists).
Fall, 3 credits

HIS 334 Modern Brazil (REVISED)

The history of Brazil since independence, stressing such themes as slavery and race relations, industrialization and the working class, populist politics, urban society and culture, and the rise of authoritarianism.

HIS 351 The History of Biology (NEW)

The development of some important biological fields (genetics, physiology, cytology, evolution theory, biochemistry) during the nineteenth and twentieth centuries. The social context in which these fields

developed as well as their social impact will be considered.

Prerequisites: BIO 102 or 151, 152
Spring, alternate years, 3 credits (not offered in 1984-85)

HIS 352 The Social History of Science (NEW)

A consideration of some important topics on the function and development of science in Western society since 1600. Such topics will include science and government, science in warfare, industrial research, and the professionalization of science.

Prerequisite: HIS 102 or 136 or 292 or SOC 103

Fall, alternate years, 3 credits (not offered in 1984-85)

HIS 353 The History of American Technology (NEW)

The development of technology in the United States, from the colonial period to the present, considered in many contexts: internal development of a few selected technologies (such as iron and steel, food processing, etc.) as well as changes in economic conditions, social organization of work, and the impact of technological change on general culture.

Prerequisites: HIS 103, 104 or 136 or 292

Fall, alternate years, 3 credits (not offered in 1984-85)

HIS 356 Zionism, 1848-1948 (NEW)

The Zionist movement as a facet of modern history. The course combines consideration of modern liberalism, nationalism, and socialism with attention to the distinctive features of Jewish assimilation and resistance to it, and the rise of a new Hebrew culture. This course is identical with JDS 356.

Prerequisite: HIS/JDS 226

Fall, alternate years, 3 credits (not offered in 1984-85)

HIS 376 History of U.S. Foreign Relations Since 1917 (REVISED)

The evolution of the United States from great power to superpower. Topics include the forms of American intervention abroad, uses of military and economic power in the global environment, and the role of domestic politics in the formulation of foreign policy.

HIS 378 American Economic History Since 1860 (REVISED)

The industrial transformation of the American economy and its consequences since 1860. Emphasis is on factors contributing to economic growth and instability, the development of corporate business organization, and the changing character of governmental policies and the international economy.

HIS 380 Origins of American Society (NEW)

An inquiry into the origins of America's distinctive social order. Examining the complex and unintended process of development of the first European commercial and military outposts into a society, the course will focus on the related processes of democratization and commercialization, and their impact upon labor, the economy, social relations, and the political system.

Prerequisite: HIS 103 or 262 or 263 or 266 or 369

Fall, alternate years, 3 credits (not offered in 1984-85)

HIS 396 Intellectual Background of Third World Revolutions (NEW)

A comparative treatment of the intellectual strategies by which "Third World" societies have dealt with European imperialism since the mid-nineteenth century. Analysis of religious change, concepts of political power, tradition and westernization, social reform, nationalism, and revolution. Selected figures from Islamic, Indian, and African societies, with briefer consideration of whether the resulting synthesis would fit East Asian or Latin American cases.

Prerequisite: Any course in non-Western history, politics, or religious studies

Spring, alternate years, 3 credits (not offered in 1985-86)

HIS 488 Internship (REVISED)

The credit range for this course is now 3 to 12 credits.

Special Topics for Spring 1985

Permission of the instructor is required for registration in all the following colloquia.

HIS 402 Colloquium in European History: The Irish Struggle, 1846 to the Present

(K. Bottigheimer)

HIS 403 Colloquium in European History: German Society Under National Socialism, 1933-45

(W. Angress)

HIS 412 Colloquium in American History: Topics in the History of American Business

(E. Lampard)

HIS 413 Colloquium in American History: Twentieth-Century Social Movements

(H. Cleland)

HIS 414 Colloquium in American History: Expository Historical Prose

(D. Burner)

HIS 422 Colloquium in Latin American History: Reform and Enlightenment in Latin America

(E. Chinchilla-Aguilar)

HIS 441 Colloquium in World History: Women's Health Care

(H. Lemay)

HIS 451 Colloquium in Medieval History: Kings and Kingship

(J. Rosenthal)

Judaic Studies

Changes in expected semester of course offerings: HBW 116 and JDS 226, which will not be offered in Spring 1985, will be offered in Spring 1986. HBW 222 will be offered in Fall 1985 instead of this spring.

Minor in Judaic Studies

A new minor in Judaic Studies, having the following requirements, is now available:

1. One year of a Jewish language (Hebrew or Yiddish) at a level appropriate to the student's previous background (6 credits)
2. Two of the following: JDS 225, JDS 226, JDH 230 (6 credits)
3. Three courses numbered 300 or higher approved in advance by the minor advisor (9 credits)

Requirement 3 may be satisfied by courses in the Judaic Studies Program itself or by related courses in other departments, if the subject is judged appropriate for the student's field of concentration. For further details, see Professor Hoberman, the minor coordinator.

HBW 222 Advanced Hebrew II (REVISED)

Prerequisite: HBW 192

HBW 315 The History of the Hebrew Language (NEW)

Reading and discussion (in Hebrew) of selections from Biblical, post-Biblical, and modern literature; lectures and discussion (in English) on the changes of sentence structure, meaning, sound, and style from one period to another. Particular attention is given to classicism, innovation, and restructuring in the rise of modern Hebrew.

Prerequisite: HBW 221

Spring, alternate years, 3 credits (not offered in 1984-85)

JDS 356 Zionism, 1848-1948 (NEW)
This course is identical with HIS 356.
See History section for description.

JDH, JDS 447 Readings in Judaic Studies (REVISED)
The credit range is now 1 to 4 credits.

Liberal Arts

Revised Major Requirement
The number of Pass/No Credit credits attempted for the major is limited to 20 percent of such credits taken at Stony Brook. This change affects all students who had completed fewer than 45 credits at the end of the Fall 1983 semester.

Linguistics

Changes in expected semester of course offerings: LIN 121, 211, 333, and 405 will not be offered in Spring 1985. LIN 340, which was not expected to be available in Spring 1985, will be offered.

TESOL Teacher Preparation Program

A new program leading to New York State provisional certification for teaching English to speakers of other languages (TESOL), grades K-12, is now in place, under the auspices of the Program in Linguistics. Although this teacher preparation program meshes most closely with the Linguistics major, students majoring in any foreign language are eligible to participate. For the requirements of the program and other information about it, see Prof. Aaron Carton.

LAN 111, 112 Selected Languages (Elementary) (Formerly LIN 115, 116)
Only the designator and numbers have been changed.

LAN 191, 192 Selected Languages (Intermediate) (NEW)
Continued study of a language not offered elsewhere in the University; advanced speaking, comprehension, reading, writing, and grammar. Selected texts will be read. Practice in the language laboratory supplements class work. May be repeated for different languages. No student who has had four or more years of the

language offered in high school (or who has otherwise acquired an equivalent proficiency) may receive credit for LAN 191, 192 without written permission from the supervisor of the course.

*Prerequisite to LAN 191: LAN 112
Prerequisite to LAN 192: LAN 191
Fall (191) and spring (192), 3 credits each semester*

LIN 375 Methods and Materials of Teaching English as a Second Language (REVISED)

The application of linguistic methodology to teaching English to non-native speakers. The course involves current review of ESL teaching materials applicable to all levels. Students will be given an opportunity to observe TESL classes on campus.

LIN 450 Supervised Student Teaching in English as a Second Language (NEW)

Supervised practice teaching in English as a Second Language (TESOL) by arrangement with selected Boards of Cooperative Educational Services (BOCES) and primary, middle, and secondary schools. Applications must be filed in the semester preceding that in which the student plans taking the course. Grading in this course shall be Satisfactory/Unsatisfactory only. *Prerequisites:* Enrollment in TESOL Program; permission of department. *Corequisite:* LIN 454
Fall and spring, 12 credits

LIN 454 Student Teaching Seminar in English as a Second Language (NEW)

Seminar on problems and issues of teaching English as a second language at the elementary, middle, and secondary school levels. Analysis of actual problems encountered by the student during the teaching experience.

Corequisite: LIN 450
Fall and spring, 3 credits

Special Topics for Spring 1985

LAN 112 Selected Languages (Elementary) II

- Sec. 1: Korean**
(H. Park)
- Sec. 2: Modern Greek**
(A. Zira)
- Sec. 3: Hindi**
(U. Garapati)
- Sec. 4: Irish**
(C. Sorochin)
- Sec. 5: Arabic**
(A. Hannaoui)

LAN 191 Selected Languages (Intermediate) I

- Sec. 1: Korean**
(H. Park)
- Sec. 2: Arabic**
(Z. Mustafa)
- Sec. 3: Irish**
(C. Sorochin)

LIN 425 Special Topics in Linguistics: Cross-Cultural Study of Language Use

An examination of differences between English-speaking cultures and other cultures in the linguistic devices used to express certain types of meanings: thanking, apologizing, greeting, inquiring, directing, quarreling, promising, swearing, blessing, etc. The emphasis will be on relating speech functions to linguistic structures via culture-specific norms. A variety of studies on a number of Western and non-Western languages will be analyzed as well as studies on variation within English, e.g., men and women, blacks and whites, native English vs. non-native varieties of English.

Prerequisites: Three courses in the social sciences
(S.N. Sridhar)

Mathematics

Changes in expected semester of course offerings: MAT 475 and 491 will not be offered in Spring 1985.

Revised Major Requirements

The Department of Mathematics has established new requirements for the major. They are effective for all students entering the University in Fall 1985 and later. Other students, however, may choose to satisfy the new requirements if they wish. A description of the new major requirements is available in the Undergraduate Office, Mathematics P-143.

Calculus Prerequisites

The prerequisites for MAT 125 and MAT 131 now include "C or higher in MAT 120" for students who took MAT 120. The prerequisite for MAT 126 is "C or higher in MAT 125." The prerequisite for MAT 132 is "C or higher in MAT 131 or 141." MAT 125 and 131 have an alternate prerequisite of passing the Mathematics Placement Examination at the appropriate level. Since this test will not be given in January 1985, this prerequisite is waived for Spring 1985. Students who have not previously taken a mathematics course at Stony Brook and who have questions about what course they are prepared for should see a mathematics advisor in Mathematics P-143.

MAT 220 Elements of Linear Algebra (NEW)

An introduction to linear algebra designed for transfer students who have studied differential equations but have not studied linear algebra. May not be taken for credit simultaneously with, or after credit is received for, MAT 221 or 231 or 241.

Prerequisites: A course in differential equations; permission of the Mathematics Department
Fall, 1 credit

MAT 307 Calculus Delta: Multivariate Calculus (REVISED)

Prerequisite: MAT 241

MAT 312 Finite Mathematical Structures
The prerequisite no longer includes CSE 201.

MAT 313 Abstract Algebra (REVISED)

Groups and rings together with their homomorphisms and quotient structures. Unique factorization, polynomials, and fields.

MAT 314 Rings and Modules (REVISED)

Structure theory of rings and modules. Applications to canonical forms for matrices and to the structure of finitely generated Abelian groups. Additional topics such as the structure theory of groups and fields, homological algebra.

MAT 320 Introduction to Analysis (REVISED)

A careful study of the theory underlying calculus. The real number system. Basic properties of functions of one real variable. Differentiation, integration, and the inverse function theorem. Infinite sequences of functions and uniform convergence. Infinite series.

Prerequisite: MAT 221 or 231 or 241, or B or higher in MAT 127 or 132 or 142

MAT 350 Differential Equations and Dynamical Systems (REVISED)

Qualitative study of first order systems of ordinary differential equations: vector fields and flows, existence and uniqueness theorems, stability, asymptotic behavior, autonomous systems.

MAT 362 Differential Geometry of Surfaces (REVISED)

The local and global geometry of surfaces: geodesics, parallel transport, curvature, isometries, the Gauss map, the Gauss-Bonnet theorem.

Prerequisite: MAT 306 or 307 or AMS 362

MAT 373 Analysis of Algorithms (NEW)

Mathematical analysis of a variety of computer algorithms, including searching, sorting, matrix multiplication, fast Fourier transform, and graph algorithms. Topics to be considered include: time and space complexity; upper bound, lower bound, and average case analysis; and NP completeness. Some machine computation will be required for the implementation and comparison of algorithms. This course is identical with AMS 373 and CSE 373.

Prerequisites: MAT 221 or 231 or 241; CSE 112 or 114; permission of the Mathematics Department.

Fall, 3 credits

MAT 475 Undergraduate Teaching Practicum in Mathematics (REVISED)

Each student will assist in teaching a lower-division mathematics course or will work in the Mathematics Learning Center. The student's work will be regularly supervised by a faculty member. In addition, a weekly seminar will be conducted. Responsibilities may include preparation of materials for student use and discussions, helping students with problems, and involvement in alternative teaching projects. Intended for upper-division students who have excelled in the calculus sequence. Not for major credit. Grading in this course shall be Satisfactory/Unsatisfactory only.

Physics

Changes in expected semester of course offerings: PHY 472 will not be offered in Spring 1985 but will be offered in Fall 1985. PHY 407 and 431, listed as fall courses, will be offered in Spring 1985. PHY 131, 132 and 443, 444 have been deleted from the curriculum.

Any course above the 100 level that is to be used as a prerequisite for other courses must be passed with a grade of C- or higher.

Revised Major Requirements

Item 1 of the minimum major requirements has been changed to specify that the following upper-division physics courses must be taken: PHY 301, 303, 306, 308, 335, and 445. Each upper-division course must be completed with a grade of C- or higher, and at least four upper-division courses must be

taken at Stony Brook. These changes apply to students who will have completed fewer than 45 credits by the beginning of Fall 1985.

PHY 251 General Physics III (REVISED)

An introduction to the concepts of modern physics. The classical phenomena of forced, damped harmonic motion and waves are studied in detail to provide a firm understanding of classical interference. The wave aspects of material particles, the concept of wave function, and other fundamentals of the quantum theory are then discussed and related to atomic structure, nuclear structure, and the physics of the solid state. Three lecture hours and one three-hour laboratory per week.

PHY 252 General Physics IV (REVISED)

Continuation of PHY 251. Further development of mathematical treatment of waves and interference phenomena with applications to and examples from the field of optics and solid state physics. Three lecture hours and one three-hour laboratory per week.

Prerequisite: PHY 251

PHY 303 Mechanics (REVISED)

Prerequisites: PHY 252; MAT 306 or 307
(MAT 341 is no longer a corequisite)

PHY 306 Thermodynamics, Kinetic Theory, and Statistical Methods (REVISED)

Corequisite: PHY 252

PHY 308 Quantum Physics (REVISED)

Prerequisites: PHY 301 and 303

PHY 335, 336 Junior Laboratory (REVISED)

An introduction to modern analog and digital electronics (integrated circuits and transistors). PHY 335 introduces the oscilloscope, function generator, digital multimeter, power supplies, frequency counter, operational amplifier circuits, basic logic gates, flip-flop switches, and amplifiers. PHY 336 treats these topics in more depth and involves programming and interfacing a 6502 microprocessor-based microcomputer. A microcomputer interfacing project is required of all students.

Prerequisite to PHY 335: PHY 252

Prerequisite to PHY 336: PHY 335

PHY 445, 446 Senior Laboratory I, II (REVISED)

Prerequisites: PHY 308 and 335

PHY 472 Solid State Physics

(REVISED)

Prerequisites: PHY 306 and 308

Special Topics for Spring 1985

PHY 137, 138 The Nature and Use of Physical Science

Module 1: Sound

Module 2: Nuclear Weapons

Module 3: Elementary Particles and the Early Universe

(C. Archie)

Political Science

Changes in expected semester of course offerings: POL 240, 305, 324, 349, 351, and 353 will not be offered in Spring 1985. POL 212, 221, 352, 360, 361, 365, and 369 have been deleted from the curriculum.

POL 312 U.S. National Security Policy (NEW)

Analysis of the strategy, structure, and processes of U.S. national security policy, including the political use of force, limited war, nuclear strategy, arms control, and selected regional security problems. Special attention will be directed to the decision-making process.

Prerequisites: POL 211 and 260
Spring, 3 credits

POL 364 Organizational Decision Making (NEW)

Decision processes are examined in public and private organizations to understand common problems arising from limited decision-making capabilities, conflicts among organizational members, and uncertainty and ambiguity in the organization's environment. Several concepts are introduced to analyze normative and behavioral issues arising from the organizational context of political life.

Prerequisites: Upper-division standing; POL 260 or ECO 251

Fall, alternate years, 3 credits (not offered in 1984-85)

POL 370 Nuclear Proliferation: Technology and Politics (NEW)

The proliferation of nuclear technology employable for both peaceful and military purposes, the threat it poses to world political and military stability, and the responses made by governments and international organizations. The topic requires an ability to read a diverse array of technical material for which students will need background in both physical and social sciences. This course is identical with EST 370.

Prerequisite: Upper-division standing; permission of instructor
Spring, 3 credits

Special Topics for Spring 1985

POL 401 Seminar in Advanced Topics

Sec. 1: Political Participation

Prerequisites: POL 102; permission of instructor

(A. Abramowitz)

Sec. 2: Political Elites

Prerequisite: Permission of instructor
(F. Myers)

POL 402 Seminar in Advanced Topics

Sec. 1: Public Opinion

Prerequisites: POL 104; permission of instructor

(S. Iyengar)

Sec. 2: Advanced Political Psychology

Prerequisite: Permission of instructor
(R. Hamill)

Psychology

The Psychology Department publishes a brochure each semester that contains extended descriptions of special course offerings and other announcements of interest to undergraduates. These are available in the Psychology Undergraduate Office (Psychology-B 116), which is open from 8 a.m. to 4 p.m. every day. Please also consult the bulletin board outside Psychology-B 116 for up-to-date information about community service opportunities and research.

Changes in expected semester of course offerings: PSY 304, 313, 330, and 352 will not be offered in Spring 1985. PSY 101, 102, and 373 have been deleted from the curriculum.

Revised Major Requirements

1. Because PSY 103 has replaced PSY 101, 102, students will be required to take an extra elective in psychology. Thus, the total number of credits required in psychology remains 34. Item A.3 in the list of major requirements has been revised as follows:

Three additional courses of which two must be upper division. PSY 273, 283, 399, 447, 475, 476, 487, 488, and 495-496 may not be used.

- For the B.A. student the upper-division courses may include only one seminar;
 - For the B.S. student one of the upper-division courses must be PSY 322 or 372.
- Transfer students must take at least 9 credits of psychology in residence at Stony Brook.
 - Psychology majors may no longer substitute BIO 332 for PSY 244.

PSY 103 A Survey of Psychology (NEW)

An introduction to research and theory in psychology in such areas as learning, perception, cognition, psychobiology, development, personality, abnormal and social psychology. May not be taken for credit in addition to the discontinued PSY 101 or PSY 102.

Fall and spring, 3 credits

PSY 104 Survey of Psychology: Honors (NEW)

An enriched introduction to research and theory in psychology, requiring extensive reading and writing as well as coverage of topics more difficult than normally covered in PSY 103. Because class size is small, the course will provide students with an opportunity for close interaction with the instructor and with classmates. May not be taken in addition to PSY 103.

Prerequisites: Permission of department; "Strong" on the English Placement Examination; satisfaction of mathematics proficiency requirement; priority given to Scholar Incentives students

Fall, 3 credits

PSY 303 Research Methodology Laboratory (CORRECTION)

This is a 4-credit course.

PSY 313 Organizational Behavior Management (REVISED)

A survey of the applications of behavior modification principles to the study and modification of problem behaviors within organizational settings. Coverage will include theoretical issues, ethical concerns, program evaluation methodology, and specific applications.

PSY 325 Psycho-social Development of College Students (NEW)

An examination of theories of college-student development and their relationship to the special problems of resident students. Relevant psychological data will be applied to

the solution of these problems. This course is designed primarily for resident assistants (R.A.s).
Prerequisites: PSY 103; PSY 209 or 211 or SOC 243 or 247; permission of instructor.
Fall and spring, 3 credits

PSY 488 Internship (REVISED)
 The credit range for this course is now 3 to 12 credits.

Special Topics for Spring 1985

PSY 311 Advanced Developmental Psychology: Cognitive Development
 An in-depth exploration of cognitive development. Topics to be discussed are Piagetian theory, social cognition, information-processing views of development, memory development, metacognition, and the development of numerical knowledge.
(R. Newman)

PSY 354 Systematic Viewpoints in Psychology: Freud and Humanistic Psychology
 An exploration of Freud's basic ideas through original readings, lectures, and discussion. The transformation of some of these ideas in modern humanistic psychology will also be reviewed.
(B. Baars)

PSY 390 Special Topics in Psychology: Animal Cognition
 The current status and historical development of research on complex problem-solving in animals is reviewed and discussed. Working memory, sequential memory, natural concepts, and adaptation to differential patterns of events in space, time, and number are emphasized.
Prerequisites: PSY 201; any other 200- or 300- level course in psychology or BIO 322
(E. Wyers)

PSY 492 Advanced Seminars in Psychology
These seminars, limited to 15-20 students, cover current topics of interest in psychology. Open primarily to upper-division students, permission of the instructor must be obtained before registration.
Sec. 40: Social Cognition
 Focusing on how individuals develop and use knowledge about people, groups, and social situations. A social information-processing approach will be used to clarify classic issues in social psychology such as impression formation and intergroup relations.
(S. Valins)

Sec. 45: Developmental Disabilities
 A review of the theory and treatment of children who are labelled autistic, retarded, schizophrenic, aphasic, or seriously delayed. The seminar will be of primary interest to those who wish to pursue careers in psychology, special education, psychiatry, social work, or special pathology. Previous contact with handicapped children will be helpful but is not necessary.
(T. Carr)

Sec. 51: Vision and the Brain
 An in-depth examination of the mechanisms underlying human perception of the visual world. Experimental and theoretical work in neurophysiology, in psychophysics, and in other disciplines will be integrated to address the time-honored question of how people see. Topics include form vision, color vision, motion perception, stereopsis, visual illusions, visual development, and defective vision.
(H. Petry)

Middle Eastern Studies

New Minor in Middle Eastern Studies
 The new interdisciplinary minor in Middle Eastern studies allows students interested in this part of the world to design an individual program around a particular area of concentration in consultation with an advisor. All students must take *SOC 264 Introduction to Middle Eastern Society* (see Sociology section for description), 12 credits in their specific area of concentration, and one course from a second area. Possible areas of concentration are Middle Eastern culture and politics, Islamic studies, Hebrew civilization, and others. At least 9 credits must be chosen from upper-division courses.
 Interested students should consult the minor coordinator, Prof. Elizabeth Stone of Anthropology, for details and the list of the minor's advisors.

Music

Changes in expected semester of course offerings: MUS 394, 432, 434, and 490 will not be offered in Spring 1985. MUS 201, 470, and 492 have been deleted from the curriculum.

The prerequisite for any course in the music major program is the Theory Placement Examination, which is an ear-training test that will be given on Saturday, December 1, 1984. Students must sign up in advance in the Department of Music office, Fine Arts 3304. Those who have not passed this test may not register for courses in the major program. The examination will be given again on February 23 and April 6, 1985.

Instrumental instruction is, as a rule, only available to majors. Occasionally there are openings for lessons for non-majors. Students should contact the Music Department office (6-5672) for appointments for auditions. Students who have not had an audition may not register for lessons.

New Minor in Music

	Credits
<i>Performance</i>	
Two semesters of one or more of the following:	
MUS 261 University Chorus	
MUS 262 University Orchestra	
MUS 263 University Wind Ensemble	
MUS 390 Collegium Musicum	
MUS 393 Chamber Chorus	2-4
<i>Theory</i>	
MUS 119 Elements of Music	3
MUS 315, 316 Structural Principles of Music	6
<i>History</i>	
3 courses chosen from the series MUS 301-309	9
<i>Total: 20-22</i>	

Students interested in the music minor should contact Professor Winkler, Fine Arts 3322, 6-7961.

MUS 161 to 187 Performance Study (REVISED)
MUS 187 Other Instruments
 Only the titles have been changed.

MUS 261 University Chorus (REVISED)
 Grading in this course shall be Satisfactory/Unsatisfactory only.

MUS 262 University Orchestra (REVISED)
 Study and performance of works from the repertoire of the concert orchestra. More than four unexcused absences from rehearsals eliminates credit. May be repeated. Grading in this course shall be Satisfactory/Unsatisfactory only.

MUS 263 University Wind Ensemble
(REVISED)

Grading in this course shall be Satisfactory/Unsatisfactory only.

MUS 361 to 387 Advanced Performance Study (REVISED)

MUS 387 Other Instruments

A one-hour individual lesson each week with 15 hours of practice required. Open only to students with adequate preparation who demonstrate a professional commitment to the performance of music. Lessons will be taught either (a) by a member of the music faculty, (b) by a teaching assistant, or (c) by an approved off-campus teacher. Progress of students will be monitored by faculty examination. May be repeated.

Philosophy

A brochure with extended descriptions of Philosophy courses is available in Old Physics 221, beginning November 7.

Changes in expected semester of course offerings: PHI 239, 264, 268, 304, 325, 342, 363, 372, 378, 482, 408, and 415 will not be offered in 1984-85. PHI 101, 102, 106, and 273 have been deleted from the curriculum.

Revised Major and Minor Requirements

The Department of Philosophy has revised the requirements for the major. The new requirements will apply to students who have completed fewer than 45 credits by the beginning of the Fall 1985 semester and are optional for more advanced students. Minor requirements have also been revised. Interested students should consult Prof. Mary Rawlinson, the Director of Undergraduate Studies in Philosophy, for details.

PHI 104 Moral Reasoning (REVISED)

An introduction to philosophy through inquiry into the formation, justification, and evaluation of moral judgments. Students are introduced to the major theories and problems of ethics, such as utilitarianism, Kant's categorical imperative, ethical relativism, egoism, and classical conceptions of the good and virtue. Against this background students engage in discussions of contemporary moral issues such as discrimination, abortion and euthanasia, responsibility in personal relations, war, or the protection and use of the environment.

PHI 105 Politics and Society (NEW)

An introduction to philosophy through analysis of political theory, theories of action, and styles of political life. Main themes will include the relation of the individual to the state, the scope of social responsibility, the nature of freedom. (The focus in Spring 1985 will be on philosophy in relation to the other humanities.)

Fall and spring, 3 credits

PHI 200 Introduction to Ancient and Medieval Philosophy (REVISED)

Readings and discussion of the major thinkers of the period, e.g., Plato, Aristotle, Plotinus, Augustine, and Aquinas.

PHI 206 Introduction to Modern and Contemporary Philosophy (REVISED)

Readings and discussion of the major thinkers of the period, e.g., Descartes, Hume, Kant, Hegel, Nietzsche, Wittgenstein, and Sartre.

PHI 249 Marxism (NEW)

A study of Marxism as a philosophical system. Topics include the development of Marxism out of German Idealism, the contributions of Marxism to political and social philosophy, and the influence of Marx on subsequent thinkers, e.g., Althusser, Habermas, Foucault, or Derrida.

Prerequisites: Sophomore standing; one philosophy course; PHI 105 recommended

Fall and spring, 3 credits

PHI 300 Ancient Philosophy (NEW)

Advanced studies in selected thinkers of the period from Thales to Aristotle.

Prerequisites: Two philosophy courses

Fall and spring, 3 credits

PHI 306 Modern Philosophy (NEW)

Advanced studies in selected thinkers of the period, such as Descartes, Vico, Spinoza, Locke, Berkeley, Hume, and Kant.

Prerequisites: Two philosophy courses

Fall and spring, 3 credits

PHI 310 American Philosophy (NEW)

A study of selected major figures in the American tradition, e.g., Jefferson, Emerson, Edwards, James, Peirce, Dewey, and Whitehead.

Prerequisite: One philosophy course; PHI 206 or 306 recommended

Fall or spring, 3 credits

PHI 312 Topics in Contemporary European Thought (NEW)

A study of major developments in contemporary European philosophy. Consult departmental brochure as topic changes. May be repeated for credit with permission of the undergraduate director in philosophy.

Prerequisite: One philosophy course

Schedule to be announced, 3 credits

PHI 353 Philosophy of Mind

(REVISED)

An analysis of the major problems in the philosophy of mind, e.g., the mind-body problem, the problem of identity through time, the relation between thoughts and sensations, the problem of the knowledge of other minds.

PHI 374 Philosophy in Relation to Other Disciplines (NEW)

The study of philosophy as it affects and is affected by other disciplines such as anthropology, science, sociology, the history of ideas, theology, and psychology.

Prerequisites: Upper-division standing; one philosophy course

Fall or spring, 3 credits

PHI 380 Philosophy and Literature (REVISED)

This course, which will focus on autobiography and the writing of one's own life, will be crosslisted with CLT 334 for Spring 1985.

PHI 405 Analytic Philosophy (REVISED)

An analysis of the major figures and problems of contemporary Anglo-American analytic philosophy. Readings from authors such as Russell, Wittgenstein, Quine, Ryle, and Austin.

Special Topics for Spring 1985

PHI 285 The Uses of Philosophy: Philosophy and the American Revolution

(D. Howard)

PHI 312 Topics in Contemporary European Thought: Contemporary French Writers

Deleuze, Bataille, Lyotard, Irigaray, Foucault

(D. Allison)

PHI 392 Individual Systems of the Great Philosophers

Sec. 1: Nietzsche

(D. Allison)

Sec. 2: Plato

(R. Sternfeld)

PHI 420 Advanced Topics in Philosophy

Sec. 1: Advanced Seminar in Philosophy of Law

(P. Grim)

Sec. 2: Problems in Medieval and Modern Philosophy

(C. Martin)

Sec. 3: Contemporary French Political Philosophy

(D. Moktar)

PHI 435 Senior Seminar: Minds and Machines

(M. Simon)

Physical Education

PEC 101, 104, and 175 have been deleted from the curriculum.

PEC 107 Intermediate Karate (REVISED)

Prerequisite: PEC 106

PEC 124 Lifeguard Training (NEW)

Preparation for the American Red Cross certification in Lifeguard Training. The material to be covered includes: requirements and responsibilities of lifeguards, selection and training, preventive lifeguarding, emergency procedures, records and reports, equipment, health and sanitation, water rescues, search and recovery, and environmental conditions.

Prerequisites: PEC 123 and 170
Spring, 1 credit

PEC 125 Aerobic Swimming (NEW)

The use of distance swimming and related activities to promote body conditioning with an emphasis on cardiovascular and muscular endurance. Attention to stroke technique will also be given in order to improve efficiency of movement.

Prerequisite: Intermediate-level swimming proficiency

Fall and spring, 1 credit

PEC 145 Physical Conditioning (NEW)

The acquisition of appropriate skills in and appreciation of physical conditioning. Instruction will be primarily devoted to improvement of muscular strength, flexibility, and endurance with some effort given to weight control. Activities will include weight training with the universal gym machine and free weights, stretching, calisthenics, and other activities known for their physical conditioning benefits.

Fall and spring, 1 credit

PEC 147 Aerobic Fitness (REVISED)

A fundamental course in body conditioning with stress on cardiovascular endurance, muscular endurance, and flexibility. Students will develop an ability to maintain a high degree of aerobic fitness through such activities as long-distance running.

PEC 148 Introduction to Road Racing (NEW)

The improvement of the intermediate-level runner to a higher level of fitness. The course will provide an in-depth study and practice of running. The physiological, emotional, and nutritional aspects of aerobic fitness will be emphasized to prepare the student for road racing. Students will be required to serve as volunteer workers for one road race and as participants in at least three five-to-fifteen kilometer races.

Prerequisite: PEC 147

Spring, 1 credit

PEC 155 Soccer (NEW)

A course designed to familiarize students with the basic skill development. An understanding of the sport is provided by examination of history, rules, boundaries, formation, and strategies. Students will be given an opportunity for intra-class play. May not be taken for credit after PEC 194.

Spring, 1 credit

PEC 170 First Aid and Safety (NEW)

An American Red Cross certification course designed to develop skills and knowledge of first aid and cardiopulmonary resuscitation for the immediate care given to an individual who has been injured or suddenly taken ill.

Fall and spring, 1 credit

PEC 188-199 Participation in Intercollegiate Sports (NEW)

PEC 188 Softball

PEC 189 Basketball

PEC 190 Baseball

PEC 191 Cross Country

PEC 192 Football

PEC 193 Lacrosse

PEC 194 Soccer

PEC 195 Squash

PEC 196 Swimming

PEC 197 Tennis

PEC 198 Volleyball

PEC 199 Track and Field

Participation in a sport at the intercollegiate level including all the instruction, practice, and competition associated with such an activity. Advanced skills and strategies will be covered. Each course may be repeated once for credit. Grading in these courses shall be Satisfactory/Unsatisfactory only.

Prerequisite: Skill level necessary for team membership

Fall and spring, 1 credit each

PEC 310 Basic Athletic Training (NEW)

Basic instruction for students interested in athletic training or the health care of athletes in the prevention, protection, and first aid care of injuries occurring in athletics. The nature and evaluation of injuries, their mechanisms, protective devices utilized, and rehabilitation will be discussed. Consists of lecture and laboratory experience.

Prerequisites: BIO 229, 230, 231, 232; permission of instructor

Fall, 3 credits

PEC 311 Advanced Athletic Training (NEW)

Advanced instruction in athletic training for selected students interested in national certification as athletic trainers. Muscle testing, methods of conditioning, remedial exercises, dietary concerns, modality

application, clinical procedures, and legal aspects of athletic training will be emphasized. Consists of lecture and laboratory experience.

Prerequisites: PEC 310; Red Cross first aid and C.P.R. certification
Spring, 3 credits

Religious Studies

A brochure with extended descriptions of Religious Studies courses will be available in the program office, Old Physics 103 at Prime Time and later.

Changes in expected semester of course offerings: RLS 246 will not be offered in Spring 1985; interested students may consider RLS 341 instead. RLS/ARH 335, listed for fall, will be offered in Spring 1985.

RLS 122 Religion and Ethics Today (REVISED)

An introduction to the role of religion in the formation of moral, social, and political values, through a study in depth of selected contemporary areas of religious concern such as political economy, medicine, human rights, science and technology, war and peace.

RLS 372 Buddhist Classics (REVISED)

May be repeated for credit as subject matter differs.

RLS 380 Islamic Classics (NEW)

A study in depth of Islamic texts in translation. Selections may be made from the Koran, the Hadith, the Law, and from one or more of the major intellectual schools, such as Kalam (scholastic theology), Peripatetic philosophy, Illuminationist theosophy, Sufism, and the "Transcendent Theosophy" of the School of Isfahan. May be repeated for credit as subject matter differs.

Prerequisite: RLS 280

Spring, alternate years, 3 credits (not offered in 1984-85)

RLS 447 Readings in Religious Studies (REVISED)

May be repeated.

Special Topics for Spring 1985

RLS 330 Special Topics: Feminine Spirituality

A survey of the role and destiny of woman as envisioned by world religions; concepts of femininity in theology, metaphysics, and cosmology; theoretical and practical place of woman in society.

(S. Murata)

Social Sciences

A brochure with extended descriptions of Spring 1985 courses is available in the Social Sciences office, SBS S-201.

Changes in expected semester of course offerings: SSI 101, 140, 405, and 407 will not be offered in Spring 1985. SSI 470 has been deleted from the curriculum.

After the first class meeting, SSI 265 Drug and Alcohol Education will be offered on a tutorial basis. It is essential for students to attend this meeting, as assignments and procedural instructions will be given at that time.

SSI 305 Children and the Family: Contemporary Issues (NEW)

Analysis of the influence of the changing family on the psychological development of children. Major topics will be adolescent parents; single parent households; working mothers; divorce; abuse and neglect and poverty.

Prerequisites: 18 credits in the social sciences, including a course in research methods or statistics and two courses chosen from SSI 102, 103, and PSY 211

Fall or spring, 3 credits

SSI 334 Women, Work, and Family in Modern European History (NEW)

An analysis of the effect of urbanization and industrialization on women and the family in Europe from 1750 to the present. Special emphasis will be placed on the development of the ideology of the "angel in the house" and the growth of female participation in the work force. Among the topics covered will be domestic work, prostitution, sexual attitudes and mores, child-rearing practices, women and revolutionary movements, and the growth of feminism.

Prerequisite: SSI 102 or one history course

Fall, alternate years, 3 credits (not offered in 1984-85)

Sociology

A brochure with extended descriptions of Sociology courses is available at the department office, Social and Behavioral Sciences S-401.

Changes in expected semester of course offerings: SOC 121, 212, 351, 401, and 475 are not scheduled for Spring 1985. The fall course SOC 353 will be offered in Spring 1985.

SOC 121 Library Skills for Sociological Research (NEW)

An introduction to basic library skills and bibliographic resources for sociological research, using a self-paced workbook approach. Reference and other library materials of special interest to sociology students are covered. Such skills as the efficient use of card catalogs, bibliographies, and specialized indexes are also treated. No class sessions are held, but opportunity for adequate contact between students and librarian is provided.

Prerequisite: SOC 103 or 104
Spring, 1 credit

SOC 264 Introduction to Middle Eastern Society (NEW)

A broad survey of society, politics, and culture in the Islamic Middle East and North Africa. The course will include an examination of Middle Eastern social structure, culture, and religion. Social stratification and the relationship between the pastoral/nomadic, agrarian, and urban sectors of Middle Eastern societies will be analyzed. The major patterns of social change, modernization of states, and political revolutions in the twentieth century will also be studied.

Fall, 3 credits

SOC 339 Sociology of Alcoholism and Drug Abuse

An examination of the sociological literature on alcoholism and drug abuse. Topics include addictive careers, the epidemiology (spread) of abuse, history of attempts to control alcohol and drugs, treatment approaches, and policy alternatives.

Prerequisites: SOC 103 or 104; either SOC 201 or two other courses in the social sciences

Fall, alternate years, 3 credits

SSI 350 Foundation of Education (NEW)

An interdisciplinary study of the foundations of education focusing on the findings of the social and behavioral sciences as related to education and teaching. The course is designed to meet the needs of students enrolled in the secondary teacher preparation programs.

Prerequisite: Upper-division standing
Fall and spring, 3 credits

Note: Beginning in Spring 1985, and thereafter, SSI 350 will be the required course for the "foundations of education" requirement of the secondary teacher preparation programs.

SSI 417 Senior Seminar in Child Care (NEW)

A seminar designed for advanced students in the minor in child care and family studies. Various current topics in the field will be covered, including program and policy issues as well as child psychology and development.

Prerequisites: SSI 281 and 283
Fall or spring, 3 credits

SSI 488 Internship (REVISED)

The credit range for this course is now 3 to 12 credits.

SSI 489 Washington Internship (REVISED)

This is now a 12-credit course.

Socio-Legal Studies

A new interdisciplinary minor in Socio-Legal Studies (SLS) is now available. It is intended for students who have an interest in law and social control and whose major is in one of the social and behavioral sciences or the humanities. It emphasizes the interrelationships between social values, social control processes, bureaucracies, and legal institutions. It will be useful to students planning a career in public policy, law, legal services, rural development studies, and urban affairs. All students must take POL 220 and ANT 411, 12 credits chosen from a list of approved courses, and POL 325 or ANT 355 or AFS 490 or another designated course approved by the minor coordinator.

Interested students should consult Prof. June Starr of Anthropology, the minor coordinator, for further details.

SOC 384 Sociology of the Life Course (NEW)

Change and stability of individuals through the life course (from childhood to old age) in the context of social structure and interactional processes. Will cover such topics as social structured periods and transitions in the life course, identity formation, continuity and change, life crises, changing roles and transitions.
Prerequisites: SOC 103 or 104; either SOC 201 or two other courses in the social sciences
Spring, 3 credits

SOC 406 Practicum in Applied Sociological Research (NEW)

Participation in several simulated and, where possible, actual ongoing research projects. The following skills will be emphasized: translating a client's problem into a manageable research project, study design, questionnaire construction, pretesting questionnaires, sample construction, field work administration, tabulation and analysis of data, report writing, the economics and professional standards of the research industry.
Prerequisites: SOC 201, 202 or SOC 211-212; permission of instructor
Spring, 3 credits

SOC 475 Undergraduate Teaching Practicum (NEW)

Work with a faculty member as an assistant in one of the faculty member's regularly scheduled classes. The student will be required to attend all the classes, do all the regularly assigned work, and in addition meet with the faculty member at regularly scheduled times to discuss the intellectual and pedagogical matters relating to the course. Grading in this course shall be Satisfactory/Unsatisfactory only.
Prerequisites: Upper-division standing; 12 credits of sociology; permission of instructor
Fall, 3 credits

SOC 488 Internship (REVISED)

The credit range for this course is now 3 to 12 credits.

Special Topics for Spring 1985

SOC 390 Special Topics

Sec. 1: Work, Jobs, and Gender

An overview of recent literature on sex differences in labor force participation, occupational distribution, and earnings. Major topics to be addressed include occupational sex segregation, comparable worth, compatibility of work and family life, unionization, harassment, and employment in sex atypical jobs, among other topics. In addition to enhancing understanding of the substantive issues, the course has several other objectives: through class discussion and writing assignments, the student is encouraged to think analytically and critically about the course issues and to improve his or her writing skills.
(P. Roos)

Sec. 2: Health Care Delivery

The focus of the course is upon the organization and component aspects of the health delivery system of this country. Particular attention is paid to the effects of this system on the patient, the provider, the institutions of the system, and the general community. The health systems of other countries are used as comparative models.
(B. Waldman)

Sec. 3: Theory and Practice in Student Leadership

This seminar, for students interested in developing communication and leadership skills, will offer a combination of reading, directed observations, and experiential learning. The course will draw on sociology, social psychology, and developmental theory and will focus on organizations, school groups, leadership, and individual student development.
(C. Vazquez)

Theatre Arts

Changes in expected semester of course offerings: THR 217, 218, 298, and 372 will not be offered in Spring 1985. THR 120, 137, 138, 203, 251, 300, 318, 330, and 351 have been deleted from the curriculum.

Revised Major Requirements

The Department of Theatre Arts has revised its requirements for the major. A handout listing the new requirements is available in Fine Arts Center-II 3046. The new requirements will apply to majors with fewer than 45 credits by the beginning of the Fall 1985

semester. Incoming transfer students will be under the new requirements as well. Continuing students with 45 credits or more may complete either these requirements or the old ones; in the latter case they must consult with a departmental advisor about appropriate substitutions for discontinued courses.

Minors in Theatre Arts

The several new theatre arts minors, which require 24 credits each, provide an opportunity for a student who wishes to explore new knowledge to sample the standards and practices of one of the theatre arts. The minor should lead the student to an understanding of necessary next steps should his or her interest be sharpened by the experiences. The requirements for each minor are listed below. For further details, see the minor coordinator.

Design in Theatre Arts (TAD)

THR 104, 116, 213, 316
Two courses chosen from THR 223, 246, 256
Two courses chosen from THR 323, 346, 356
Coordinator: G.W. Mercier

History and Theory in Theatre Arts (TAH)

THR 104, 130, 281, 282, 314, 344, 401, 402
Coordinator: R. Bharucha

Performance in Theatre Arts (TAP)

THR 104, 205, 281, 282, 322, 352
THR 105 or 130
THR 332 or 362
Coordinator: T. Neumiller

Playwriting in Theatre Arts (TAW)

THR 104, 225, 281, 282, 314, 325, 485
THR 105 or 112
Coordinator: L. Peterson

Revised Media Arts Minor Requirements

This minor now requires all of the following courses: THR 117, 217, 270, 272, 325, 377, 403. In addition, students must take one course chosen from among THR 362, 371, and 375.
Coordinator: R. Hartzell

THR 130 Introduction to Oral Interpretation (REVISED)

The interpretation of language and imagery that supports effective oral presentation. Students will prepare eight to ten readings for class presentation from diverse source material, including novels, the Greek tragedies, epic poems, and the Bible. May not be taken for credit in addition to THR 105 or 112.

3 credits

THR 213 Communicating Visual Experience (NEW)

The development of observational and artistic skills necessary for communicating visual experience. Exploration of various applications including drawing, painting, model- and collage-making, and photography. Emphasis on building an individual approach.

Prerequisite: THR 101

Fall and spring, 3 credits

THR 285 Black Theatre Workshop (NEW)

A performance workshop and scene study exploring Third World theatre and the relationship of myth and legend to folk drama. May lead to a production in the following semester.

Prerequisites: Audition; permission of instructor

Fall and spring, 3 credits

THR 298 Student Media Leadership (NEW)

A review of the decision-making processes involved in campus media organizations and an investigation of the similarities and differences between the obligations of student and professional media managers. Class meetings are devoted to the discussion of problems related to media production and management, to talks by professionals about their specialties, and to the development of critical skills useful to practitioners and managers. Grading in this course shall be Satisfactory/Unsatisfactory only.

Prerequisite: Permission of instructor

Fall and spring, 1 credit

THR 301 Stage Management Laboratory (NEW)

Development of skills needed to accomplish the functions of the stage manager. Students in THR 301-307 will meet jointly once each week. May be repeated once.

Prerequisites: THR 101; 105 or 112 or 130; 116

Fall and spring, 2 credits

THR 302 Theatre Management Laboratory (NEW)

Development of practical skills in the business and managerial problems of theatre. Students in THR 301-307 will meet jointly once each week. May be repeated once.

Prerequisites: THR 101, 104, 116

Fall and spring, 2 credits

THR 303 Costume Crafts Laboratory (NEW)

Development of skills needed for costume and accessory construction. Students in THR 301-307 will meet jointly once each week. May be repeated once.

Prerequisites: THR 101, 116

Fall and spring, 2 credits

THR 304 Marketing Laboratory (NEW)

Development of skills needed in marketing theatre. Students in THR 301-307 will meet jointly once each week. May be repeated once.

Prerequisites: THR 101, 104

Fall and spring, 2 credits

THR 305 Lighting and Sound Laboratory (NEW)

Development of skills needed in installation and control of lighting and sound equipment. Students in THR 301-307 will meet jointly once each week. May be repeated once.

Prerequisites: THR 101, 104, 116

Fall and spring, 2 credits

THR 306 Stagecraft Laboratory (NEW)

Development of skills needed in theatre construction. Students in THR 301-307 will meet jointly once each week. May be repeated once.

Prerequisites: THR 101, 104, 116

Fall and spring, 2 credits

THR 307 Performance Laboratory (NEW)

Development of skills in performance through the preparation and rehearsal of a production. Student must audition, be cast in a principal role in a major departmental production, and be engaged in the entire rehearsal process to receive credit. Students in THR 301-307 will meet jointly once each week. May be repeated once.

Prerequisites: THR 101; 105 or 112 or 130

Fall and spring, 2 credits

THR 376 Video Production Workshop (NEW)

Creation of one or more television productions (single or multicamera) with the aim of meeting broadcasting standards. Students will script, produce, direct, engineer, and edit these productions.

Prerequisites: THR 375; permission of instructor

Spring, 3 credits

THR 475, 476 Undergraduate Teaching Practicum I, II (REVISED)

May not be used to fulfill major requirements.

THR 488 Internship (REVISED)

The credit range for this course is now 3 to 12 credits.

Special Topics for Spring 1985**THR 299 Special' Workshop: Costume Construction**

Techniques in period costume pattern drafting.

Prerequisite: Permission of instructor

2 credits

(S. Wood)

Unaffiliated Courses**EXT 488 Internship (NEW)**

Participation in public and private agencies and corporations under the supervision of a faculty sponsor. Students will be required to submit progress reports and a final written report on their experience to the faculty sponsor. Grading in this course shall be Satisfactory/Unsatisfactory only. May be repeated up to a limit of 12 credits. Students taking nine or more credits must take a related campus-based seminar.

Prerequisites: Acceptance by faculty sponsor; approval of appropriate department and Office of Undergraduate Studies

Fall and spring, 3 to 12 credits

EXT 489 Washington Internship (NEW)

Designed so that students can participate in the Washington Center for Learning Alternatives (W.C.L.A.) as interns in private or public sector organizations and agencies. Students will be supervised by selected practitioners within the organization or agency. Students will be required to submit journals of experience and observation which, together with the supervisors' report, become the basis for a Satisfactory/Unsatisfactory grade.

Prerequisites: Admission to W.C.L.A.; sponsorship of a faculty member; approval of appropriate department and Office of Undergraduate Studies.

Corequisite: EXT 490

Fall and spring, 12 credits

EXT 490 Washington Seminar

Seminar offered in Washington as part of the internship program of the Washington Center for Learning Alternatives (W.C.L.A.). The seminars are taught by people in public and private organizations. Seminar topics include law and justice, policy studies, community-urban service, and studies in government.

Prerequisites: Admission to W.C.L.A.; sponsorship of a faculty member; approval of appropriate department and Office of Undergraduate Studies.

Corequisite: EXT 489

Fall and spring, 3 credits

INT 150 Introduction to the Stony Brook Library (NEW)

An introduction to basic library skills and bibliographic resources, using a self-paced workbook approach. Topics covered include the use of the card catalogs, periodical indexes and abstracting sources, newspaper indexes, government documents, and current affairs sources. Special emphasis is placed on the Stony Brook Library's organization and resources. No class sessions are held, but opportunity for adequate contact between student and librarian will be provided.

Prerequisite: Freshmen and sophomores only

Fall and spring, 1 credit

Note: Students must meet with the instructors in the Main Library Reference Room during the first week of the semester for course orientation. See Undergraduate Class Schedule booklet for times.

INT 200 Career and Life Planning (REVISED)

Prerequisites: Sophomores only; permission of instructor

INT 224 The Science Establishment (NEW)

An examination of the institutions that comprise the science establishment in the U.S. with emphasis on federal agencies, scientific societies, academic institutions, and industrial research and development laboratories. Three scientific activities will be examined to determine both their scientific content and their impact on society. The economic, social, and political factors that help to determine scientific goals and budgets will be studied. May not be counted toward the natural sciences and mathematics distribution requirement. *Spring, 3 credits*



College of Engineering and Applied Sciences

Technical Electives

Courses taken by College of Engineering and Applied Sciences majors at other universities and colleges from September 1981 on in curricula in technologies of all kinds will not be transferred as meeting requirements for technical electives.

Mathematics Requirements for Various Majors

Engineering Science: ESG majors may substitute any of the following courses for AMS 362: AMS 301, 302, 310, 311, 312, 320, 326, 341, 342; MAT 310, 311, 313, 314, 315, 321, 322, 335, 342, 350, 353, and 371. It is recommended that the prerequisites be honored.

Course Load: 12 to 19 credits

College of Engineering and Applied Sciences majors who are full-time students cannot register for fewer than 12 credits nor more than 19 credits without the approval of the Committee on Academic Standing and Appeals.

Applied Mathematics and Statistics

Changes in expected semester of course offerings: AMS 194, 331 and 491 will not be offered in Spring 1985. The fall course AMS 301 will be offered this spring.

AMS 210 Linear Models (see description below) has been approved as an option to satisfy the Calculus III requirement for all students who are considering application to the Applied Mathematics major. Students may take both AMS 210 and MAT 221 or 231 or 241 for credit. Students who have already satisfied the Calculus III requirement would also profit from taking AMS 210.

Double Majors

Students considering a double major should speak to advisors in both Applied Mathematics and Statistics and the other discipline to insure that a sufficient number of credits within each major will be accumulated.

Bachelor of Science/Master of Science Program in Applied Mathematics and Statistics

An Applied Mathematics and Statistics major may apply at the end of the junior year for admission to a special program which will lead to the Bachelor of Science and Master of Science degrees at the end of the fifth year. In the fourth and fifth years, in addition to completing the 120 credits for the B.S. degree requirements, the student will take 30 graduate credits to fulfill the master's requirements in one of the department's three areas of study: applied mathematics, operations research, or statistics.

The advantage of the combined program is that the M.S. degree can be earned in less time than that required by the traditional course of study. The M.S. degree in Applied Mathematics and Statistics normally requires three to four semesters of study after completion of a bachelor's degree.

The in-depth training of a master's degree is required by many employers for professional positions in applied mathematics and statistics (beyond beginning analyst/programmer jobs).

For more details about the B.S./M.S. program, see the Graduate Program Director in the Department of Applied Mathematics and Statistics.

AMS 210 Linear Models (NEW)

An introduction to linear models and associate matrix theory, which simultaneously serves as an introduction to applied mathematics. Models include Markov chains and related probability models, regression, economic input-output and ecological growth models, computer graphics, and finite difference methods. Applications drawn from diverse areas of social and natural sciences. Efficient matrix computation and numerical analysis involving programming exercises.

Prerequisites: MAT 126 or 131 or 141; programming experience
Fall and spring, 3 credits

AMS 302 Finite Mathematical Structures B (REVISED)

Prerequisite: MAT 221 or 231 or 241

AMS 326 Numerical Analysis (REVISED)

Prerequisites: CSE 111 or 112 or 114; MAT 221 or 231 or 241

AMS 342 Operations Research II: Stochastic Models (REVISED)

Prerequisites: MAT 221 or 231 or 241; AMS 310 or 311 or ECO 320

AMS 361 Engineering Mathematics A (REVISED)

Prerequisites: C or higher in MAT 221 or instructor's permission; CSE 111 or 112 or 114

AMS 362 Engineering Mathematics B (REVISED)

Prerequisite: MAT 221 or 231 or 241

AMS 373 Analysis of Algorithms (NEW)

Mathematical analysis of a variety of computer algorithms, including searching, sorting, matrix multiplication, fast Fourier transform, and graph algorithms. Time and space complexity. Upper bound, lower bound, and average case analysis. Introduction to NP completeness. Some machine computation will be required for the implementation and comparison of algorithms. Crosslisted with CSE 373 and MAT 373.

Prerequisites: MAT 221 or 231 or 241; CSE 112 or 114; permission of department
Fall, 3 credits

AMS 492 Topics in Applied Mathematics (NEW)

Treatment of an area of applied mathematics which expands upon the undergraduate curriculum. Topics may include applied mathematics, statistics, or operations research and will change from semester to semester.

Prerequisite: Permission of instructor
Fall and spring, 3 credits

Special Topic for Spring 1985

AMS 492 Topics in Applied Mathematics: Data Analysis (H. Thode)

Computer Science

Changes in expected semester of course offerings: CSE 304, 307, 345, 346, and 352 will not be offered in Spring 1985. The fall courses CSE 303 and 306 will be offered this spring. CSE 112 has been deleted from the curriculum.

Revised Major Requirements

Requirement A: Instead of CSE 303, majors may now choose among CSE 303 or 373 or MAT 371.

Requirement B: Group 2 courses now include all other upper-division CSE courses, except CSE 475.

Requirement F: ESE 318 is now numbered ESE 218 and has the following prerequisite for CSE majors: CSE 120 (see Electrical Engineering section for further details).

Requirement G (Natural Science): All students entering the major after May 1984 must take eight (8) credits of natural science in the form of one of the following sequences:

BIO 151, 152
PHY 101, 102
CHE 131, 132
GEO 122, 226
PHY 101, AST 203

Exceptions are students who have already taken more than four credits of natural science courses under the rules outlined in the *Undergraduate Bulletin Supplement for Spring 1984 (compiled in October 1983)*.

Admittance to Undergraduate CSE Courses

The criteria for admittance to undergraduate computer science courses are as follows:

A. For all CSE courses:

- 1) Students registered for a course must attend the first two class meetings, or they will be considered for deregistration from the course unless they have made a previous arrangement with the course instructor.
- 2) Students must attend the first two class meetings to be considered for admission to the course during the add period.

B. For CSE 105-201:

- 1) Students must have successfully completed the necessary prerequisite courses, if any, with the required grade (usually C or better).
- 2) Students who have not taken the course before will have priority over those students who have taken the course before, or have withdrawn from the course previously.
Students who withdrew because of illness that can be documented should bring their documentation to the instructor to reinstate priority.
- 3) Students who were on the waiting list for a course in previous semesters, but were not admitted, will be given priority over all other students. Students waiting two semesters will have priority over those who have waited only one semester.
- 4) Juniors should have priority over sophomores, who have priority over freshmen. A senior may be admitted who needs the course to fulfill requirements for graduation for another department.
- 5) Transfer students whose prior preparation (math and science) was geared towards planning to major in computer science at Stony Brook will be given priority over students currently at Stony Brook who are changing majors. Again, junior transfers will have priority over sophomores, who have priority over freshmen.

- 6) Scholar Incentives students will be admitted to all courses for which they met the prerequisites.
- 7) All other cases will be judged upon their performance in college-level mathematics and science courses.
- 8) Students admitted to an engineering major will have priority over all other students for CSE 111. Freshmen who meet the prerequisites and have also indicated an engineering area of interest (see General Academic Information section) will have second priority.

C. For course codes CSE 301-487:

- 1) Students must have successfully completed the necessary prerequisite courses, if any, with the required grade (usually C or higher).
- 2) Students who have *not* taken the course before will have priority over those students who have taken the course before, or have withdrawn from the course previously.

Students who withdrew because of illness that can be documented should bring their documentation to the instructor to reinstate priority. Students must petition to have the "W" removed from the transcript.

- 3) Students who were on the waiting list for a course in previous semesters, but were not admitted, will be given priority over all other students. Students waiting two semesters will have priority over those who have waited only one semester, etc.
- 4) Students admitted to the computer science major will have priority over all other students.

Challenge and Proficiency Exams

Challenge exams for CSE 113 and 114 will be given early in the first week of the fall semester. All transfer students planning to take CSE 114, 120, 201, or higher-level CSE courses must take proficiency exams to establish equivalency of transferred courses to serve as the prerequisite.

All students intending to take one of these exams must register in the department office (Lab Office Bldg., room 1401) during the week before the exam.

Written information about the content of the exam is available in the department office.

CSE 105 Introduction to Computer Science and Business Data Processing (REVISED)

May not be taken for credit after CSE 111 or 114.

CSE 111 Computer Science for Engineers (REVISED)

Students who have a C or better in CSE 114 may not take CSE 111.

Pre- or corequisite: MAT 125 or 131 or 141; PHY 101 or CEAS major

CSE 113 Introduction to Computer Science I (NEW)

A rigorous introduction to the fundamental concepts of computer science, software development, and the programming language Pascal. Problem-solving techniques that aid in the understanding and solution of algorithmic problems will be stressed. The course will concentrate on analyzing, rather than on writing programs. Mathematical maturity at the level of pre-college calculus is expected. Primarily for students planning to take further computer science courses.

Pre- or corequisite: MAT 131 or 141 or 126

Fall and spring, 2 credits

CSE 114 Introduction to Computer Science II (NEW)

Application of the principles of computer science taught in CSE 113. During weekly laboratory sessions, students will gain experience using the Pascal programming language to solve a variety of numeric and non-numeric problems. Topics to be covered include files, records, sets, pointers, text processing, abstract data types, stacks and queues, program design, and testing strategies.

Prerequisite: Grade of C or higher in CSE 113 or proficiency exam

Fall and spring, 3 credits

CSE 120 Computer Organization and Programming

Prerequisite: Grade of C or better in CSE 112 or 111 or 114 or passing proficiency examination

CSE 201 Advanced Programming

Prerequisite: Grade of C or better in CSE 112 or 114 or passing proficiency examination
4 credits

CSE 346 Computer Communications (REVISED)

Crosslisted with ESE 346. See Electrical Engineering section for details of the revision.

Prerequisites: CSE 111 or 114; MAT 221 or 231

CSE 370 Digital Simulation and Modelling (REVISED)

Pseudo-random number and variate generation. Discrete-event simulator design and construction. Model design, structuring, scaling, verification, and parameter identification. Model control using introductory statistical concepts (sampling, confidence, interval calculation, etc.). Regenerative simulation. Efficient statistical simulation techniques. Pascal or Fortran, as well as GPSS, will be used to implement models of computer and engineering systems, deterministic and random signal processing, etc. Crosslisted with ESE 370.

Prerequisites: Upper-division standing; CSE 111 or 112 or 114; MAT 221 or 231 or 241

CSE 371 Computer Graphics (REVISED)

Prerequisite: ESE 218

CSE 373 Analysis of Algorithms (NEW)

Crosslisted with AMS 373 and MAT 373. See Applied Mathematics and Statistics section for description.

Prerequisites for CSE majors: MAT 221 or 231; CSE 114 and 201

CSE 380 Microprocessors and Programming Logic I (REVISED)

Prerequisites: CSE 111 or 114; ESE 218

Computer Engineering

With the division of CSE 112 into CSE 113 and 114, the recommended sequence for the first three semesters of the computer engineering program will change slightly:

First semester (Fall):

EGC 101, PHY 101, MAT 131, CSE 113, HUM/SOC elective
(total: 16 credits)

Second semester (Spring):

PHY 102, MAT 132, CSE 114, two HUM/SOC electives
(total: 17 credits)

Third semester (Fall):

CHE 131 or 141, CHE 133 or 143, ESG 261, CSE 120, MAT 221
(total: 16 credits)

Electrical Engineering

Changes in expected semester of course offerings: ESE 310, 312,

332, 333, 341, 345, 349, 350, and 361 will not be offered in Spring 1985. The fall course ESE 304 and 331 will be offered this spring.

Pass/No Credit Grading

The only courses which may be taken for P/NC by Electrical Engineering majors are those fulfilling the College distribution and open elective requirements.

Acceptance into the Major

The enrollment committee will meet only twice a year to consider accepting Stony Brook continuing students into the Electrical Engineering major. Students may apply for spring acceptance during Prime Time, November 7 to 16, and until December 21. For fall acceptance, students may apply in the spring semester during Prime Time, April 10 to 19, and until May 31. Applications from freshmen with only one semester's work at Stony Brook and late applications will not be considered. Transfer students must have course evaluations completed before the deadline. Applications must be submitted to the Engineering Undergraduate Student Office, E-127.

Revised Major Requirements

Requirement D: Mathematics, has been changed to: MAT 131, 132, 221, and two more from the following AMS courses, with at least one from the first group: AMS 361, 362 and AMS 301, 311.

This change is in effect as of Spring 1985 for all students except those who have already completed Requirement D under the rules printed in the *BULLETIN Supplement* of March 1984.

Requirement E, Natural Sciences has been changed to: PHY 101, 102, CHE 131, 133 (or 141, 143) and one of ESG 281, PHY 251, CSE 120.

This change is in effect as of Fall 1983 for all students except those who have already completed Requirement E under the rules printed in the *BULLETIN*, p. 190.

Requirement G, Engineering Sciences on p. 190 of the 1983-85 *BULLETIN* has been changed for those students graduating after August 1985 to: ESG 271, 372, 211, 261, 312, ESE 218 (formerly 318), and one of ESG 302, 332, 333 (recommended unless a more suitable course is chosen in consultation with a

faculty advisor).

Requirement I, Engineering Specialization and Technical Electives on p. 190 of 1983-85 *BULLETIN* has been changed for those students graduating after August 1985 to: Nine technical elective courses. Of these nine, at least six must be chosen from the technical elective courses offered by the department, except for ESE 218 (formerly ESE 318), ESE 499, and no more than 3 credits of ESE 390.

Requirement K, Grading has been changed to: All courses taken to satisfy requirements D through I must be taken for a letter grade. A grade of C (2.00) or higher is required in the following courses taken after Spring 1982:

- 1) ESG 211, 271, 372; ESE 218 (formerly 318); MAT 131, 132, PHY 101, 102; and
- 2) Six technical electives

The addition of ESE 218 to this requirement is in effect as of Fall 1984 for all students except those who have already completed ESE 318.

ESE 218 Digital Systems Design (Formerly ESE 318) (REVISED)

Prerequisites: CSE 111 or 114; PHY 102 or CSE 120

ESE 290 Transitional Study (NEW)

A vehicle used for transfer students to remedy discrepancies between a Stony Brook course and a course taken at another institution. For example, it will allow the student to take the laboratory portion of a course for which he or she has had the theoretical portion elsewhere.
Prerequisite: Permission of department
Fall and spring 1 to 3 credits

ESE 315 Introduction to Feedback Control Theory (REVISED)

A first course in the analysis and design of linear control systems. Control components and their mathematical description are first introduced. A systematic procedure is then introduced to analyze any linear control system. Both analog and digital computer simulations are discussed. Four design techniques: optimal design, root-locus method, frequency domain technique, and parameter optimization are discussed and compared.

ESE 340 Basic Communication Theory (REVISED)

Basic concepts in both analog and digital data communications; signals, spectra, and linear networks; Fourier transforms, energy and power spectra, filtering; AM, FM, and PM; time and frequency multiplexing; discussion of problems encountered in practice; noise and bandwidth considerations; pulse modulation schemes.
Prerequisite: ESG 271

ESE 346 Computer Communications (REVISED)

Basic principles of computer communication design and analysis. Technologies covered include packet networks, circuit switched networks, packet radio, local area networks, Aloha channels, and protocols. Techniques covered include algorithms for network design and routing as well as statistical models of network links. Crosslisted with CSE 346.
Prerequisites: CSE 111 or 114; MAT 221 or 231

ESE 347 Digital Signal Processing (REVISED)

Topics covered include system analysis, matrices, discrete time systems, difference equations, convolution and de-convolution, state space techniques, frequency domain techniques, the z-transform and its applications, the discrete and fast Fourier transforms, digital filter design and analysis techniques, computer-aided design.
Prerequisite: ESE 340

ESE 350 Electrical Power Systems (REVISED)

Prerequisite: ESG 271

ESE 370 Digital Simulation and Modelling (REVISED)

Pseudo-random number and variate generation. Discrete-event simulator design and construction. Model design, structuring, scaling, verification, and parameter identification. Model control using introductory statistical concepts (sampling, confidence, interval calculation, etc.). Regenerative simulation. Efficient statistical simulation techniques. Pascal or FORTRAN, as well as GPSS, will be used to implement models of computer and engineering systems, deterministic and random signal processing, etc. Crosslisted with CSE 370.

Prerequisites: Upper-division standing; CSE 111 or 114; MAT 221 or 231 or 241

ESE 371 Computer Graphics (REVISED)

Prerequisites: ESE 218; CSE 111 or 114

ESE 380 Microprocessors and Programmed Logic I (REVISED)

Prerequisites: ESE 218; CSE 111 or 114

ESE 440 Senior Design (REVISED)

Prerequisites: ESG 315, 372, two ESE courses (except ESE 390, 499), and ESE major with senior standing

Engineering Science

Changes in expected semester of course offerings: ESI 310 will not be offered in Spring 1985.

Pass/No Credit Grading

The only courses that may be taken for P/NC by Engineering Science majors are those fulfilling the College distribution and open elective requirements.

Revised Major Requirements

The grading requirement outlined in K.2, *BULLETIN*, p. 195 is no longer restricted to technical electives in the three engineering departments; it also applies to technical electives in all other CEAS departments.

ESG 211 Engineering Laboratory I: Electrical Circuits and Electronics (REVISED)

Prerequisite: CSE 111 or 112 or 114
Corequisite: ESG-271 (same as in *BULLETIN*)

ESG 271 Electrical Sciences I (REVISED)

Prerequisites: CSE 111 or 112 or 114; MAT 221; PHY 102

ESG 315 Engineering Experimentation: Electrical Engineering (REVISED)

Prerequisites: ESG 211, 312, 372, and junior standing

ESG 372 Electrical Sciences II (REVISED)

Prerequisites: CSE 111 or 112 or 114; ESG 271

Materials Science and Engineering

Changes in expected semester of course offerings: ESM 306, 327, 337, and 352 will not be offered in Spring 1985. The fall course ESM 336 will be offered this spring. ESM 205, 328, 329, 346, and 348 have been deleted from the curriculum.

ESM 315 Phase Transformation (NEW)

A review of the processes by which structures are changed in the solid state. Classical nucleation theory including homogeneous and heterogeneous mechanisms. Diffusional and diffusionless growth mechanisms. Transformation kinetics. (A technical elective.)
Prerequisite: ESG 332
Spring, 3 credits

ESM 327 Solid Crystal Surfaces (NEW)

Description and explanation of the experimental methods currently used for the study of solid crystal surfaces. Introduction to two-dimensional crystallography. Discussion of the atomic structure of surfaces of metals, semiconductors, and insulators. Studies of the electronic structure, surface states, surface defects, and of adsorption/desorption processes. (A technical elective.)
Prerequisite: ESG 381 or PHY 251
Spring, 3 credits

ESM 347 Physical Chemistry of Metal-Gas and Metal-Liquid Interfaces (REVISED)

The behavior and chemical properties of solid-gas and solid-liquid interfaces. Adsorption and the specific factors influencing (a) heterogeneous catalysis on gas-solid interfaces and (b) oxidation and reduction processes at metal-liquid interfaces will be described. Examples will be drawn from industrial processes to describe these effects. May not be taken for credit in addition to the discontinued ESM/CHE 346 or 348. This course is identical to CHE 347.
Prerequisites: CHE 302; PHY 102
Spring, 3 credits

Mechanical Engineering

A brochure with information pertaining to Spring 1985 course offerings is available in Engineering Light Laboratory 311.

Changes in expected semester of course offerings: ESC 328, 345, 360, 361, 393, and 394 will not be offered in Spring 1985. Fall courses ESC 346 and 348 will be offered this spring. ESC 314, 322, 329, and 332 have been deleted from the curriculum.

Revised Major Requirements

The following change is in effect for all students who enter the Mechanical Engineering undergraduate program after Spring 1984 with junior standing (57 credits) or below. It is optional for all students currently accepted into the ESC major and (until Spring 1986) for students accepted into the major as seniors.

The 15 credits of technical electives required for graduation in the Mechanical Engineering program must include at least 9 credits from a select group of Mechanical Engineering technical electives. Of these 9 credits, at

least 3 must be from the Mechanical Engineering design group. Current listings of the Mechanical Engineering technical electives and the Mechanical Engineering design group are available in the department office.

Pass/No Credit Grading

The only courses that may be taken for P/NC by Mechanical Engineering majors are those fulfilling the College distribution and open elective requirements.

ESC 348 Atmospheric Physics (REVISED)

An investigation of the relationship between atmospheric phenomena and the nature of matter as expressed in the principles of physics. Topics studied include gravitational effects, thermodynamic properties of atmospheric gases, formation and growth of cloud particles, atmospheric electricity, solar and terrestrial radiation, atmospheric signal phenomena, atmospheric motions, and heat and mass transfer in the atmosphere. Crosslisted with ATM 348.
Prerequisite: PHY 102

ESC 355 Applied Stress Analysis (REVISED)

A study of structures with emphasis on internal stress analysis. A review of concepts of stress, deformation, and material behavior under various stress conditions. Introduction to the theories of elasticity and plasticity. Principles of virtual work and minimum energies, and their application in structured analysis. Torsion and plane problems of elasticity and initiation of plastic flow.
Prerequisite: ESC 363

ESC 360 Numerical Solutions of Engineering Problems (NEW)

Consideration of numerical methods used to solve differential and integral equations frequently encountered in engineering analysis and design. Finite difference and finite element formulations will be examined as well as the solutions of systems of linear algebraic equations by matrix and iteration techniques. Examples will be drawn from fluid mechanics, electricity, elasticity, thermodynamics, and heat transfer. Students will solve a number of computer problems as semester projects. (A technical elective.)
Prerequisite: ESC 305
Spring, 3 credits

ESC 361 Airfoil Design (REVISED)

Unconfined flow about an airfoil can be described approximately by a boundary-layer flow near the surface and by potential flow elsewhere. This course develops both areas of fluid dynamics and then approaches the viscous airfoil design problem. The technique is indirect; shape of the

airfoil is computed from a potential flow distribution which is consistent with a desired boundary layer development. The design of an airfoil with specified characteristics will be required of each student in the course. An efficient computer program developed for low speed airfoils is available for this purpose.

Prerequisite: ESC 365

ESC 362 Glider Design (NEW)

Students will explore the design process and document the design of a model glider in a notebook. In parallel, aerospace design will be discussed and illustrated; design goals, synthesis, parametric studies, etc. Selected designs will be discussed to explain their design rationale.

Prerequisite: ESC 364

Spring, alternate years, 3 credits (not offered in 1985-86)

ESC 365 Design of Mechanisms (NEW)

Motion analysis using vector mathematics, complex variables, and graphical methods. Geometry of motion: centrodes, analytical representation of plane motion, the Euler Savary equation, and Bobillier's theorem. Linkages and cams. Synthesis of mechanisms: two- and three-position syntheses, Freudenstein's method and optimal synthesis methods.

Prerequisite: ESC 310

Spring, alternate years, 3 credits (not offered in 1985-86)

ESC 395 Jet Propulsion Systems (NEW)

Basic principles of operation and performance of jet propulsion systems (air breathing and rocket). Analysis of flow through rotating machines, combustors, inlets, and nozzles. Component matching. Circle analysis of turbojet, turbofan, and ramjet engines. Liquid and solid propellant rockets. (A technical elective.)

Prerequisites: ESC 301 and 364
Spring, 3 credits

ESC 397 Air Pollution and Its Control (REVISED)

A detailed introduction to the causes, effects, and control of air pollution. The pollutants discussed include carbon monoxide, sulfur oxides, nitrogen oxides, ozone, hydrocarbons, and particulate matter. The emissions of these gases from natural and industrial sources and the principles used for controlling the latter are described. The chemical and physical transformations of the pollutants in the atmosphere are investigated and the phenomena of urban smog and acid rain are discussed. Crosslisted with ATM 397.

Prerequisites: PHY 102; CHE 131 or 141; upper-division standing

ESC 398 Thermodynamics II (REVISED)

Review of the fundamentals of thermodynamics. Applications of

thermodynamics to the analysis of power cycles including Rankine cycles, internal combustion engines, turbojets, and rockets. Consideration of refrigeration cycles including heat pumps. Discussion of combustion, chemical equilibrium, and alternative energy systems. (A technical elective.)

ESC 410 Machine Design II (NEW)

This course gives the student experience with design methods in mechanical engineering. It reinforces the structural design and machine design content of the introductory machine design course and by emphasizing guided project work it eases the transition to the more independent work of the senior design project.

Prerequisite: ESC 310

Fall, 3 credits

ESC 440 Engineering Design I (REVISED)

Prerequisites: ESC 312 and 317; CSE 111 or 114

Technology and Society

Changes in expected semester of course offerings: EST 191, 194, 310, 340, and 361 will not be offered in Spring 1985. EST 390 and 420, listed as fall courses, will be offered in Spring 1985. EST 330 and 340 have been deleted from the curriculum.

Revised Minor Requirement

HIS 135 and 136 are no longer approved courses for the minor.

EST 300 Microcomputers in Science and Mathematics for Educators (NEW)

Effective interactive learning approaches include the use of: computer simulations, microworlds, problem solving via programming, computer-assisted science laboratories, and applications courseware. Course will also involve study of design and evaluation techniques. Primarily designed for future secondary science and mathematics teachers, the focus of this course is on the use of microcomputers in classrooms and laboratories. (An open elective.)
Prerequisite: EST/CSE 100
Spring, 3 credits

EST 310 The Exploration of Space (REVISED)

Prerequisites: One year of college mathematics; upper-division standing

EST 360 Science, Technology, and Arms Control (REVISED)

Only the title has been changed.

EST 370 Nuclear Proliferation: Technology and Politics (NEW)

The proliferation of nuclear technology employable for both peaceful and military purposes, the threat it poses to world political and military stability, and the responses made by governments and international organizations. The topic requires an ability to read a diverse array of technical material for which students will need background in both physical and social sciences. (An open elective.) Crosslisted with POL 370.
Prerequisites: Upper-division standing; permission of instructor
Spring, 3 credits

EST 393 Production and Operation Analysis (NEW)

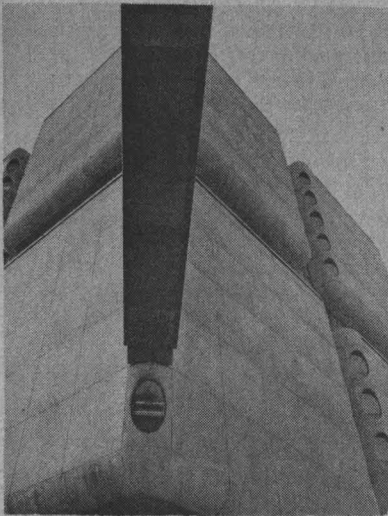
The design, planning, and organizing of resources to develop and manufacture new products or to bring new services on line. The factors affecting product and process design, project planning, facility location and layout, operations scheduling, job analysis, inventory control, material requirements planning, and quality control will be identified and related through analytical and modeling techniques. (A technical elective.)
Prerequisites: Upper-division standing; ESC or ESE or ESG major
Spring, 3 credits

EST 420 Seminar on Information-Age Society (NEW)

This seminar course considers the characteristics and current trends in telecommunication technology. The communication infrastructure of a major urban area leads to the study of interactive cable television, computer generation of speech, and industrial and governmental applications. On a national scale, satellite and fiber optic communications are considered with both civilian and military implications. (An open elective.)
Prerequisite: EST 320
Fall, 3 credits

EST 441 Business Policy, Formulation, and Administration (REINSTATED)

This course focuses on the problems faced by the general manager in business planning, forecasting, and decision making. Typical case studies relating to establishing objectives and formulating strategies are assigned as a basis for a discussion-oriented class session. Analyses of financial statements, production planning, and organizational structures are involved in arriving at recommendations for action. (An open elective.)
Prerequisites: Any three required courses in the business minor program; permission of instructor
Spring, 3 credits
Note: This course is referred to in the business minor requirements as AMS 441.



Health Sciences Center

School of Allied Health Professions

Students may register for the following course using either the School of Allied Health Professions course number, HAS 190, or the School of Nursing course number, HNI 190.

HAS/HNI 190 Introduction to the Health Professions

Presents topics of interest to students considering a career as a health professional. Introduces basic concepts of health, factors influencing health care, health care settings, and selected health professions. Professional roles assumed by allied health professionals, nurses, and social workers are explored. Directs students in examining personal, cultural, and social values as they relate to the implementation of these roles.

Spring, 1 credit

Thursday, 2:00-3:30

(C. Mereday, P. Gorska, A. Campos)

The following School of Nursing course will be open to non-nursing and early accepted nursing students. Students wishing to take this course must call Prof. Rose Meyers at 444-3200 for permission to enroll.

HNI 290 Introduction to Nursing (NEW)

This course is designed as an introduction to nursing for students who are considering a career in nursing. The student will be oriented to the nature and scope of the profession of nursing, settings where nursing is practiced, and selected skills basic to nursing practice.

Fall and spring, 2 credits

Tuesday, 10:00-12:00

(R. Meyers)

School of Social Welfare

The following social welfare course will be open to non-social welfare students in Spring 1985. Students wishing to take these courses must call the Office of Admissions at 124-3141 for permission to enroll. Other courses may be available by the beginning of the spring semester; see list in HSC Level II, Room 091.

HWC 325 Women and Health Care

Identifies the systematic lack of quality in care offered to historically oppressed groups. Identifies rights and special needs of women as patients, family members, and citizens at large, which are infringed upon by laws, administrative policies, professional attitudes, and lack of programs. Seeks to develop new models of care for women which are based on peer control and reviews.

Spring, 3 credits

Wednesday, 12:45-3:15

(E. Polansky)

Anatomical Sciences

HBA 325 Anatomical and Biological Illustration (NEW)

An introduction to human anatomy for the studio artist who is interested in biological illustration. The course will provide an introduction to techniques of illustration utilizing as subject matter the live model, skeleton, prosection, and cadaver dissection. Details of human anatomy will often be discussed by comparison of humans with other vertebrates. Lectures will precede each lab/studio class and involve proportion, topographic, and surface anatomy; bone-muscle relationships and human movement; comparative form of visceral organs; and the comparative anatomy of humans and higher primates.

Prerequisite: ARS 152 or BIO 101 or 151

Fall, 2 credits

Biomedical Sciences

HBI 398, 399 Research Projects in Biomedical Sciences

An independent research project under faculty supervision, with emphasis on the principles of experimental design, data collection, evaluation of findings, and reporting of results. Project report required. The course may be repeated.

Prerequisites: Laboratory experience; permission of supervising instructor
Fall (398) and spring (399), 2 to 4 credits each semester



Marine Sciences Research Center

Changes in expected semester of course offerings: MAR 101 will be offered each fall semester. MAR 333 will be offered in Spring 1985.

MAR 302 Marine Microbiology and Microbial Ecology (REVISED)
This is now a 3-credit course.

MAR 333 Coastal Oceanography (REVISED)

Aspects of physical, biological, chemical, and geological processes which characterize coastal marine environments. Natural phenomena, including upwelling, particle transport, benthic/pelagic coupling, and barrier island processes will be discussed, as well as anthropogenic impacts on the Coastal Ocean.

Prerequisite: MAT 127 or 132 or 142. BIO 151, 152 or CHE 132 or GEO 102, 112 or 122 or PHY 102 or 104 recommended

MAR 487 Research in Marine Sciences (NEW)

A student may conduct research for credit. The students must submit a research proposal for approval before the beginning of the credit period and a written report of the work before the end of the credit period. May be repeated once.

Prerequisite: Written permission of instructor and of MSRC Undergraduate Studies Committee
1 to 3 credits

PROGRAM PLANNING WORKSHEET

50 - MINUTE PERIODS

75 - MINUTE PERIODS

50 - MINUTE PERIODS				FINAL EXAMINATIONS			75 - MINUTE PERIODS										
HOUR	MONDAY	WEDNESDAY	FRIDAY	Course	Day	Period	HOUR	TUESDAY	THURSDAY								
8:30 — 9:20							8:30 — 9:45										
9:30 — 10:20							9:55 — 11:10										
10:30 — 11:20							11:20 — 12:35										
11:30 — 12:20							12:45 — 2:00										
12:30 — 1:20							2:15 — 3:30										
1:30 — 2:20							3:45 — 5:00										
2:30 — 3:20							5:30 — 6:45										
3:30 — 4:45	MW			Alternate Times			6:45 — 7:00										
			<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="border: 1px solid black; padding: 2px;">3:30 — 4:20</td> <td style="border: 1px solid black; padding: 2px; text-align: center;">M</td> <td style="border: 1px solid black; padding: 2px;">W</td> <td style="border: 1px solid black; padding: 2px;">F</td> </tr> <tr> <td style="border: 1px solid black; padding: 2px;">4:30 — 5:20</td> <td></td> <td></td> <td></td> </tr> </table>	3:30 — 4:20	M	W	F	4:30 — 5:20							7:00 — 8:15		
3:30 — 4:20	M	W	F														
4:30 — 5:20																	
5:30 — 6:45	MW						8:30 — 9:45										
7:00 — 8:15			<div style="border: 1px solid black; width: 100%; height: 100%; display: flex; align-items: center; justify-content: center;"> X </div>														
8:30 — 9:45																	