

Undergraduate Bulletin Supplement

For Fall Semester, 1986 Compiled in March 1986

with

Prime Time Program

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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 1985-87 UNDERGRAD-UATE 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 1985) are printed in the Supplement. Not every course listed in this issue of the Supplement, however, will be offered in Fall 1986; those actually being offered appear in the Class Schedule. The Supplement announces what courses that are listed in the BULLETIN as being available in Fall 1986 are not scheduled for that semester (as of March 11). By the time the fall semester begins, however, a few of these courses may become available. Special topics being offered in Fall 1986 are also announced in the Supplement.

Courses that do not appear in the BULLETIN at all are designated "NEW" in the Supplement, 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.

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Stony Brook



Prime Time Program

Prime Time is Your Time April 9—April 18

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, April 9-18. 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

Speaker/Discussion: "Creating Your Own Career": Roman Foster, AIM graduate and producer of "Diggers," talks about a career in film. Thurs., Apr. 17, 3:30

AIM Conference Room, Library W3520

Advising: AIM staff are available daily by appointment between 10:00-3:00

Africana Studies

Social & Behavioral Sciences S245 246-6737

Advising: Offices are in SBS Wed., Apr. 9 and 16 1:00-4:00, P. Kunhikannan/N202 12:45-1:45, C. Brown/S255 2:55-3:30, C. Brown/S255 Thurs., Apr. 10 and 17 10:00-12:00, P. Kunhikannan/N202 11:30-1:00, E.F. Dube/S251 10:00-11:00, L. Owens/S247 1:00-2:30, L. Owens/S247 Fri., April 11 and 18 12:45-1:45, C. Brown/S255 2:55-3:30, C. Brown/S255 Mon., Apr. 14 12:45-1:45, C. Brown/S255 2:55-3:30, C. Brown/S255 Tues., Apr. 15 10:00-11:00, L. Owens/S247 11:30-1:00, E.F. Dube/S251 1:00-2:00, L. Owens/S247

Anthropology

Social & Behavioral Sciences S507 246-7726

Open House: "Multi-Media Event in Anthropology" Music, slides, exhibits Tues., Apr. 15, 2:00-4:00 SBS 5th floor lobby Advising: Offices are in SBS Wed., Apr. 9
2:00-4:30, E. Stone/S507
Mon. Apr. 14
1:00-4:30, E. Stone/S507
Tues, Apr. 15
1:00-5:00, L. Martin/N545
Wed., April 16
9:00-12:00, L. Martin/N545
Fri., Apr. 18
1:00-4:30, E. Stone/S507

Art

Fine Arts 2223 246-7070, 7068

Open House:

Tues., Apr. 15, 1:00-3:00 Fine Arts, 2nd floor lobby (Art side)

Lecture: "Altered Persona and Some Other Bright Ideas," by Prof. T. Buonagurio, in conjunction with her exhibit

Tues., Apr. 15, 12:00 Fine Arts Gallery **Exhibition:** Toby Buonagurio, Selected

Works Tues.-Sat., Mar. 18-Apr. 26, 12:00-4:00, Fine Arts Gallery

Advising: Offices are in Fine Arts Wed., Apr. 9 and 16 2:00-4:00, J. Guilmain/2226A Thurs., Apr. 10 and 17 10:00-11:00, J. Rubin/4213 1:00-5:00, M. Pekarsky/2221 Mon., Apr. 14 2:00-4:00, J. Guilmain/2226A Tues., Apr. 15 10:00-11:00, J. Rubin/4213 1:00-4:00, J. Guilmain/2226A 1:00-5:00, M. Pekarsky/2221

Biochemistry Biological Sciences

Life Sciences 130 246-5032

Life Sciences lobby

Advising Fair and Open House: For Prospective Majors Wed., Apr. 9, 1:00-3:30

Advising

Biological Sciences and Biochemistry faculty office hours posted in Life Sciences 130.

Chemistry Engineering Chemistry

Chemistry 104 246-5050

Discussion: "Opportunities in Chemistry" (Guest speakers from industry) Thurs., Apr. 10, 12:00-5:00 University Commons

Advising: Offices are in Chemistry Wed., Apr. 9
9:45-11:45 S. Rokita/521
4:00-5:00, C. Burrows/741
Fri., Apr. 11
1:15-3:30, R. Kerber/104
Mon., Apr. 14
10:00-12:00, C. Allen/320 Chem Lab
Tues., Apr. 15
9:30-11:00, M. Kandel/735
12:00-1:00, S. Anderson/567
Wed., Apr. 16
3:00-4:00, F. Fowler/767
Thurs., Apr. 17
11:00-12:00, J. Lawher/647
1:00-2:00, A. Haim/657

Comparative Literature, Classics, Judaic Studies, and Humanities

Library E4326, E4309 246-6059, 6057

Open House:

Mon., Apr. 14, 12:00-3:00 Library 3rd floor commons

Advising: Offices are in Library Wed., Apr. 9 10:30-11:30, D. Petrey/E4310 10:30-11:45, R. Hoberman/E4321 11:45-1:00, A. Godfrey/E4322 1:00-4:00, C. Kessner/E4323 Thurs., Apr. 10 and 17 11:30-12:50, R. Goldenberg/E4330 1:00-2:00, R. Goldenberg/E4330 1:00-2:00, H. Gross/4328 Fri., Apr. 11 and 18 11:45-1:00, A. Godfrey/E4322 Mon., Apr. 14 10:30-11:30, D. Petrey/E4310 10:30-11:45, R. Hoberman/E4321 11:45-1:00, A. Godfrey/E4322 2:00-3:00, C. Lasker/E4326 2:00-3:00, K. Gabbard/E4316 Tues., Apr. 15 11:30-12:50, R. Goldenberg/E4330 1:00-2:00, R. Goldenberg/E4330 1:00-2:00, H. Gross/E4328 6:00-6:45, C. Lasker/E4326 Wed., Apr. 16 10:30-11:30, D. Petrey/E4310 10:30-11:45, R. Hoberman/E4321 11:45-1:00, A. Godfrey/E4322 1:00-4:00, C. Kessner/E4323 5:00-6:00, K. Gabbard/E4316

Earth and Space Sciences

Earth and Space Sciences 255 246-6541

Discussion and Reception: "Earth and Space Sciences: Careers in Geology and Astronomy" Wed., Apr. 16, 5:00-6:00 ESS 123

Advising: Offices are in ESS Wed., Apr. 9 and 16 3:00-5:00, C. Thurber, GEO/356 Thurs., Apr. 10 and 17 12:00-2:00, K.R. Cercone, GEO/220 2:30-4:00, C. Thurber, GEO/356 2:30-4:00, J. Hardorp, AST/440 Fri., Apr. 11 2:00-3:00, K.R. Cercone, GEO/220 2:30-4:00, J. Hardorp, AST/440 Mon., Apr. 14 3:00-5:00, C. Thurber, GEO/356 Tues., Apr. 15 12:00-2:00, K.R. Cercone, GEO/220 2:30-4:00, J. Hardorp, AST/440 Fri., Apr. 18 2:00-3:00, K.R. Cercone, GEO/220

Economics

Social & Behavioral Sciences S601 246-5078

Panel Discussion: "Being an Economics Major" Wed., Apr. 9, 3:00 SBS N603

Open House and Poster SessionWed., Apr. 9, 4:00
SBS 6th floor lobby

Advising: Offices are in SBS Wed., Apr. 9 and 16 9:00-11:00, P. Gertler/S625 11:00-12:00, B. Dawes/S641 1:30-2:30, T. Coleman/S629 2:00-3:00, C. Staley/N639 Thurs., Apr. 10 and 17 9:30-11:30, M. Kristein/N641 1:15-2:15, M. Zweig/S645 2:30-3:30, J. Anton/N645 Mon., Apr. 14 10:30-11:30, L. Locay/N651 1:30-2:30, T. Coleman/S629 2:00-3:00, C. Staley/N639 2:00-3:15, A. Nairay/N607 Tues., Apr. 15 9:30-11:30, M. Kristein/N641 1:15-2:15, M. Zweig/S645 2:30-3:30, J. Anton/N645 2:30-3:30, B. Dawes/S641

English

Humanities 258 246-5091

Open House:

Wed., Apr. 9, 1:00-2:00 Faculty Lounge, Humanities 283

Discussion: "Literature and Writing Studies Abroad," S. Guthridge Wed., Apr., 9, 2:00-3:00 Poetry Center, Humanities

Reading: "Readings by Faculty and Students"
Wed., Apr. 9, 11:30-1:00
Poetry Center, Humanities

Advising: Offices are in Humanities Wed., Apr. 9 10:00-2:00, S. Squier/258 10:00-2:00, R. Jenkins/259 2:00-4:00, H. Goldberg/274 Thurs., Apr. 10 10:00-2:00, S. Squier/258 2:00-4:00, H. Goldberg/274 Fri., Apr. 11 10:00-2:00, S. Squier/258 10:00-2:00, R. Jenkins/259 Mon., Apr. 14 10:00-2:00, R. Jenkins/259 2:00-4:00, H. Goldberg/274 Tues., Apr. 15 10:00-2:00, S. Squier, 258 2:00-4:00, H. Goldberg/274 Wed., Apr 16 and Fri., Apr. 18 10:00-2:00, R. Jenkins/259 Thurs., Apr. 17 10:00-2:00, S. Squier/258

Federated Learning Communities

Educational Communications Center 237 246-6107, 8611

Discussion: "Introduction to the 1986-87 Program: 'Issues in Management and Business' "Thurs., Apr. 10, 11:00 Educational Communications Center 237

Advising: Offices are in ECC 237 Daily, 9:00-5:00

Foreign Languages

Open House:

Mon., Apr. 14, 12:00-3:00 Library 3rd floor commons

French and Italian Library N4004-4008 246-8676

Germanic and Slavic Languages Library N3009 246-6830, 6831

Hispanic Languages Library N3017 246-5685, 5691

Advising: Offices are in Library Wed., Apr. 9
2:00-2:50, J. Giordano/N3018
2:00-4:00, H. Pato/N3029
2:00-5:00, A. Montoro/N3027
Thurs., Apr. 10 and 17
11:00-12:00, M.L. Nunes/N3028
1:00-2:00, F. Klein-Andreu/N3014
1:00-2:30, L. Deutsch/N3026
2:00-4:00, R. de la Campa/N3013-17
2:00-4:00, H. Pato/N3029
4:00-5:00, G. Şabat-Rivers/N3025
Mon., Apr. 14
2:00-2:50, J. Giordano/N3018

Tues., Apr. 15
11:00-12:00, M.L. Nunes/N3028
1:00-2:00, F. Klein-Andreu/N3014
1:00-2:30, L. Deutsch/N3026
2:00-4:00, R. de la Campa/N3013-17
4:00-5:00, G. Sabat-Rivers/N3025
4:00-5:00, E. Rivers/N3015
Wed., Apr. 16
2:00-2:50, J. Giordano/N3018
2:00-4:00, H. Pato/N3029
2:00-5:00, A. Montoro/N3027

History

Social & Behavioral Sciences S317 246-6500

Discussion: "Majoring or Minoring in History: Auntie Helen Plans Your Life" Wed., Apr. 9, 11:00-1:00 SBS N303

Advising: Offices are in SBS Wed., Apr. 9 10:40-11:40, P. Alin/N303 11:00-1:00, H. Lemay/N303 1:00-3:00, M. Barnhart/N321 1:30-4:00, J. Pratt/S351 Thurs., Apr. 10 and 17; Tues., Apr. 15 12:15-1:15, H. Lemay/S317 Fri., Apr. 11 and 18 10:40-11:40, P. Alin/S333 10:45-12:30, H. Lemay/S317 Mon., Apr. 14 10:40-11:40, P. Alin/S333 2:00-3:00, M. Barnhart/N321 Wed., Apr. 16 10:40-11:40, P. Alin/S333 10:45-12:30, H. Lemay/S317 1:00-3:00, M. Barnhart/N321 1:30-4:00, J. Pratt/S351

International Programs

Central Hall 101 246-7711

Discussion: "Study Abroad: How to Apply and Where to Go" Wed., Apr. 16, 2:00-4:00 Central Hall 101

Advising: Offices are in Central Hall Daily advising, M. Giron

Linguistics

Social & Behavioral Sciences N511 246-3452

Open House: Thurs., Apr. 10, 4:00 SBS N514

Advising: Offices are in SBS Wed., Apr. 9 and 16
12:00-2:00, D. Finer/N513
12:30-1:30, S.N. Sridhar/N527
1:00-3:00, E. Broselow/N525
2:00-3:00, M. Aronoff/N509
Thurs., Apr. 10 and 17
11:30-12:30, S.N. Sridhar/N527
2:30-4:00, A. Carton/N517
Mon., Apr. 14
10:00-12:00, A. Carton/N517
1:00-3:00, S. Ansara/N521
2:00-3:00, M. Aronoff/N509

Tues., Apr. 15 9:30-12:00, S. Ansara/N521 10:00-11:00, M. Aronoff/N509 11:30-12:30, S.N. Sridhar/N529 1:00-2:00, E. Broselow/N525 1:00-2:00, D. Finer/N513

Mathematics

Mathematics P143 246-6520

Open House and Film: "Mathematics and Technology" by Prof. Geller Thurs., Apr. 10, 3:30-5:00 Mathematics P131

Advising: Faculty are available in Mathematics P143
Wed., Apr. 9 and 16
12:50-2:50
Thurs., Apr. 10 and 17
1:00-2:20
Fri., Apr. 11 and 18
12:50-2:50
Mon., Apr. 14
12:50-2:50
Tues., Apr. 15
1:00-2:20

Music

3304 Fine Arts Center 246-5672

Discussion: "The Undergraduate Music Program: Questions and Answers"
Thurs., Apr. 10, 4:30-6:00
Fine Arts, 1st floor lounge

Advising: Offices are in Fine Arts Wed., Apr. 9 and 16
11:00-12:00, E. Linfield/3324
1:00-3:00, A. Rubin/3332
2:15-3:15, S. Fuller/3328
Thurs., Apr. 10 and 17
11:00-1:00, P. Winkler/3322
Fri., Apr. 11 and 18
2:00-3:00, A. Rubin/3332
Mon., Apr. 14
1:00-2:30, E. Linfield/3324
1:15-2:15, S. Fuller/3328
Tues., Apr. 15
11:00-2:00, P. Winkler/3322

Philosophy

Old Physics 221 246-6560, 6566

Discussion: "Are We Animals?" D. Abram and A. Weston Thurs., Apr. 17, 12:30 Old Physics 249

Discussion: "The Value of Majoring in Philosophy"
Thurs., Apr. 17, 1:30
Old Physics 249

Open House: Thurs., Apr. 17, 2:30-4:30 Old Physics 218 Advising: Offices are in Old Physics Wed., Apr. 9 2:00-3:30, P. Heelan/223 4:00-6:00, D. Allison/232 Thurs., Apr. 10 9:00-10:00, C. Martin/248 2:30-3:30, M. Simon/256 Fri., Apr. 11 and 18 11:00-1:00, R. Nolan/221 Mon., Apr. 14 1:00-3:00, M. Rawlinson/247 4:30-6:00, D. Howard/239 Tues., Apr. 15 1:00-1:30, C. Martin/248 2:30-4:00, W. Watson/231 Wed., Apr. 16 1:00-2:30, D. Howard/239 7:00-8:00, H. Silverman/237 Thurs., Apr. 17 1:30-2:30, R. Nolan/249 2:30-4:30, R. Nolan/218

Physics

Physics P110 246-6580

Discussion: "Careers in Physics" Wed., Apr. 9, 2:00-3:30 Physics C120

Advising: Offices are in Grad Physics Wed., Apr. 9 and 16
9:30-10:30, H.R. Muether/A102
10:30-11:30, R.A. Mould/A109
Thurs., Apr. 10 and 17
9:30-10:30, R.A. Mould/A109
1:30-3:30, H.R. Muether/A102
Fri., Apr. 11 and 18
9:30-10:30, H.R. Muether/A102
10:30-11:30, R.A. Mould/A109
Mon., Apr. 14 and Tues., Apr. 15
1:30-3:30, H.R. Muether/A102

Political Science

Social & Behavioral Sciences S747 246-7018

Open House: Wed., Apr. 9, 1:00-3:00 SBS 7th floor lobby

Advising: Offices are in SBS Wed., Apr. 9 9:30-10:00, A. Cover/N711 11:30-12:30, E. Brodkin/S733 1:00-2:00, J. Enelow/S723 1:30-2:00, C. Cameron/S731 Thurs., Apr. 10 10:00-10:30, P. Baumann/N709 2:00-2:30, M. Schneider/N725 11:30-12:00, M. Lodge/N717 1:00-3:00, S. lyengar/S715 Mon., Apr. 14 10:00-11:00, A. Cover/N711 11:00-12:00, M. Travis/S747 1:30-2:00, H. Scarrow/S743 2:00-2:30, J. Segal/N747 2:00-3:00, C. Cameron/S731 2:00-3:00, J. Enelow/S723 5:00-5:30, F. Myers/S711 Tues., Apr. 15 10:30-11:30, P. Baumann/N709 1:30-2:00, M. Schneider/N725 2:00-2:30, H. Norpoth/N731

Wed., Apr. 16
10:00-11:00, M. Travis/S747
10:30-11:30, M. Lodge/N717
1:00-1:30, H. Scarrow/S743
1:30-2:00, J. Segal/N747
4:30-5:00, F. Myers/S711
5:00-6:00, R. Pijacki/N743
Thurs., Apr. 17
10:00-10:30, P. Baumann/N709
12:30-2:30, J. lyengar/S715
Fri., Apr. 18
11:30-12:00, M. Lodge/N717
1:30-2:00, H. Norpoth/N731

Psychology

Psychology B 115 246-3300

Open House: "Opportunities for the Psychology Major" Mon., Apr. 14, 2:00-4:00 Psychology A 257

Workshop:

"Careers in Psychology" Wed., Apr. 16, 7:30-9:30 Psychology A 137

Advising: Offices are in Psychology B Wed., Apr. 9 and 16
10:30-12:30, R. Finke/250
Thurs., Apr. 10 and 17
4:00-6:00, L. Collins/320
Fri., Apr. 11 and 18
1:30-3:30, M. Levine/115
Mon., Apr. 14
9:00-11:30, R. Liebert/311
10:30-12:30, D. Emmerich/203
Tues., Apr. 15
10:00-12:00, R. Friend/242
3:30-5:30, J. Wood/338

Religious Studies

Old Physics 103 246-7783

Open House:

Wed., Apr. 9, 1:00-3:00 Old Physics 132

7:30-8:30, P. Heelan/223

Advising: Offices are in Old Physics Wed., Apr. 9 and 16 12:00-1:00, P. Heelan/223 12:00-1:30, S.B. Park/109 1:00-3:00, P. Heelan/103 Thurs., Apr. 10 and 17 11:30-12:30, T. Altizer/101 11:30-12:50, R. Goldenberg/Library 1:00-2:00, R. Goldenberg/Library E4430 1:00-3:00, P. Manchester/107 1:00-3:00, S. Murata/102 2:30-4:30, W. Chittick/102 4:00-5:00, T. Altizer/101 Fri., Apr. 11 and 18 12:00-1:30, S.B. Park/109 Tues., Apr. 15 11:30-12:30, T. Altizer/101 11:30-12:50, R. Goldenberg/Library 1:00-2:00, R. Goldenberg/Library E4430 1:00-3:00, P. Manchester/107 1:00-3:00, S. Murata/102 2:30-4:30, W. Chittick/102 4:00-5:00, T. Altizer/101

Returning Student Network

Office of Undergraduate Studies Center for Academic Advising Library E3310 246-3520

Advising Fair:

Wed:, Apr. 9, 12:00-3:00 Library W3510, Student Lounge

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

Open House:

Tues., Apr. 15, 2:30-4:30 SBS S207

Advising: Offices are in SBS Wed., Apr. 9 and 16 9:00-11:00, B. Baskin/N251 10:00-12:00, S. Sternglanz/S215 1:00-2:00, S. Sternglanz/S215 1:00-2:30, G. Fouron/S227 3:00-4:00, J. Kuchner/S231 Thurs., Apr. 10 and 17 9:00-10:30, E. Seifman/S203 9:30-10:00, J. Wishnia/S213 11:30-12:00, J. Wishnia/S213 Fri., Apr. 11 and 18 9:00-11:00, B. Baskin/N251 Mon., Apr. 14 1:00-2:30, G. Fouron/S227 3:00-4:00, J. Kuchner/S231 Tues., Apr. 15 9:00-10:30, E. Seifman/S203 9:30-10:00, J. Wishnia/S213 10:00-11:00, J. Kuchner/S231 11:30-12:00, J. Wishnia/S213 2:30-4:30, S.M. Hu/S219

Sociology

Social & Behavioral Sciences S401 246-6720

Lecture: "The Past, Present, and Future of Sociology at Stony Brook" Thurs., Apr. 10, 4:00 SBS 4th floor

Discussion: Professors L. Coser, J. Gagnon, H. Selvin, and J. Tanur Thurs., Apr. 10, 4:30 SBS 4th floor

Wed., Apr. 9 9:00-10:00, J. Tanur/N427 2:30-4:30, K. Feldman/N431 Thurs., Apr. 10 2:30-4:30, L. Coser/S429 Fri., Apr. 11 and 18 10:00-11:00, S. Cole/N411 Mon., Apr. 14 1:30-3:00, M. Granovetter/N451 2:30-4:00, K. Feldman/N431

Advising: Offices are in SBS

Tues., Apr. 15 11:20-12:20, J. Tanur/N427 2:30-4:00, L. Coser/S429 Wed., Apr. 16 10:00-11:00, M. Granovetter/N451 Thurs., Apr. 17 9:00-10:00, J. Tanur/N427 2:30-4:00, L. Coser/S429

Theatre Arts

Fine Arts II 3046 246-5670

Open House:

Tues., Apr. 15, 3:00 Theatre III, Room 1002

Advising: Offices are in Fine Arts Thurs., Apr. 10 and 17 9:00-12:00, S. Insull/3016 10:00-12:00, T. Neumiller/3006 11:45-12:45, L. Auerbach/3008 2:00-3:00, S. Insull/3016 Tues., Apr. 15 10:00-12:00, T. Neumiller/3006 11:20-12:00, S. Insull/3016 11:45-12:45, L. Auerbach/3008 1:00-3:00, S. Insull/3016 Advising also available by appointment

College of Engineering and Applied Sciences

Seminar: "First Annual Engineering Seminar"—Professional engineers covering topics of interest to all CEAS majors. Sponsor: Stony Brook Student Chapter of the National Society of Professional Engineers Thurs., Apr. 10, 5:30-8:30 Engineering 143

Applied Mathematics and Statistics

Mathematics P139A 246-6773

Discussion: "Majoring in Applied Mathematics"
Mon., Apr. 14, 12 noon
Tues., Apr. 15, 12 noon
Mathematics, P131

Advising: Offices are in Mathematics Wed., Apr. 9 and 16
1:30-3:15, H.K. Liu/I-114
Thurs., Apr. 10 and 17
10:00-12:00, T. Hagstrom/I-105
2:00-4:00, E. Weitzman/P-140
Fri., Apr. 11
10:00-12:00, H.K. Liu/I-114
Mon., Apr. 14
10:00-11:45, T. Hagstrom/I-105
Tues., Apr. 15
2:00-4:00, E. Weitzman/P-140

Computer Science

Lab Office Building 1401 246-7090

Acceptance into the CSE Major: See BULLETIN, page 205.

Advising: Offices are in Lab Office Building Wed., Apr. 9 and 16 10:30-12:00, G. Buckley/1428 1:00-2:30, D. Warren/1422 1:30-3:00, G. Stark/1414 3:00-4:00. H. Badr/1424 4:00-5:00, J. Hsiang/1419 Thurs., Apr. 10 and 17 2:30-4:00, M. Srivas/1425 3:00-4:00, S. Smolka/1423 3:00-4:00. H. Badr/1424 4:00-5:00, A. Giacalone/1416 Fri., Apr. 11 and 18 11:00-12:00, H. Badr/1424 1:00-2:00, M. Kifer/1429 1:30-3:00. E. Stark/1414 Mon., Apr. 14 12:00-1:00, D. Warren/1422 3:00-4:00, H. Badr/1424 4:00-5:00, J. Hsiang/1419 Tues., Apr. 15 10:30-12:00, G. Buckley/1428 12:00-1:00, M. Kifer/1429 2:30-4:00, M. Srivas/1425 3:00-4:00, S. Smolka/1423 3:00-4:00, H. Badr/1424 4:00-5:00, A. Giacalone/1416

Acceptance into an Engineering Major: Electrical Engineering, Mechancial 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. 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 273 246-6757

Open House and Discussion:

"The Electrical Engineering Curriculum and Acceptance into the ESE Major" Tues., Apr. 15, 12:00-1:00 Light Engineering 202

Advising:

Light Engineering
Wed., Apr. 9
8:30-12:30, H.S. Don/267
Thurs., Apr. 10
10:00-2:00, C.C. Yeh/267
Fri., Apr. 11
9:00-1:00, J. Hantgan/267
Mon., Apr. 14
8:00-12:00, T. Robertazzi/267
Tues., Apr. 15
8:30-12:30, H. Dhadwal/267

Engineering Science

Engineering 314 246-6759

Open House and Discussion:

"Engineering Science Curriculum and Career Opportunities" Wed., Apr. 9, 4:00-5:30 Engineering 301

Advising: Offices are in Engineering Wed., Apr. 9 and 16 3:30-4:30, M. Dudley/318 Thurs., Apr. 10 and 17 12:00-1:00, J. Broughton/209 Mon., Apr. 14, 3:30-4:30, M. Dudley/318 Tues., Apr. 15 12:00-1:00, J. Broughton/209

Mechanical Engineering

Light Engineering 113 246-6771

Discussion and Open House:

"Choosing the Mechanical Engineering Major" Wed., Apr. 9, 11:00-2:00 Light Engineering, Room 107

Advising: Offices are in Heavy Engineering (HE) and Light Engineering (LE) Wed., Apr. 9 and 16; Mon., Apr. 14 11:40-1:00, L.S. Wang/HE-214 2:00-3:00, M. Mayourian/LE-157 Thurs., Apr. 10 and 17; Tues., Apr. 15 1:00-2:30, A. Rubenstein/LE-141 4:00-5:00, J. Fox/LE-161

Minor in Technology and Society

Engineering 210 246-8427

Open House: Demonstration of Microcomputers, Simulations, and Programming Tues., Apr. 15, 10:00-12:00 Engineering 214

Advising: Offices are in Engineering Wed., Apr. 9 8:30-4:30, A. Gilmore/127 9:00-12:00, E.J. Piel/220 9:00-3:00, D. Hefferin/212 1:00-3:00, S. Reaven/218 Thurs., Apr. 10 10:00-1:00, S. Spanier/220 11:00-1:00, J. Truxal/210 1:00-3:00, T. Liao/220 2:30-4:00, D. Ferguson/218 Fri., Apr. 11 and 18 8:30-4:30, A. Gilmore/127 9:00-3:00, D. Hefferin/212 1:00-3:00, S. Reaven/218 Mon., Apr. 14 9:00-11:00, M. Visich/100 9:00-12:00, E.J. Piel/220 11:00-1:00, J. Truxal/210

Tues., Apr. 15
9:00-11:00, M. Visich/100
10:00-1:00, S. Spanier/220
1:00-3:00, T. Liao/220
2:30-4:00, D. Ferguson/218
Wed., Apr. 16
8:30-4:30, A. Gilmore/127
9:00-3:00, D. Hefferin/212
Thurs., Apr. 17
10:00-1:00, S. Spanier/220
1:00-3:00, E.J. Piel/220
1:00-3:00, T. Liao/220
2:30-4:00, D. Ferguson/218

W. Averell Harriman College for Policy Analysis and Public Management

Old Physics 314 246-8280

Open House:

Tues., Apr. 15, 3:00-5:00 Old Physics 306

Advising:

Daily basis, 10:00-4:00 Old Physics 314

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

School of Nursing

Health Sciences Center L-2 242 444-3200

Information and Advising Session: 1st Wednesday of each month, 3:00-5:00

HSC, L-2, Office of Student Affairs

Discussion: "Consider a Career in Nursing" Fri., Apr. 11, 1:00-2:00 HSC, L-2, School of Nursing

School of Social Welfare

Health Sciences Center L-2 091 444-3170

Discussion: "Consider a Career in Social Welfare: Educational Preparation and Career Opportunities" Wed., Apr. 9, 5:30-7:30 HSC L-2 089 Faculty Lounge

Advising:

For information on advising hours call 444-3170, 2138

General Academic Information

University Core Curriculum

The University's new general education requirements go into effect in Fall 1986 for students matriculating as freshmen in the 1986-87 academic year. The requirements for these students, called the Core Curriculum Distribution and Skills Requirements, are set forth in the Core Curriculum Bulletin, 1986-87 (publication date: May 1986), which all admitted freshmen who have paid deposits will get from the Office of Undergraduate Admissions.

Continuing students who matriculated at Stony Brook in Spring 1986 or before and transfer students matriculating in 1986-87 with more than 23 credits are not subject to these new requirements. They should not be confused by such terms new to the Stony Brook campus as "core curriculum," "Category A, B, and C courses," and "study of another culture requirement." Nor should they confuse new freshmen by saying these things do not exist or are not necessary.

The new requirements, which have taken four years to develop, promise an enhanced undergraduate education for future Stony Brook graduates.

University Writing Requirement

A new method of grading for the Writing Requirement has been established: Students who do not receive a grade of C or higher in EGC 101 will be assigned a U grade, which conveys no credit, and must repeat the course in the following semester.

ANT 103, HIS 213, ISS 103, and POL 105 have been added to the list of Designated Advanced Writing Courses, which satisfy the University Writing Requirement for students who scored "Strong" on the English Placement Examination.

The English Placement Examination will be given on Monday and Tuesday, April 7 and 8, from 6:45 to 9:00 p.m. in Old Physics 137. It will be given at summer Orientation programs on June 4, 12, 25, 29 and July 9, 15, 22 in the Javits Lecture Center, from 1:00 to 3:00 p.m. It will also be given on September 2 and 3, from 6:45 to 9:00 p.m. (The place will be posted on the bulletin board outside Humanities 196.)

Continuing students should bring their SUSB I.D., and all students should bring a pen, a pencil, and a dictionary. There is no advance registration for the examination.

Upper-Division Elective Courses

Students are expected to fulfill their upper-division credit requirement with a combination of electives and major courses. All the Fall 1986 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 300, 325 HIS 303, 311, 313, 316, 325, 362, 370, 375, 377 POL 354 RLS 330 SOC 301, 305 SSI 350

One specific prerequisite:
AFH 329
AFS 335
ARH 300, 303, 337, 342
HIS 309, 320, 326, 338, 344, 352, 382, 384, 386, 387
MAR 340, 390
MUS 305, 307, 315
PHI 310, 323, 332, 360, 364, 372, 375, 376, 384, 391
POL 305, 308, 317, 321, 322, 323, 324, 327, 343, 346, 355, 360, 372, 373

Two specific prerequisites: ANT 304, 318, 350, 371 ARH 307, 349 CHE 310 CLT 352, 361 EGL 362, 364, 366, 372, 374, 376 EST 310 HIS 367 ILT 381 JDH 366 LIN 305, 320 MUS 349 PHI 300, 306 POL 325, 335, 375 PSY 310, 311, 312, 313, 318, 319, 321, 350, 392 **THR 349** WNS 320

EST 320, 370 PHI 362 POL 370 SOC 303, 307, 308, 310, 320, 323, 336 337, 338, 339, 341, 353, 356, 361, 370, 372, 380, 381, 387 SSI 320

Other prerequisites:

Center for Continuing Education Courses

Several CED courses to be offered in Fall 1986 may be open to qualified undergraduates. Undergraduates must get permission from the Dean for Continuing Education before a CED course can count toward a baccalaureate degree. Permission of the instructor is not enough. See BULLETIN, p. 56, for further information about undergraduates taking CED courses.

Health Sciences Center Electives

Students are reminded that Health Sciences Center courses open each semester to Main Campus students are listed at the front or back of the *Undergraduate Class Schedule*. In addition, the School of Social Welfare will have a list of courses available starting April 9 in the Health Sciences Center, Level 2, Room 091.

Study Abroad

The deadline for applications to study abroad next summer, fall, or academic year through a program sponsored by Stony Brook was April 1. It is possible, however, that some accommodations may be available beyond the April 1 deadline. Interested students should inquire at the Office of International Programs. The Stony Brook-sponsored summer programs are in Avignon, France; Rome, Italy; and Warsaw, Poland. One-semester

or academic-year programs are in Avignon; Chendu, China (a new program); Lima, Peru; and Wroclaw and Warsaw, Poland. Academic year (only) programs are in Tubingen, Germany; Rome; and Paris, France. Students who are interested in participating in a one-semester program during the Spring 1987 semester should keep in mind that the application deadline for these programs is November 1.

Deadlines for study abroad programs sponsored by other SUNY colleges vary, but they are generally around April 1 for summer and fall programs and November 1 for spring programs.

Information about all study abroad programs is available in the Office of International Programs, Central Hall 101. Students considering studying abroad in the future should plan their fall programs carefully to include both prerequisites for the program abroad and Stony Brook graduation requirements.

Guide to Academic Help

The Office of Undergraduate Studies publishes 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.

Academic Advising Summer 1986

The Center for Academic Advising urges continuing students to seek academic advice for fall at Prime Time or surely before the spring semester is over. Those who wait for the summer may have trouble finding an advisor to talk to in their major department. Although the Center for Academic Advising is open during Summer Session, advising hours are curtailed. Advisors are not likely to be readily available between the end of the Summer Session and Fall Registration week.

New students should make every effort to attend one of the Orientation programs during the summer or the alternate Orientation for freshmen or transfer students during Final Registration week. For those who absolutely cannot come to Orientation, the Center for Academic Advising will hold brief information meetings to acquaint students with general requirements at the following times: Thursday, August 7; Wednesday, August 13; and Monday, August 18, 1:00 to 2:30 p.m. These meetings, which will be held in the Center's seminar room, cannot substitute for a proper Orientation since no advice about major programs will be offered.

New freshmen must have approval of their fall registrations; but the faculty members who give this approval may not be available in August. Moreover, choice of courses may depend on the results of English and Mathematics Placement Examinations, which will be given in the first week of classes. (The placement examinations are part of every Freshman Orientation program, however.)

Students who register without advice—especially new students—are likely to make mistakes in their choices that either cause them misery throughout the semester or delay their graduation. Avoid these pitfalls by seeking advice at the appropriate times.



College of Arts and Sciences

Proficiency Requirements

English

Continuing students who matriculated at Stony Brook as freshmen before Fall 1984 or as transfer students before Fall 1985 are still under the Arts and Sciences English Proficiency Requirement (see 1983-85 BULLETIN). For them the English Proficiency Examination will be given on Monday and Tuesday, April 7 and 8, from 6:45 to 9:00 p.m. in Old Physics 137, and on Saturday, May 10, from 9:45 a.m. to noon in the Javits Lecture Center. It will also be given on September 2 and 3, from 6:45 to 9:00 p.m. (The place will be posted on the bulletin board outside of Humanities 196.) Students should bring their I.D., a pen, a pencil, and a dictionary. There is no advance registration for the tests

Students who matriculated as freshmen in Fall 1984 and later and transfer students who matriculated in Fall 1985 and later are under the new University Writing Requirement. See General Academic Information, above.

Foreign Languages

The requirement to earn a C or higher in any course taken to satisfy the foreign language proficiency requirement applies only to students who matriculated as freshmen in Fall 1985 and later. It will also apply to new transfer students who matriculate in Fall 1986 and later. It does not apply to students who matriculated as freshmen before Fall 1985 or as transfer students before Fall 1986.

Foreign language proficiency examinations are usually offered by the language departments early in the fall and spring semesters. Students planning to satisfy their language proficiency requirement by examination should make arrangements with the appropriate department no later than the first day of classes for that semester.

Mathematics

The Mathematics Proficiency
Examination will be given on each
day of the first week of classes
during the fall and spring
semesters at 12 noon in the
Mathematics Learning Center,
Mathematics Building, Room
S-235. Students are advised to
review seriously the topics of
"elementary algebra," which make
up the bulk of the examination.
Students should bring their SUSB
I.D. and a No. 2 pencil to the test.

After the first week of classes, the proficiency examination is offered throughout the term on the second Wednesday of each month at 11:30 a.m. in the Mathematics Learning Center. It is necessary, however, to call Ms. Frank (6-3660) for an appointment.

For further information about the proficiency requirement go to the Mathematics Learning Center or call 6-3660.

Departmental Announcements and Courses

Africana Studies

Changes in expected semester of course offerings: AFS 239, 319, and 360 will not be offered in Fall 1986.

Special Topics for Fall 1986

AFS 420 Topics in Africana Studies: 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 databases gathered from federal and state census reports. *Prerequisite:* Permission of instructor (W. McAdoo)

Anthropology

A brochure with extended descriptions of Anthropology courses for Fall 1986 is available in Social and Behavioral Sciences S-507.

Changes in expected semester of course offerings: ANT 251 and 265 will not be offered in Fall 1986. ANT 203, 350, and 410, which were not offered in 1985-86 as listed, will be offered this fall.

The physical anthropology program has been revamped and expanded. Courses in this area are identified by the new designator, ANP. All ANP courses will satisfy the Natural Sciences and Mathematics distribution area, starting in Fall 1986.

There is a typographical error in the prerequisite for ANT 360 shown in the BULLETIN. It should be ANT 316.

Revised Major RequirementsThe major now requires at least 21 credits of upper-division courses.

Revised Minor Requirements
The Anthropology Department has
revised its minor to include four
tracks: general anthropology,
sociocultural anthropology,
archaeology, and physical
anthropology. Details of the
requirements for these tracks are
available from the Anthropology
Department, but a brief description
follows:

General Anthropology: ANT 102, 104, 363, ANP 120, one elective in sociocultural anthropology, one in archaeology, and one in physical anthropology.

Sociocultural Anthropology: ANT 102, 230, 300, two courses in areas in sociocultural anthropology, and two on topics in sociocultural anthropology.

Archaeology and Culture History: ANT 104, 105, 316, 317, two area courses chosen from a list of anthropology, art history, and history courses, and two topical courses chosen from a list of anthropology courses.

Physical Anthropology: ANP 120, 121, 220, 321, 322, and three electives chosen from a list of physical anthropology, biology, geology, applied mathematics, and anatomy courses.

ANP 120 Introduction to Physical Anthropology (REVISED—formerly ANT 120)

An introduction to the evolutionary study of humankind. The development of scientific and revolutionary thought and method. The biological basis of inheritance and variation. Human adaptations and variability in relation to the environment. Physical characteristics and behavior of living primates. Evolution of the primates. Current research on human origins.

ANP 121 Laboratory in Introductory Physical Anthropology

(REVISED—formerly ANT 121) Only the designator has been changed.

ANP 220 Human Evolution and Adaptation (REVISED—formerly ANT 220)

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 environments. *Prerequisite:* ANP 120

ANP 320 Primate Ethology

(REVISED—formerly ANT 320)
The comparative study of behavior of primates and other animals not closely related to humans but ecologically similar. Special emphasis will be paid to social organization and environmental parameters, as well as to the relationship between habitat and feeding strategies.

Prerequisites: ANP 120 and one ANT course, or two relevant courses in biological or social sciences, as approved by the instructor

ANP 321 Primate Evolution (NEW) The evolution of the order Primates from the earliest origins up to the appearance of the human family. Relationships among living primates; reconstruction of common ancestral conditions. Primate origins; Eocene primates; anthropoid and catarrhine origins, evolution and adaptations; hominoid origins, evolution and adaptations.

Prerequisites: ANP 120, 121; either ANP 220 or BIO 344 or 351 or 354 or 377

Fall, 3 credits

ANP 322 Human Osteology (NEW)
An introduction to the anatomy of the human skeleton, with special emphasis on the interpretation of skeletal remains from archaeological contents. Consideration will be given to the growth, structure, and function of bones, and to forensic aspects such as the determination of age, sex, stature, and pathology from skeletal remains.

Prerequisites: ANP 120, 220; ANT 104; permission of instructor Spring, 3 credits

ANP 391 Topics in Physical Anthropology (NEW)

Discussion of a topic of current interest in physical anthropology. Topics may include human biology, dental anthropology, primate locomotion, diet and evolution, functional morphology. Prerequisite: ANP 120; one other ANP course to be specified when topic is announced Fall or spring, 3 credits

ANP 403 Problems in Physical Anthropology (REVISED—formerly ANT 403) Prerequisites: ANP 120: one other

Prerequisites: ANP 120; one other ANP course to be specified when the topic is announced Fall or spring, 3 credits

ANP 421 Field Methods in Physical Anthropology (NEW)

Methods, problems, and experience in field techniques. Course will focus on field methods such as fossil excavation, reconstruction of skeletal and dental remains, anthropometry, craniometry. The specific focus may vary each year and will be announced in advance. May be repeated as topic varies.

Prerequisites: ANP 220 or 321; permission of instructor Fall or spring, 3 to 6 credits

ANP 447 Readings in Physical Anthropology (NEW)

Individual advanced readings on selected topics in physical anthropology. Work may be submitted for honors in anthropology. May be repeated twice.

Prerequisites: ANP 220 and 321; permission of instructor
Fall and spring, 3 credits

ANP 475 Undergraduate Teaching Practicum (NEW)

Each student will conduct a regular recitation or tutorial section to supplement a lecture course and will receive regularly scheduled supervision from a faculty member. Responsibilities may include preparing material for discussion and helping students with research papers. Satisfactory/Unsatisfactory grading only.

Prerequisites: ANP 121, 220, 321; permission of instructor Fall and spring, 3 credits

ANP 487 Independent Research in Physical Anthropology (NEW) Independent research projects carried out by upper-division students. The student must prepare the research project, carry it out, analyze the data, and submit the results in a written form acceptable to the sponsor. This course may be used for the honors thesis in anthropology. May be repeated up to a limit of six credits. Prerequisites: ANP 121, 220, 321; permission of instructor Fall and spring, 3 to 6 credits

ANT 104 Introduction to Archaeological Theory and Method (REVISED)

An overview of archaeology as a field of study and an introduction to the methods, goals, and theoretical concepts used by archaeologists. The course outlines how archaeologists make behavioral interpretations using the cultural material of past human societies. Techniques used to detect and study past settlements will be presented.

ANT 160 The Individual in Society (NEW)

A study of the ways in which individuals form stable communities and societies. The course focuses on the socialization of sexuality and aggression, conflict and social order, and social control. These and other problems are explored from the perspective of the psychological and social sciences. The role of individual men and women in group dynamics is viewed in cross-cultural perspective. Fall or spring, 3 credits

ANT 170 The New Guinea Highlands: A Case Study of Another Culture (NEW)

An examination of the life of New Guinea Highlands peoples. Lectures supplemented by a strong audio-visual component will cover such topics as ecology, local groups, socialization, ceremonials, values, social change and development, and involvement in contemporary national affairs. Fall or spring, 3 credits

ANT 201 Peoples of South America

(REVISED—formerly ANT 301)
A survey of the social, cultural, and historical aspects of South American native peoples. Attention is given to issues of demography and biology, ecology, and cultural evolution. In-depth study of selected cultures and comparative study in selected cultural topics form the core of the course. Particular emphasis is given to topics of culture contact, culture change, tribal cultures in a context of national development, and cultural pluralism.

Prerequisite: ANT 102 or 103

ANT 290 Science and Technology

in Ancient Society (NEW)
Technology and society, including mining and engineering, from the earliest humans through the archaic non-Western civilizations of the Americas and the Near East. These technological achievements are related to the changes in the organization of the societies involved.

Prerequisite: ANP 120
Fall or spring, 3 credits

ANT 304 Peoples of Africa (REVISED)

The study of the environment, history, and cultural and social institutions of representative cultures from the African continent. Topics will include ecology and the diversity of environmental settings, family structure and social organization, differing subsistence strategies, levels of sociopolitical complexity, religious beliefs, ideological systems, and ritual life.

ANT 316 Old World Prehistory

(REVISED)
Prerequisites: ANT 104 and one other course in anthropology

ANT 317 New World Archaeology (REVISED)

Prerequisites: ANT 104 and one other course in anthropology

ANT 318 Topics in Middle Eastern Ethnography (REVISED)

An investigation into a cultural group in the Middle East, such as Turkic, Arab, Iranian, or North African culture. Special attention is given to ecological and sociocultural adaptations of nomads, villagers, and urbanites. This course may be repeated as the topic varies.

ANT 355 Anthropology of Law (REVISED)

The handling and resolution of disputes in simple and complex societies. Courts, mediation, and the alternatives to law courts will be studied. Students will be introduced to the prevailing theories about conflict and its resolution in modern societies. *Prerequisites:* ANT 102 or 103; one other anthropology course or POL 220

ANT 357 The Beginnings of Sedentary Life (REVISED)

Prerequisites: ANT 104 and one other course in anthropology

ANT 358 Ways to Civilization (REVISED)

Prerequisites: ANT 104 and one other course in anthropology

ANT 373 Conflict Resolution and the Life Course (NEW)

How conflicts over property or status at birth, adolescence, marriage, divorce, old age, and death are avoided and resolved in different societies. A fundamental question is which individuals at what points in the life course enter into conflicts with others and with the law. Prerequisite: ANT 102 Fall or spring, 3 credits

ANT 421 Anthropological Field Methods (REVISED)

This is now a 3-to-6-credit course.

Special Topics for Fall 1986

ANT 318 Topics in Middle Eastern Ethnography: Turkey, Afghanistan, and Soviet Central Asia

A study of the legal, religious, and cultural aspects of Islam and its relationship to Arab culture. Examination of the Ottoman Empire and its use of Islamic law. Ethnic diversity and economic adaptations will be considered.

(J. Starr)

ANT 391 Topics in Anthropology Sec. 1: Advanced Archaeology Laboratory Methods

Laboratory Methods
Training in methods used by archaeologists studying artifactual materials. Laboratory methods include the examination of artifacts, soil samples, and faunal remains. Students analyze Long Island prehistoric site materials. Laboratory work complements ANT 421.

Prerequisites: ANT 104, 105, 421 (K. Lightfoot)

Sec. 2: Rambo: The Vanishing American

An examination of the cultural effects of America's involvement in Vietnam through the study of individuals and groups who participated in the conflict. Guest speakers will present many perspectives on the issue.

Prerequisites: ANT 102 or 103; one other social science course
(T. Kennedy)

ANT 410 Problems in Ethnology: Religion

A comparative survey of rituals and beliefs through the study of functionalist, structuralist, and diffusionist theories.
(D. Hicks)

ANT 492 Special Seminar in Anthropology: Magic

A research seminar and discussion of interrelationships between magic practices and diverse religious systems in different societies and cultures. (R. Stevenson)

Art

Changes in expected semester of course offerings: ARS 252 will be offered in the spring instead of in the fall. The biennial course ARH 207, listed for 1985-86, will be offered this fall. ARH 110, 204, 323, 326, 331, and ARS 190, 365, 366, 373, 374, 376 have been deleted from the curriculum.

There are two typographical errors in the list of requirements for the studio art major listed in the BULLETIN, p. 65. The correct requirement 2. is ARS 151, and the correct requirement 4. is ARH 341 and 342.

Advanced undergraduates may elect certain graduate courses in aspects of art history/criticism and studio art of particular interest to them. The requirement for registration is a 3.0 average in ARH or ARS courses and departmental permission. The courses are: ARH 501 History of Renaissance and Baroque Art Criticism and Theory, ARH 502 History of 19th-Century Art Criticism and Theory, ARH 503 History of 20th-Century Art Criticism and Theory, ARH 541 Topics in Ancient Art, ARH 542 Topics in Medieval Art, ARH 543 Topics in Renaissance Art, ARH 544 Topics in Baroque Art, ARH 545 Topics in 19th-Century Art, ARH 546 Topics in 20th-Century Art, ARH 547 Topics in Primitive Art; ARS 560 Graduate Sculpture Studio, ARS 570 Graduate Printmaking Studio. See the Graduate Bulletin for course descriptions.

Studio art majors may participate in open monitored model sessions every Friday in the fall from 10 a.m to 1 p.m. It is not necessary to register for these sessions, and they bear no credit.

ARH 207 Art of the Ancient Near East (REVISED) Prerequisites: COR 101, 102; or ARH 101

ARH 230 Analysis and History of Western Architecture (NEW)

The development of skills in the interpretation of Western architecture in the light of world history and culture, in terms of its technological as well as aesthetic aspects; architectural structures as human environments as well as forms in space; buildings as expression of a society, class, or social structure, as well as historical styles. Prerequisites: ARH 101; one other humanities or social sciences course with an historical perspective Alternate years, 3 credits

ARH 300 Greek Art and Architecture (REVISED) Prerequisites: COR 101, 102; or ARH 101 and two other courses in the humanities

ARH 301 Roman Art and Architecture (REVISED) Prerequisites: COR 101, 102; or ARH 101 and two other courses in the humanities

ARH 303 The Art and Architecture of the Early Middle Ages, ca. 400-1050 (REVISED)

Prerequisites: COR 101, 102; or ARH 101 and two other courses in the humanities

ARH 313 Art of the United States (REVISED)

Prerequisites: COR 101, 102; or ARH 101 and two other courses in the humanities

ARH 324 Architecture and Design of the 19th and 20th Centuries

Prerequisites: ARH 101, 102; or ARH 230

ARH 329 Primitive Art (REVISED)
Prerequisites: COR 101, 102; or ARH
101 and two other courses in the
humanities

ARH 338 Baroque Art (REVISED)
Painting and sculpture of the 17th 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. Basic principles of Baroque architecture will be discussed as background to the course.

ARH 342 Art of the 20th Century (REVISED)

Prerequisites: COR 101, 102; or ARH 101 and two other courses in the humanities

ARS 281 Photography I (REVISED) Prerequisites: Sophomore standing; interview; permission of instructor

ARS 291 Theory and Practice of Two-Dimensional Design (REVISED) A course in the exploration, analysis, and interpretation of the formal organization of the visual elements on two-dimensional surfaces. Elements such as line, shape, value, color, and space (including perspective studies) will be analyzed and applied to projects, according to principles that develop an organic unity in the total work of art.

Prerequisites: ARS 151, 152; permission of department

ARS 292 Theory and Practice of Three-Dimensional Design (REVISED)

A course in the exploration, analysis, and interpretation of the formal organization of the visual elements in three-dimensional space. Elements such as mass, volume, plane, shape, and line will be analyzed and applied to projects in varied media, according to principles that develop an organic unity in the total work of art. *Prerequisites:* ARS 151, 152; permission of department

ARS 355 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 laboratory/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. Crosslisted with HBA 325. Prerequisites: ARS 152 or BIO 101 or 151 Fall and spring, 3 credits

ARS 364 Advanced Theory and Practice of Ceramics (REVISED)
An advanced course in ceramics, stressing sophisticated sculptural forms. Class work will be based on individual projects that will stress the expression of ideas and image-making.

"Prerequisites: ARH 341, 342; ARS 264; permission of department Note: This course is acceptable retroactively as a studio/theory course. See Notes on the ARS major, item 1, 1985-87 BULLETIN, p. 65.

ARS 371 Intermediate Graphics: Intaglio and Relief Processes (REVISED)

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

Prerequisites: ARS 271, 272; permission of department

ARS 372 Intermediate Graphics:
Planographic Processes (REVISED)
Increasing development of craft in
lithography and silkscreen, with
growing emphasis on technical
specialization and individual growth as
an artist.
Prerequisites: ARS 271, 272;
permission of department

ARS 376 Advanced Theory and Practice of Graphics (REVISED)
A graphic arts workshop and critique, stressing individual development and refinement of craft for the advanced student with professional intent.
Theories and methods of various printmakers and their times will be examined. May be repeated once.
Prerequisites: ARH 341 and 342; ARS 371 or 372; permission of instructor

ARS 390 Special Directed Studio Projects (REVISED)

Explorations in studio areas not covered by the core curriculum. The student works under the guidance of a sponsor and is expected to complete a report, portfolio, or project. May be repeated once.

Special Topics for Fall 1986

ARS 422 Special Topics in Studio/Theory and Practice: Topics in Photography

An in-depth course dealing with the photographic studio environment. Special emphasis on color printing from both transparency and negative; and 4x5 view camera techniques. Concurrent lecture, studio, critique, and darkroom laboratory. Students must provide their own 35mm cameras and materials. Prerequisites: ARS 281 and 282; portfolio review; permission of instructor (M. Edelson)

Biochemistry

Revised Major Requirement

PHY 251 is no longer required, and PHY 103, 104 may be taken in place of PHY 101, 102. In place of PHY 251, the requirement in Group B, item 5, is increased to two additional courses instead of only one. Group B, item 5 is now:

5. Two additional courses. totaling at least 5 credits, chosen from the following list, including at least one course which is marked with an asterisk (*): BIO 310, 315, 322*, 347, 355, 366*, 374*, 409*, 410*, CHE 302, 303, 345, 365, HBP 390*, MAR 413, PHY 251, or selected graduate courses in Molecular Biology (BMO) or the Health Sciences Center, with the permission of the Undergraduate Advisor and the course instructor Additional courses to meet this requirement may be approved each semester; a complete list can be obtained from the Biochemistry Department office.

Biological Sciences

Changes in expected semester of course offerings: BIO 115 and 347, normally fall courses, were offered in Spring 1986. BIO 326, 339, 347, 366, 376, 385, and 386 will not be offered in Fall 1986. BIO 103, 104, 350, 356, and 383 have been deleted from the curriculum.

As the Supplement went to press, the College was considering a change in the designator for the biology teacher preparation courses to SCI. It is possible that the change will occur by the time students register. The courses involved are BIO 200, 300, 445, 450, and 454.

Revised Major Requirements

Up to six credits (three credits for transfer students) of major electives may be chosen from a diverse list of courses offered by departments outside the Division of Biological Sciences. The current list is available from the Biology Undergraduate Studies Office.

Revised Minor Requirements

Up to two credits of biology research (BIO 486, 487, 488, 489) and one credit of tutorial readings (BIO 446, 447, 448, 449) may be applied toward the minor. The list of substitute electives for the major does not apply to the minor.

BIO 315 Microbiology (NEW)

The organization, structure, energetics, and reproduction of microorganisms. Interactions of bacteria and viruses will be discussed.

Prerequisites: BIO 151, 152; CHE 322 Fall, 3 credits

BIO 355 Computer Programming and Modelling Techniques in Biology (REVISED)

The computer language to be used in this course has been changed to PASCAL.

BIO 359 Animal Behavior (REVISED) This course is now crosslisted with PSY 343. Prerequisite: BIO 101 or 151 or PSY 103 or 104

Chemistry

Changes in expected semester of course offerings: CHE 365 will not be offered this fall. CHE 355 has been deleted from the curriculum.

The following major electives to be offered in the fall are suitable for American Chemical Society certification: CHE 345, 351, 353.

CHE 111 Elementary Chemistry I (REVISED)

An introduction to the concepts of chemical composition, structure, and reactions, illustrated with examples from the life sciences. Appropriate for students preparing for admission to nursing and some other undergraduate health professions programs, liberal arts students, and those lacking high school preparation for CHE 131. Not open to students who have completed high school chemistry, except by permission, nor to students who have completed any college chemistry course.

CHE 112 Elementary Chemistry II (REVISED)

A terminal course in fundamental organic and biological chemistry, appropriate for students preparing for admission to nursing and some other undergraduate health professions.

CHE 344 Spectroscopy of Organic Compounds (NEW)

Modern spectroscopic methods applied to organic compounds. Structural effects on spectroscopic properties are surveyed with dual emphasis on fundamental aspects and problem solving. The student learns how spectroscopic methods are used both to solve complex structural problems and to investigate bonding features in organic molecules. Prerequisite: CHE 322 or 332 Spring, 3 credits

CHE 345 Structure and Reactivity in Organic Chemistry (REVISED)

Electronic and stereochemical theories relating to organic structure and reactions. Topics such as bonding, strain, aromaticity, MO theory, molecular rearrangements, pericyclic reactions, and photochemistry will be covered.

CHE 350 Research Frontiers in Physical Chemistry (NEW)

Selected topics of active research interest introduced at the advanced undergraduate level and developed to the level of the current research literature. The topics will vary from year to year and will be taken from areas such as spectroscopy, molecular kinetics and dynamics,

polymer and biophysical chemistry, solid state and surface chemistry, and nuclear chemistry, and may include theoretical developments of interest to chemists. May be repeated as the topic varies.

Prerequisites: CHE 302; MAT 306 Fall or spring, 3 credits

CHE 351 Quantum Chemistry (NEW)

Concepts of quantum theory, Schrodinger wave mechanics, and related mathematical techniques illustrated by application to systems of chemical bonding, spectroscopy, molecular structure, and molecular collision phenomena. Prerequisites: CHE 302; MAT 306

Fall, 3 credits

CHE 353 Chemical Thermodynamics (NEW)

A rigorous development of thermodynamics and its application to systems of interest to chemists, including electrochemical cells, gases, polymers, and homogeneous and heterogeneous equilibrium. An introduction to statistical mechanics is included

Prerequisites: CHE 302; MAT 306 Fall, 3 credits

Special Topics for Fall 1986

CHE 461 Selected Topics in Chemistry Sec. 1: Chemical Applications of Computers

The applications of computers in chemical research will be discussed in a series of weekly lectures by various members of the Chemistry Department. Students will gain experience applying their knowledge of computing to real problems in chemistry and chemical education. Each student will be responsible for the development of an independent special project in consultation with some member of the Chemistry faculty.

Prerequisites: CHE 132 or 142; MAT 132; a working knowledge of a computer language (FORTRAN, PASCAL, or BASIC); permission of department (Y. Okaya)

Sec. 2: Topics in Bioorganic Chemistry

A study of bioorganic phenomena with emphasis on mechanisms of enzymatic catalysis. Topics will include kinetics, inhibitors, cofactor chemistry, and enzyme models. Prerequisite: CHE 345 (C. Burrows)

Child and **Family Studies**

Three new courses have been added to the list of related courses acceptable for the Child and Family Studies minor: SSI 210 Images and Realities of Childhood: SSI 308 Battered Women, Endangered Children; and SSI 320 The Special Child.

The designator for the minor has been changed to CFS.

Classics

Changes in expected semester of course offerings: CLS 113 and LAT 353 will not be offered in Fall

Comparative Literature

A brochure with extended descriptions of Fall 1986 Comparative Literature, Classics, Humanities, and Judaic Studies courses will be available in Library, E-4309, starting April 10.

Changes in expected semester of course offerings: CLT 113 and 120 will not be offered in Fall 1986.

Special Topics for Fall 1986

CLT 352 Mythical Themes and Archetypal Characters: The Faust Legend

The Faust legend from its origins in the 16th century to its apotheosis in Thomas Mann's Dr. Faustus. The Faust theme as musical subject in opera, in symphonic versions, and tone poems will also be considered. (J. Gross)

CLT 361 Literature and Society: Third World Women Writers

Literary works of Mariama Ba (Senegal), Kamala Markandaya (India), Nawal El Sadawy (Egypt), and others will form the basis for examination of such issues as independence, marriage, motherhood, and, in particular, the "Third World" woman's place in a man's world. (C. Lasker)

Earth and **Space Sciences**

Changes in expected semester of course offerings: GEO 300 303, 312, 323, 363; AST 108; ATM 346 will not be offered in Fall 1986.

Revised Major Requirements:

Geology GEO 307 is no longer required for the major in geology under requirement A; it may be used as an elective under requirement B.

GEO 303 Stratigraphy (REVISED) Prerequisites: GEO 306, 312

GEO 306 Igneous Petrology (REVISED)

Principles of the description, classification, and interpretation of igneous rocks. The student will be introduced to the use of field and laboratory data for interpreting the origin and evolution of various rock types and to the use of the petrographic microscope. Two one-hour lectures and one three-hour laboratory session per week. Prerequisite: GEO 301 Spring, 3 credits

GEO 307 Metamorphic Petrology (REVISED)

Principles of the description, classification, and interpretation of metamorphic rocks. Study of hand specimens and thin sections; principles of determining conditions of metamorphism. Two one-hour lectures and one three-hour laboratory session per week.

Prerequisite: GEO 306 Fall or spring, 3 credits

GEO 308 The Earth in the Nuclear Age (NEW)

Exploration of some complex societal issues concerning nuclear power and nuclear arms that involve fundamental aspects of earth sciences. Impact of research in geological, geophysical, geochemical, and atmospheric sciences on nuclear power plant siting, nuclear test ban verification, nuclear waste disposal, and nuclear winter theories. Throughout the course, the empirical nature of scientific research will be stressed. Prerequisite: GEO 102 Spring, 3 credits

GEO 321 Mineral Deposits (REVISED)

Prerequisites: GEO 306, 312; CHE 301 or GEO 323; permission of instructor

GEO 363 Sedimentation and Sedimentary Rocks (REVISED) Prerequisite: GEO 306

Economics

Changes in expected semester of course offerings: ECO 222, 203, and 317 will not be offered in Fall 1986. The latter two courses will be offered in the spring.

ECO 251 Intermediate Microeconomic Theory (REVISED) A grade of C or higher is necessary in the calculus listed among the prerequisites.

ECO 252 Intermediate Macroeconomic Theory (REVISED) A grade of C or higher is necessary in the calculus listed among the prerequisites.

ECO 310 Basic Computational Methods in Economics

(NEW-offered in 1985-86 as ECO 402, Sec. 2)

A first course in the computational and graphical techniques for finding numerical solutions to the economic models presented in undergraduate courses. Includes the foundations of programming (using BASIC), data management, Newton's method for solving non-linear equations, exploring and fitting functions graphically, and finding maxima of functions. Pre- or corequisite: ECO 251 Fall and spring, 4 credits

ECO 322 Applied Econometrics Application of econometric methods to real problems, using panel data sets and problems involving qualitative dependent variables. Prerequisites: ECO 251, 252, 321 Fall or spring, 3 credits

ECO 339 China's Economy since 1949 (NEW)

Economic development policies in the People's Republic of China from the revolution in 1949 to the present. Topics include agricultural and industrial organization, population policies, sectoral balances, foreign trade, and attempts to reconcile planning with market forces. A substantial term paper is required Prerequisite: ECO 251 Spring, 3 credits

ECO 368 Modern Portfolio Theory (NEW)

The economics of uncertainty and modern portfolio theory. Topics will include expected utility theory, measurement of risk, the capital asset pricing model, and efficient markets. Students will maintain a portfolio of common stocks and evaluate its performance.

Prerequisites: ECO 251, 320 Corequisite: ECO 321 Spring, 3 credits

ECO 370 Application and Theory of Financial Markets (NEW-offered as ECO 408 in Fall 1985)

The study of financial markets. The course reviews net present value as an investment criterion. Capital asset pricing models and market efficiency are covered briefly. Pricing of stocks, bonds, options, and futures, together with hedging strategies using options and futures, are covered in more

Prerequisites: ECO 251, 320 Fall, 3 credits

Special Topics for Spring 1986

ECO 408 Topics in Applied **Economics: Economic Aspects of** Health Care Policy

An analysis of health care policy issues from an economic perspective. The course will cover determinants of supply and demand for health services; cost containment and quality regulation; subsidy programs such as Medicare; and National Health Insurance.

Prerequisites: ECO 251, 321 (P. Gertler)

English

A brochure with extended descriptions of Fall 1986 courses offered by the Department of English is available in Humanities 245. Extended descriptions of the various sections of EGL 191, 192, 193, and 202 are also available in the Writing Programs Office, Humanities 196.

Changes in expected semester of course offering: EGL 260, 261, and 385 will not be offered in Fall

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

EGC 101 Writing Workshop (REVISED)

Intensive practice in writing frequent short papers. Emphasis on strategies for drafting and revising. Students must earn a C or higher in this course to satisfy the University Writing Requirement.

A-through-C/Unsatisfactory grading

EGC 102 Writing Workshop II (REVISED)

A continuation of EGC 101. Emphasis on the development of expository writing skills, research skills, and documentation. Frequent short research papers and one longer one.

EGC 104 Writing Workshop for Transfer Students (NEW)

An intensive writing workshop for transfer students in the drafting and revising of short essays. Students must earn a C or higher in this course to satisfy the University Writing Requirement. A-through-C/Unsatisfactory grading

Prerequisites: Transfer status; equivalent credit for EGC 101; placement by English Placement Examination Fall and spring, 3 credits

EGL 192 Introduction to Fiction (REVISED)

An analysis of fictional prose in terms of a section's theme. A goal of each class is to interpret various pieces of literature in relation to a political or historical view, or a particular literary technique. (Not for English major

EGL 202 Advanced Writing

Workshops (REVISED)
Intensive work on advanced problems in writing. Different sections will have different emphases (e.g., argument, research methods, a theme such as technical writing). Consult the Writing Program Office for descriptions of current offerings.

EGL 276 Women and Literature (REVISED)

An examination of works written by or about women that studies the development and conception of women in drama, poetry, and fiction.
The course focuses on literature seen in relation to women's sociocultural and historical position. May be repeated with permission of the Director of Undergraduate Studies as the subject matter varies.

EGL 376 The Literature of Imperialism (NEW)

A course in the history and culture of European imperialism as it is evidenced primarily in the literary texts produced both by Europeans and by the indigenous populations which they colonized. The course will present the colonial/imperial experience from three different perspectives: the imperial ideology; the liberal reaction by colonizers to the injustice of imperialism; the response of colonial and formerly colonial peoples to their experience as the colonized. Prerequisite: A literature course at the 200 level or higher. Fall or spring, 3 credits

Special Topics for Fall 1986

Sections of EGL 191, 192, 193, and 202 will have different emphases. See

EGL 199 Freshman Honors Seminar in English: Love in Philosophy and Literature

(A. Wilson)

EGL 347 Major Writers of the Neoclassical Period in England: Defoe and Fielding (H. Goldberg)

EGL 348 Major Writers of the Romantic Period in England: Byron and Shelley (D. Erdman)

EGL 349 Major Writers of the Victorian Period in England: Hardy (R. Levine)

EGL 350 Major Writers of American Literature: Henry James and His Circle (R. Miller)

EGL 352 Major Writers of Modern British and American Literature: Faulkner, James, and Woolf (S. Sears)

EGL 353 Major Writers of Contemporary British and American Literature: Berryman and Pynchon (J. Ludwig)

EGL 362 Poetry in English: Poetry of Modern Ireland (T. FLanagan)

EGL 364 Drama in English: Renaissance Drama (R. Levin)

EGL 366 Fiction in English: The American Jewish Experience in Fiction

Crosslisted with JDH 366 for Fall 1986 only. See Judaic Studies section for description.
(C. Kessner)

EGL 372 Literature in English and Its Relation to Other Literatures Sec. 1: European Naturalism (D. Fortuna)

Sec. 2: Literature and Mythology (A. Wilson)

EGL 374 Literature in English and Its Relations to Other Disciplines: The Author's Perspective and Its Effect on the Text (L. Gardner)

EGL 490 English SeminarLiterary study and the humanities in the modern world. Honors course.
(B. Bashford)

Federated Learning Communities (FLC)

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

Issues in Management and Business (IMB)

The 1986-87 FLC program identifies and studies significant issues related to the world of management and business. One of the primary objectives is to enable students to understand the broad social, cultural, political, and ethical contexts within which management and business activity takes place. Successful completion of the two-semester program will earn the FLC minor in management and business. The courses selected for federation are as follows:

Fall Semester

PHI 372 Ethical Inquiry
PAM 345 Special Topics in
Management
A political science course to be
announced
IMB 301 Program Seminar

Spring Semester

PAM 345 Special Topics in Management SOC 381 Sociology of Complex Organizations A third course selected from a list of courses prepared by FLC IMB 302 Program Seminar

The Master Learner for this Program is Professor Michael Simon, Department of Philosophy.

IMB 301, 302 Program Seminar: Issues in Management and Business (NEW)

The agenda of the seminar will be determined by the problems, difficulties, and interests of the students. Discussions and frequent written and oral reports will focus on assisting the students in learning how to learn; deepening understanding of the concerns and ideas of the corequisite courses: comparing. contrasting, and synthesizing the material of these courses; developing confidence to think and write independently. Corequisites to IMB 301: PAM 345. PHI 372, the federated POL course Corequisites to IMB 302: PAM 345, SOC 381, another approved course Fall (301) and spring (302), 3 credits

each semester

French and Italian

Changes in expected semester of course offerings: The spring courses, FRN 222 and ITL 195 and 222 will be offered in Fall 1986.

Revised Major Requirements

All upper-division courses offered for the major in French or Italian must be passed with a grade of C or higher.

Transfer students who wish to graduate with a major in French or Italian must take at least 12 credits of French or Italian in residence at Stony Brook.

Revised Minor Requirements

All upper-division courses intended to fulfill minor requirements in French or Italian must be passed with a grade of C or higher. Transfer students who wish to graduate with a minor in French or Italian must take at least six credits of upper-division French or Italian courses in residence at Stony Brook.

FRN 199 Modern France (NEW)
A survey of contemporary France and its political, social, and economic structure, as well as the study of cultural life and institutions. Special attention will be given to other French-speaking countries and their relations to France.

Fall or spring, 3 credits

ITL 199 Modern Italy (NEW)
A survey of contemporary Italy and its political, social, and economic structure, as well as the study of cultural life and institutions with comparisons to American models and standards.

Fall or spring, 3 credits

ITL 393 Free Seminar (REVISED)
May be repeated as the topic varies.

Special Topics for Fall 1986

FRN 343 Studies in 17th-Century Literature: Theme of Love in 17th-Century French Literature (F. Brown)

FRN 361 Studies in 19th-Century Literature: The French Novel (H. Allentuch)

ITL 331 Studies in 15th- and 16th-Century Literature: Petrarch and Italian Humanism (To be announced)

ITL 381 Italian Literature in Translation: Dante and His Time (C. Franco)

Germanic and Slavic Languages and Literatures

A brochure with extended descriptions of Germanic and Slavic courses will be available in Library N-3009 starting April 9.

Changes in expected semester of course offerings: GER 195, PSH 111, RUS 109, SWE 111, 141, 191, and YDH 191 will not be offered in Fall 1986.

Special Topics for Fall 1986

RUS 291 Special Author in Translation: Pushkin and Romanticism

Readings and discussions of Pushkin's major works with particular emphasis on his Romantic period, including his impact on the Russian Romantic literature of the first half of the 19th century.

(L. Vogel)

Hispanic Languages and Literature

A brochure with extended descriptions of Fall 1986 Spanish courses will be available in Library N-3017 on April 9.

POR 191 Intermediate Portuguese I

An intermediate course in Portuguese featuring a review of grammar and intensification of reading, writing, and speaking skills.

Prerequisite: POR 112 or 113

Fall, 3 credits

POR 192 Intermediate Portuguese II

An intermediate course in Portuguese intended to develop competence in reading, writing, and speaking Portuguese through the study of grammar and the interpretation of selected literary texts.

Prerequisite: POR 191

Spring, 3 credits

SPN 199 Modern Spain (in English) (NEW)

An examination of major cultural and social developments in Spain during the 20th century, with special emphasis on the Spanish Civil War, the Franco era, and the transition to democracy. Presented in English, the course seeks to enhance understanding of Spain through analysis of such issues as national character, change and continuity, and

regional diversity. May not be used to satisfy the foreign language proficiency requirement. Spring, 3 credits

Special Topics for Fall 1986

SPN 444 Topics in Caribbean Literature and Culture: The Anti-Slavery Novel and the Poetry of Negritude

Authors to be covered are Villaverde, Barnet, Guillen, Pales Matos, and others. (R. de la Campa)

History

A brochure with extended descriptions of Fall 1986 History courses is available in Social and Behavioral Sciences S-301.

Changes in expected semester of course offerings: HIS 101, 225, 233, 248, 269, 278, 304, 315, 327, and 369 will not be offered in Fall 1986. The spring courses HIS 201 and 316 will be offered this fall, as well as HIS 262, 271, 313, and 352, listed for the 1985-86 academic year. HIS 331 has been deleted.

HIS 133 The Medieval Imagination (NEW)

An introductory course in the civilization of medieval Europe and its immediate neighbors. The main emphasis is upon culture and society as depicted in creative literature: women and marriage, contemporary view of social structure, the impact of Islam, popular science and religion, travel, the role of "outsiders," and marginal people and groups. Fall, alternate years, 3 credits (not offered in 1987-88)

HIS 326 History of Popular Culture (NEW)

The development of popular culture in Europe and the United States. The course will examine different aspects and genres of popular mentality beginning with peasant cultures in the 16th century. Other aspects include artisanal culture in the 18th century in Europe and America, commercial cultures in 19th century England and America, and the rise of mass media culture in the 20th century.

Prerequisite: One course in history, preferably in the area of U.S. history Fall, alternate years, 3 credits (not offered in 1987-88)

HIS 382 Politics and Political Change in Latin America (formerly HIS 332) Only the number has been changed.

HIS 383 Cultural and Intellectual History of Latin America to 1825 (NEW)

The cultural and intellectual history of Latin America during the Colonial Period. Major reports on the discovery and exploration, the spiritual conquest, universities, baroque times, scientific missions and the enlightenment, colonial newspapers, and the movement of Independence. May not be taken for credit in addition to the discontinued HIS 331.

Prerequisite: One history course, preferably in the area of Latin American history

Fall, 3 credits

HIS 384 Cultural and Intellectual History of Latin America from 1825 to Present (NEW)

The cultural and intellectual history of Latin America during the 19th and 20th centuries. Romanticism, liberalism, positivism, Arielism, uiversity reform, Marxism in Latin America, liberation theology, major current trends. May not be taken in addition to the discontinued HIS 331. Prerequisite: One history course, preferably in the area of Latin American history Spring, 3 credits

HIS 385 Colonial Brazil and the Portuguese Empire (New)

The age of Portuguese expansionism, the conquest and settlement of Brazil, the rise of slavery and plantation agriculture, Brazil's transition from colony to nation.

Prerequisite: One course in history, preferably in the area of Latin

American history

Fall, alternate years, 3 credits (not offered in 1986-87)

HIS 386 Modern Brazil (formerly HIS 334)

Only the number has been changed.

HIS 387 Women, Development, and Revolution in Latin America (formerly HIS 335)
Only the number has been changed.

Special Topics for Fall 1986

HIS 403 Colloquium in European History: Totalitarian Societies in the 20th Century—Germany, the Soviet Union, and Italy through Literature (W. Angress)

HIS 411 Colloquium in American History: History of the American West

(E. Lampard)

HIS 414 Colloquium in American History: Crime and Police in the U.S.

(W. Miller)

HIS 461 Colloquium in the History of Science: American History through Material Culture (R. Cowan)

Human Development

The new minor in human development (LHD) is designed for the residents of Langmuir College who wish to add an academic dimension to their residence experience. The aim of the minor is to provide an integrated view of the human life course defined as infancy and childhood, youth and adolescence, and mid-life and aging.

Requirements for the Minor in Human Development

The minor will consist of 24 credits to be taken in the following manner:

Credits

18

- 1. Six three-credit courses from the approved listing (available from the Minor Coordinator), including: a. at least one threecredit course in one phase of the life course and at least one other in another phase or one which provides an overview of the life course: b. at least one threecredit course in each of the following divisions: Biological Sciences, Humanities and Fine Arts, Social and Behavioral Sciences. Note: Any one course may meet both the life course and divisional requirement of (a) and (b) at the same time. c. any other threecredit courses to achieve a total of 18 credits.
- Three one-credit courses in human development
 a. LHD 301 to be taken during the first semester of this program;
 b. LHD 302 to be taken during the second

through fourth semesters of this program; c. LHD 401 to be taken during the final year of this program.

3

24

3. One three-credit independent study course in either:
a. LHD 487 under the supervision of the Coordinator; or
b. an independent study course in any department approved by the Coordinator.

Note: No more than one three-credit course in the minor may be taken P/NC. At least twelve credits for the minor must be in upper-division courses.

Declaration of the Minor

Students must declare the human development minor no later than the middle of their third year, at which time they will consult with the Minor Coordinator, Prof. William Arens, and plan their course of study for fulfillment of the requirements.

LHD 301 Introductory Seminar in Human Development (NEW)

An interdisciplinary introduction to human development through the consideration and discussion of major works on the human life course. An emphasis will be placed on reading, integration of material, and critical discussion in a seminar format. Prerequisites: Residence in Langmuir College; human development minor Fall and spring, 1 credit

LHD 302 Colloquium in Human Development (NEW)

A series of lectures by Stony Brook and visiting scholars on various aspects of human development pertaining to the life course. Students will be expected to participate in subsequent discussions. Content will vary from semester to semester. Prerequisites: LHD 301; residence in Langmuir College; human development minor

Fall and spring, 1 credit

LHD 401 Advanced Seminar in Human Development (NEW)

An interdisciplinary seminar in human development through consideration of topics and issues raised by any of the disciplines concerned with the human life course. The content will vary in relation to the interests and experience of seminar participants. Prerequisites: LHD 301, 302; residence in Langmuir College; human development minor Fall and spring, 1 credit

LHD 487 Independent Study in Human Development (NEW)

The completion of an individual project by one or a group of students on human development and the life course. Projects may include library, laboratory, or field research, or literary or artistic endeavor. Each project must result in an individual or group production or written report and be approved in advance by the Minor Coordinator. May be repeated. Prerequisites: LHD 301, 302; residence in Langmuir College; human development minor Pre- or corequisite: LHD 401 Fall and spring, 3 credits

Special Topics for Fall 1986

The following Seminars on Contemporary Issues are open to Langmuir residents only. See the Class Schedule for dates and hours.

HUM 491 Science Fiction and Fantasy

The seminar will explore "first contact," one of the major themes of science fiction. Each assigned book explores a vision of humankind contained in classic works of this literary form.

Prerequisite: A literature course at the 200 level or higher

(L. Morris)

SBS 491 Seminar in Comparative Religion

This seminar consists of a set of readings designed to introduce students to the range of beliefs, myths, and rituals held by peoples in various parts of the world today and in the past. Religion will be discussed in light of several theoretical approaches adopted by anthropologists and other social scientists. Not for credit in addition to ANT 251.

Prerequisite: An anthropology or religious studies course at the 200 level or higher (D. Hicks)

Humanities

Changes in expected semester of course offerings: HUM 107 will not be offered in Fall 1986. The spring course, HUM 122, will be offered in the fall.

Interdivisional Humanities and Social Science

Under the new University Core Curriculum requirements, which apply only to students matriculating as freshmen in 1986-87, the following course satisfies part of the humanities and fine arts and the social and behavioral sciences requirements. Students must take both semesters of this course if they wish to count it toward distribution requirements.

COR 101, 102 Art, Literature, and Philosophy in Historical Perspective (NEW-offered in 1985-86 as HUM 101, SBS 102)

An historical introduction to the art, literature, and philosophy of the West: cultural achievements are studied in relation to their historical conditions of emergence, and emphasis is given to the ways in which Western culture is influenced by and influences other cultures.

Prerequisite to COR 102: COR 101 Fall (101) and spring (102), 3 credits each semester

Judaic Studies

JDH 261 Biblical Narrative (NEW) An examination of selected portions of the Bible, using literary and historical modes of interpretation. These texts will be analyzed from such perspectives as genre, narrative strategy, language, imagery, redactive skill, legend, chronicle, and epistle. Fall, 3 credits

JDH 366 The American Jewish Experience in Fiction (NEW)

A study of the American Jewish Experience as it is revealed in the fiction of the Jewish writers in the period of 1917 through the present. The course will explore the long-range affect on the second, third, and fourth generations of immigration; acculturation; the impact of the depression; World War II and the Holocaust; the emergence of the State of Israel; suburbanization; the entry of the Jewish writer into the center of the literary world; and the new search for Jewish identity. Crosslisted with EGL 366 for Fall 1986 only. Prerequisite: One literature course at the 200 level or higher Fall, alternate years, 3 credits (not offered in 1987-88)

Linguistics

Changes in expected semester of course offerings: LIN 211, 311, 342, and 351 will not be offered in Fall 1986; LIN 211 will be offered next spring.

Special Topics for Fall 1986

LAN 111 Selected Languages (Elementary) I Sec. 1: Modern Greek (E. Tourlafti)

Sec. 2: Irish (C. Sorochin)

Sec. 3: Korean (To be announced)

LAN 191 Selected Languages (Intermediate) I Sec. 1: Arabic (Z. Mustafa)

Sec. 2: Irish (C. Sorochin)

Sec. 3: Korean (To be announced)

LIN 425 Special Topics: The Use of Computers in Language Teaching Prerequisite: LIN 375 (D. Kauffman)

Mathematics

Changes in expected semester of course offerings: MAT 311, which will not be offered in Fall 1986, will be offered in Fall 1987. MAT 111 has been deleted from the curriculum.

MAP 102 and 106 will be designated "remedial" beginning in Fall 1986. This means that these courses will count for registration credit in the semester they are taken but will not count toward graduation.

The Mathematics Placement Examination tests a student's knowledge of precalculus mathematics. This examination is one of the alternative prerequisites for MAT 125 and 131. It is also used to provide advice about placement in MAP 101, 102, and MAT 120. The examination will be offered during summer Orientation and each day during the first week of both the fall and spring

semesters in the Mathematics Learning Center, Room S-235, Mathematics Building, at 10 a.m. each day. No appointment is necessary. Students should bring their SUSB I.D. and a No. 2 pencil. A student who cannot make these times should call Ms. Frank (6-3660) for an appointment.

MAT 112 Introductory Mathematics (REVISED)

A course designed to acquaint the student with the nature of mathematics and what modern mathematicians do through consideration of specific topics chosen from logic, set theory, number theory, algebraic systems, limit concept, combinatorial topology, and geometric structures. This course may not be taken for credit after credit has been earned for any MAT course numbered above 300. Does not satisfy the mathematics proficiency requirement nor the quantitative literacy requirement.

MAT 120 Preparation for Calculus (REVISED)

An introduction to the skills and knowledge needed during the early stages of learning calculus, including work with polynomials, rational functions, and trigonometric functions. Intended for students who have not completed 12th year high school mathematics. May not be taken after any college calculus course has been passed with a grade of C or higher.

MAT 306 Calculus IV: Multivariate Calculus (REVISED) Prerequisites: MAT 221 or 231 or 241, or AMS 210 and MAT 127 or 132

Music

Changes in expected semester of course offerings: MUS 107 will not be offered in 1986-87. MUS 434, normally a spring course, will be offered this fall rather than next spring.

The prerequisite for any course in the music major program is the Ear Training Examination, which will be given on Saturday, April 12, 1986. Students must sign up in advance in the Department of Music office, Fine Arts 3304. Those who have not passed this placement test may not register for courses in the major program. The examination will be given again on September 6, 1986.

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.

MUS 120 Elementary Sight-Singing and Dictation (NEW)

Beginning ear-training, including rhythmic and melodic dictation and sight-singing. Intended for students who are not prepared to enter MUS 121. May be repeated, but credit counts toward graduation only once. Prerequisite: MUS 119 or placement examination
Fall and spring, 3 credits

MUS 222 Modal Counterpoint (REVISED)

An introduction to fundamental principles of musical structure through exercises in two-part species counterpoint in 16th-century style.

MUS 363 Advanced Performance Study in Harpsichord (NEW) Prerequisites: Audition; permission of

instructor
Fall and spring, 4 credits

Philosophy

A brochure with extended descriptions of Fall 1986 Philosophy courses will be available in Old Physics 221, beginning April 9.

Changes in expected semester of course offerings: PHI 103 and 268 will not be offered in Fall 1986. PHI 109, 110, 150, 239, 264, 285, 308, 320 324, 325, 374, 378, 405, and 408 are not expected to be offered in 1986-87.

PHI 111 Introduction to Eastern Philosophy: Classical Texts (REVISED)

A study of main classical texts drawn from Hinduism, Buddhism (Indian, Chinese, Japanese), Taoism, Confucianism, and Neo-Confucianism (2500 B.C. to 300 B.C.). The emphasis will be on the structural and contextual background of these traditions and on relating them to what may be implicit in the American experience.

PHI 112 Introduction to Eastern Philosophy: Interpretations (REVISED)

Analysis of texts drawn from the Eastern tradition in an effort to recover the different modes of knowledge,

language, identification, liberation, etc., and a study of different systems of Eastern philosophy that have dealt with these problems.

PHI 223 Introduction to Metaphysics (REVISED)

An introduction to philosophy through a study of the methods by which philosophers construct systematic accounts of knowledge and reality. Topics such as mind and matter, appearance and reality, freedom and determinism are discussed. The logical principles of system-formation as well as the power of specific systems in resolving particular metaphysical problems are demonstrated.

PHI 239 Japanese Philosophy and Aesthetics (REVISED)

An examination of how modernization has affected the philosophical process in Japan focusing on such philosophical and literary authors as Fukuzawa, Natsume, Mori, Watsuji, Nishida and the Kyoto School, and more recent thinkers such as Tanizaki, Kawabata, and Mishima.

PHI 264 Philosophy of the Arts (REVISED)

A study of the arts focusing on the nature of the creative process, methods of interpretation, essential differences among the various arts, and the relation of performance to text.

PHI 310 American Philosophy (REVISED)

A study of selected major figures in the American tradition, e.g., Jefferson, Emerson, Edwards, James, Peirce, Dewey, and Whitehead. Includes consideration of such issues as the global relevance of the ethical issues engaged, the effects of the science of the day on the philosophical perspectives of these thinkers, and the cross-cultural relevance of the philosophical problems addressed.

PHI 332 Theories of Knowledge (REVISED)

A study of a variety of conceptions of the structure and content of knowledge as found in classical and contemporary epistemologies. Fundamental methods and principles of philosophical inquiry are applied to questions about the ways in which concepts and theories are generated in the physical and social sciences and to questions about the nature of knowlege, of what is of value, of philosophy and knowledge in the arts.

PHI 362 Scientists on Science

The study of the methods, goals, and achievements of science as well as the ethical and social commitments of scientists through the writings of

selected natural scientists from Galileo and Newton to Bohr, Einstein, and Feynman. Topics will include: the criteria for choice among theories, e.g., simplicity, beauty, usefulness; the use of mathematics and the role of experiment in science; objectivity; reality of the scientific image; scientific images of the person and of society; social and ethical values in science; religion and science.

Prerequisite: Two semesters of science and one philosophy course Fall, 3 credits

PHI 363 Philosophy of the Social Sciences (REVISED)

A study of the philosophical foundations of the social sciences, applying principles and methods of philosophical analysis to questions concerning the structures of social reality, the methodological and epistemological status of the social sciences, and the criteria for evidence and theory formation in the social sciences.

PHI 372 Ethical Inquiry (REVISED)

An intensive study of the methodological principles governing the formation of ethical theories and ethical judgments through an investigation of selected ethical problems.

PHI 380 Literature and Philosophy (REVISED)

An intensive study of the methods and principles of the philosophical analysis of literature and the relations between literature and philosophy. Primary texts are selected to demonstrate the precise nature of this relationship. Topics will vary from term to term.

PHI 381 Aesthetics (REVISED) An intensive study of methods and principles specific to the philosophical analysis of art through selected classical texts in aesthetics (e.g., Plato's Phaedrus, Aristotle's Poetics, Kant's Critique of Judgment, or Nietzsche's The Birth of Tragedy). Discussions will focus on such problems as the ontology of the work of art, its epistemological significance, the relation between fact and fiction. criteria of interpretation, or the political import of art. Readings in the classical texts may be supplemented by selections from contemporary authors.

PHI 415 The Philosophical Methodology of the Rig Veda (REVISED)

The philosophical methodology of this great Indian text is interpreted within the text's own cultural context but also with a view to discerning a universal meaning that enriches Western understanding of such topics as knowledge, expression, and the need to structure experience, as well as the different forms and insights generated by such structures.

PHI 391 Individual Systems of the Great Philosophers: Aristotle (C. Martin)

Physical Education

Changes in expected semester of course offerings: PEC 103 and 268 will not be offered in Fall 1986.

Fees for Horsemanship courses have been increased to \$100 for PEC 180 and 181, and \$110 for PEC 282.

PEC 134 Aerobic Dance II (NEW) Advanced body conditioning to

enhance cardiovascular fitness. Energetic dance forms will be combined with warm-ups, muscle-strengthening exercises, and cool-down Prerequisite: PEC 133

Fall and spring, 1 credit

PEC 136 Basic Social Dance (REVISED) Only the title has been changed.

PEC 137 Intermediate Social Dance

The presentation of additional steps to those dances taught in PEC 136, as well as the introduction of several new dances. Emphasis will be placed on the following: good standards of leading and following; use of proper footwork, positioning, and styling; appreciation of music recognition; and interchanging certain steps from one style of dance to another. Prerequisite: PEC 136 Spring, 1 credit

PEC 138 Beginning Jazz Dance (NEW)

The fundamental techniques of jazz dance. The course develops body awareness through limbering and strengthening exercises, stretches, and body alignment. Students will learn body isolations, followed by center floor combination and movement phrases through space to jazz and related music.

Fall and spring, 1 credit

PEC 145 Basic Physical Conditioning (REVISED) Only the title has been changed

PEC 147 Advanced Physical Conditioning (NEW)

The maintenance and improvement of advanced levels of fitness. Instruction will be primarily devoted to improvement of muscular strength, flexibility, and endurance. Activities will include weight training with the

Universal gym machine and free weights, stretching calisthenics, and other activities known for their physical conditioning benefits. Prerequisite: PEC 145
Fall and spring, 1 credit

PEC 270 First Aid and Safety (REVISED-formerly PEC 170) This is now a 2-credit course.

PEC 475 Undergraduate Teaching Practicum in Physical Education I

Selected undergraduates will assist faculty members teaching physical education activity classes. In addition to working as tutors during instructional periods, students will have regular conferences with a faculty supervisor. Student effort will concentrate on teaching motor skills, class safety, principles of sportsmanship, and basic coaching strategies. Satisfactory/Unsatisfactory grading only.

Prerequisites: Advanced skill level; permission of instructor and department

Fall and spring, 2 credits

PEC 476 Undergraduate Teaching Practicum in Physical Education II (NEW)

The course continues on a more advanced level training in the methods of planning for physical education classes; administration of sports skills; testing and advanced coaching strategies. Students will be expected to assume greater responsibility in small unit coaching in team sports and concentrated individual coaching in lifetime sports.

Satisfactory/Unsatisfactory grading

Prerequisites: PEC 475; permission of instructor and department Fall and spring, 2 credits

Physics

PHY 100 Introductory Physics (REVISED)

A quantitative introduction to basic ideas of physics: space and time, static force and pressure, temperature, velocity, acceleration, force and motion, and energy. Strong emphasis is laid on the handling of numbers, treatment of experimental data, graphing, functions, vector algebra, the slope of a curve and the area underneath it. Three lectures, one recitation, and two laboratory hours per week.

PHY 101 Classical Physics I (REVISED)

An introductory survey of mechanics, wave motion, kinetic theory, and thermodynamics. Calculus is used concurrently with its development in MAT 131 or 141. Three lectures, one recitation, and two laboratory hours

Prerequisite: PHY 100 with a grade of C- or higher or permission of department

Corequisite: MAT 131 or 141 or 126 Note: Some students who have sufficient preparation may be permitted to register for PHY 101 without having taken PHY 100, but only after they have received permission from Professor C.E. Swartz, Room B-104 in the Physics Building. (The College of Engineering and Applied Sciences will arrange permission for freshmen accepted directly into one of its majors.)

PHY 102 Classical Physics II (REVISED)

An introductory survey of electromagnetism, electric circuit theory, and optics. Calculus is used concurrently with its development in MAT 132 or 142. Three lectures, one recitation, and two laboratory hours per week.

Prerequisite: PHY 101

Corequisite: MAT 132 or 142 or 127

PHY 105, 106 Classical Physics I, II: Honors (NEW)

A course intended for students with strong interests and abilities in science and mathematics. The topics covered are similar to those in PHY 101, 102, but are treated in more depth in a small class setting. Students will be able to transfer to PHY 101, 102 at any time during the first half of each semester without penalty. Three class hours, one recitation hour, and one two-hour laboratory per week. Prerequisite to PHY 105: Permission of department

Corequisite to PHY 105: MAT 131 or 141 or 126

Prerequisite to PHY 106: PHY 105 or per-

mission of department
Corequisite to PHY 106: MAT 132 or 142 or 127

Fall (105) and spring (106); 4 credits each semester

PHY 137, 138 The Nature and Use of Physical Science (REVISED)

An introductory physics course using a minimal amount of mathematics to provide scientific background for the education citizen in an increasingly technological society . . . (the rest of the description is the same as in the BULLETIN).

PHY 251 Modern Physics (REVISED) An introductory survey of modern physics, which completes a three-semester general physics sequence. The elements of the special theory of relativity are discussed. Wave-particle duality, the concept of wave function, and other fundamentals of the quantum theory are introduced and related to atomic structure, nuclear structure, and the physics of the solid state. In the laboratory students perform some of the pivotal experiments of the 20th century. Three lecture hours and one three-hour laboratory per week.

PHY 252 Optics and Wayes (REVISED)
Only the title has been changed.

Special Topics for Fall 1986

PHY 137, 138 The Nature and Use of Physical Science

Topics for the modules will be posted on the bulletin board outside the Department of Physics office, Physics Building, Room P-110. (P. Koch)

Political Science

A brochure with extended descriptions of Fall 1986 courses is available in Social and Behavioral Sciences S-701.

Changes in expected semester of course offerings: POL 211, 240, 311, 313, 320, 348, 366, 367, and 368 will not be offered in Fall 1986.

The new course, POL 105 Honors Introduction to American Government, below, may be used as an alternative to POL 102 in satisfying major requirements and as the prerequisite for the following courses: POL 220, 221, 260, 261, 305, 320, 322, 323, 324, 326, 327, 348, 351, 352, 366, and 369.

Honors Program

The new honors program is open to seniors majoring in political science who have maintained a G.P.A. of 3.5 in the major and 3.0 overall, and who have completed 21 credits in political science of which 12 credits have been in 300-level courses. Students should apply for the honors program before the beginning of their senior year. The student

must find a faculty member of the department to act as sponsor. With the approval of the sponsor, the student must submit a written proposal for a major paper or research project to be completed during the senior year. Acceptance into the honors program depends on the approval of the proposal by the department.

During the senior year the student will enroll in POL 447 during the first semester and POL 487 during the second semester, for a total of six credits. The student's major paper or research project must be completed no later than four weeks prior to the end of the second semester. It will be read and evaluated by a committee consisting of the student's sponsor, one other political science faculty member, and one faculty reader from an outside department in the Social and Behavioral Sciences Division.

If the honors program is completed with distinction and the student has achieved a 3.5 G.P.A. in all political science courses taken in the senior year, honors will be conferred.

POL 105 Honors Introduction to American Government (NEW) An enriched introduction to American government. Topics covered include political participation, public opinion, voting and elections, parties, interest groups, federalism, Congress, the Presidency, the bureaucracy, the judiciary, and public policy formation. This course requires more reading and more written work than does POL 102. May not be taken for credit in addition to POL 102. Prerequisites: Permission of department. Priority given to Scholar Incentives Program students Fall or spring, 3 credits

POL 321 American Federalism and Intergovernmental Regulations (NEW)

A survey of the constitutional, institutional, and political interrelationships among federal, state, and local governments, covering grant-in-aid and interstate compacts. Prerequisite: POL 102 or 105 Fall or spring, 3 credits

POL 355 Ancient and Medieval Political Philosophy (NEW)
Power, authority, social conflict, justice, and the goals of government as seen by such thinkers as Plato, Aristotle, Augustine, Thomas Aquinas, John of Salisbury, Marsilio of Padua, Machiavelli, Bodin, More, and Hooker. May not be taken for credit in addition to POL 250.

Prerequisites: Two poliical science courses; upper-division standing Fall, 3 credits

POL 356 Modern Political Philosophy (NEW)

Power, authority, social conflict, justice, and the goals of government as seen by such thinkers as Hobbes, Locke, Rousseau, Hume, Burke, Hegel, Bentham, Mill, and Marx. May not be taken for credit in addition to POL 250 and 351.

Prerequisites: Two political science courses; upper-division standing Spring, 3 credits

POL 360 Political Decision Making

Exploration of economic models of political choice. Topics include decision theory, game theory, and social choice theory. Substantive problem areas include voting in small groups, candidate competition in mass elections, and the normative study of democratic decision making.

Prerequisites: POL 102 or 104 or 105; one of the policy or behavior courses listed on BULLETIN, p. 167; satisfaction of mathematics proficiency requirement

Fall or spring, 3 credits

POL 365 Bureaucracy and Public Administration (NEW)

Intended for students interested in a public service career. Topics include functions of bureaucracy in American society and in various cultural contexts; relationships between policy and administration; development of organizational and bureaucratic theories, with emphasis on decision making, innovation, and responsibility. Prerequisite: POL 260

Spring, alternate years, 3 credits (not offered in 1986-87)

POL 372 Politics in the Third World (NEW)

Analysis of problems and prospects of non-industrialized nations that are experiencing political and economic development. Particular attention will be paid to the impact of colonialism, social problems, economic modernization, and foreign policy orientations of the Third World nations. Prerequisite: POL 103 Spring, 3 credits

POL 373 Politics in South Asia (NEW)

Analysis of the political systems of India, Pakistan, and other major nations of South Asia. The course will explore the relationships between political cultures, economic structures, party systems, and institutions for formulating public policy.

Prerequisite: POL 103

Spring, 3 credits

POL 375 American Politics and Social Change (NEW-offered as POL 402, Sec. 1 in Spring 1986) An examination of the dynamics of social change from theoretical and historical perspectives. The course focuses on competing models of the American political process and questions how well they explain the origins of movements seeking social change and the state's responsiveness to political demands of disadvantaged

Prerequisites: POL 102 or 105 and POL

Fall, alternate years, 3 credits (not offered 1987-88)

Special Topics for Fall 1986

POL 401 Seminars in Advanced **Topics: Women in Politics** (M. Mericle)

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 8:30 a.m. to 4:00 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 315 (to be offered in Spring 1987) and 317 will not be offered in Fall 1986. PSY 348 has been deleted from the curriculum.

Revised Major Requirement

1. A grade of C- or higher must be obtained in all courses (within and outside the Psychology Department) required for the major.

2. No transferred psychology course with a grade lower than Cwill be accepted for credit toward the major.

PSY 343 Comparative Psychology (NEW)

A consideration of observed patterns and underlying mechanisms of animal and human behavior in ecological and evolutionary perspective. Crosslisted with BIO 359. May not be taken for credit in addition to the discontinued

Prerequisite: PSY 103 or 104 or BIO 101 or 151 Fall, 3 credits

PSY 350 Cognitive Psychology (REVISED)

Prerequisite: PSY 201 or AMS 102

PSY 351 Topics in Cognition (NEW) A study in depth of a selected topic from among (1) problem solving, (2) memory, (3) attention, and (4) imaginal processes. The topic will be announced and described in detail prior to advance registration. May be repeated once with permission of the instructor. Prerequisite: PSY 350 Spring, 3 credits

Special Topics for Fall 1986

PSY 311 Advanced Developmental Psychology: Biobehavioral Basis of Development

A review of biological factors that provide the context for development and behavior. In particular, genetic, growth, and brain characteristics will be examined. Prerequisites: PSY 201 and 211

(H. Kaye)

PSY 390 Special Topics in Psychology: Social Cognition

The process by which people achieve understanding of themselves, other people, groups, and social situations. An information-processing approach will be used to analyze classic issues in social psychology such as impression formation, social influence, interpersonal attraction, and intergroup relations.

Prerequisites: PSY 209 and 300 (S. Valins)

PSY 391 Special Topics in

Psychology: Health Psychology Introduction to the field of health psychology, which involves the application of psychological theories and research to health and illness problems. Specific topics include stress, coping with chronic illness, compliance, health and illness behaviors, and pain. Prerequisites: BIO 102 or 152 or PSY 241; two of the following: PSY 208, 209, 215 (J. Wood)

PSY 392 Special Topics in Psychology: Sleep-Research, Disorders, and Treatment

A review of the research on the anatomy, physiology, and psychology of sleep. The major emphasis will be on the discussion of sleep disorders and their treatment. Prerequisite: PSY 241 (J. Walsleben)

Religious Studies

A brochure with extended descriptions of Fall 1986 Religious Studies courses will be available in the department office, Old Physics 103 at Prime Time and

Changes in expected semester of course offerings: RLS 246 is being offered in Fall 1986 instead of Spring 1987. RLS 280 and 335 will not be offered in 1986-87.

RLS 122 Religion and Ethics Today

An introduction to problems of method in the study of religion. This course analyzes 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 150 The Religious Dimension (REVISED)

This is no longer an honors course; it is open to all students.

RLS 310 Biblical Theology (NEW) Intensive introduction to the theological tendencies and implications

of selected major texts from the Christian and Jewish scriptures. The course will survey historical and critical work on the selected texts, but will focus on the religious thinking reflected in them and their influence on later traditions. May be repeated once for credit as subject matter

Prerequisites: RLS 230 or 270 or RLS 101 and one 200-level RLS course Fall, 3 credits

RLS 321 Christian Classics (REVISED)

Intensive study of a particular influential classic Christian text or genre, orthodox or heterodox, selected from early Christian, medieval, Reformation, or modern works. May be repeated as subject matter differs.

RLS 345 Religion and Science (NEW)

Origins and development of the conflict between religion and modern science, along with contemporary efforts to reconcile their methods and goals. Topics include the Galileo case, the Enlightenment critique of dogmatic religion, and anti-religious theories such as Darwinism, psychoanalysis, sociobiology, and artificial intelligence. Recent efforts toward a new

intellectual synthesis of religion and science will be discussed, with attention to its East-West dimension. Prerequisites: Upper-division standing; two semesters of science and one 200-level RLS or PHI course Fall or spring, 3 credits

Special Topics for Fall 1986

RLS 220 Studies in Religion: Hinduism and Jainism

An introduction to the major non-Buddhist religous and philosophical traditions of India, with attention to views on personal identity, bondage and liberation, dreams, illusions and reality, and psychophysical transformation through yoga.

(J. Gyatso)

RLS 330 Special Topics: Korean Aesthetics

A survey of the poetry, music, dance, drama, painting, and cinema art of Korea, in both traditional and contemporary forms, with attention to the influences of religious agricultural festivals, Buddhism, and Confucianism. (Won Kyung Cho)

Social Sciences

A brochure with extended descriptions of Fall 1986 courses is available in the Social Sciences office, Social and Behavioral Sciences S-201.

Women's Studies courses are no longer listed with the SSI designator. WNS (but not WNH) courses may, however, be applied to the Social Sciences Interdisciplinary major as if they were still SSI courses. See Women's Studies section, below.

Students planning to enter the Social Studies Secondary Teacher Preparation Program during the 1986-87 academic year must register for SSI 397 in Fall 1986. Students who intend to enter this program later on should consult with Professor Eli Seifman during the Spring 1986 semester. Failure to do so may result in a delay in meeting the New York State teacher certification requirements.

Students planning to take SSI 450 Supervised Student Teaching in Fall 1986 must contact Professor Seifman during the Spring 1986 semester to make arrangements for a secondary school student teaching placement.

SSI 210 Images and Realities of Childhood (NEW)

Contemporary views of childhood as reflected in societal values and attitudes. Emphasis will be placed upon present-day society whose books, films, television, music, and child-rearing customs will be analyzed to determine contemporary social roles and expectations. Prerequisite: SSI 103 Spring, 3 credits

SSI 265 Drug and Alcohol Education (REVISED)

May not be taken for credit after SOC 339.

Corequisite: A supervised student teaching course (numbered 450)

SSI 308 Battered Wives, Endangered Children (NEW)

Theories and research about physical and sexual abuse of women and children. Among the topics to be discussed are rape, incest, and spouse abuse. The approach will include sociological, psychological, and feminist perspectives. Solutions involving the medical and legal systems and the establishment of shelters will also be explored. Prerequisite: 18 credits of social sciences Fall, 3 credits

SSI 320 The Special Child (NEW) Social, political, philosophical, and educational issues related to the habilitation and integration of children. The course focuses on the interaction between children who have developmental, sensory, communication, behavioral, orthopedic, and other health disorders as well as those who are gifted, and community response to their exceptional needs. Prerequisites: SSI 103; PSY 211 Spring, 3 credits

Sociology

A brochure with extended descriptions of Sociology courses will be available at the department office, Social and Behavioral Sciences S-401, starting April 12.

Changes in expected semester of course offerings: SOC 358 will not be offered in Fall 1986. SOC 104 has been deleted from the curriculum.

The new courses, SOC 105
Structure and Method in
Sociology, SOC 106 Introduction
to Sociology: Honors, and SOC
305 Modernity and Identity, below,
may be used as alternative
prerequisites instead of SOC 103
whenever that course is listed as
a prerequisite. One of these three
courses may be used instead of
SOC 103 to satisfy major
requirements.

Revised Major Requirements

1. SOC 211-212 will replace SOC 201 and 202 as requirements for the major for all students who have accumulated 45 graduation credits by the beginning of the Fall 1986 semester. (Students under the old requirement who have not yet completed SOC 201 and 202 must take the courses in 1986-87, the last year in which they will be offered, or substitute SOC 211-212.)

2. Courses in linguistics, social sciences (SSI only), and women's studies (WNS only) may be used to satisfy the "related fields" requirement of three courses in one related social science.

SOC 105 Structure and Methods in Sociology (NEW)

A general introduction to the science of sociology. This course emphasizes sociological theory and methods. Students will be taught what is unique about the way in which sociologists analyze human behavior and society. Differences between the sociological perspective and perspectives of other social sciences are emphasized. There will also be a heavy emphasis on the types of methods and data that sociologists use to test the validity of their ideas. May not be taken for credit in addition to SOC 103, 106, 301, 305, or the discontinued 104. Fall and spring, 3 credits

SOC 106 Introduction to Sociology: Honors (NEW)

An enriched introduction to the sociological perspective with an emphasis on how sociologists develop and test their hypotheses about human behavior. This course will require more reading and cover more difficult topics than SOC 105, providing an introduction to sociology in greater depth. May not be taken for credit in addition to SOC 103, 105, 301, 305, or the discontinued 104. Fall and spring, 3 credits

SOC 305 Modernity and Identity (NEW)

A sociological perspective applied to the emergence of modern society. Special attention is focused on the impact of the industrial revolution, urbanism, and the rise of modern democracies. The course will consider how new social structures, such as bureaucracies, lead to new definitions of personal identity, and how social order and culture become increasingly problematic as new social groups are formed and demands made. May not be taken for credit in addition to SOC 103, 105, 106, 301, or the discontinued 104.

Prerequisite: Upper-division standing Fall, 3 credits

SOC 320 Demography (REVISED)
Only the title has been changed.

SOC 375 Biosociology (NEW)
Comparison of basic social processes in human and animal groups. Topics covered include dominance, hierarchies, the distribution of scarce resources, cooperation, and the division of labor.

Prerequisites: SOC 103 or 104 or 105 or 106 or 301 or 305; either SOC 201 or two other courses in the social sciences or two courses in biology Spring, 3 credits

SOC 385 The Sociology of Economic Life (NEW)

The sociological approach to markets, production, distribution, and consumption. Special attention to the differences between sociological and economic theories of the same phenomena and to the embeddedness of economic action in social structure. Topics include the historical emergence of sociology and economics as separate disciplines, labor markets and the labor process, discrimination, vertical integration and industrial organization, the organization of professions such as law and medicine, fertility and population changes, comparisons of tribal and non-Western economic systems to those familiar in modern industrial

Prerequisites: SOC 103 or 104 or 105 or 106 or 301 or 305; either SOC 201 or two other courses in the social sciences

Spring, alternate years, 3 credits (not offered in 1987-88)

SOC 475 Undergraduate Teaching Practicum (REVISED)

Prerequisites: Upper-division standing; 12 credits of sociology; permission of instructor and Director of Undergraduate Studies

Special Topics for Fall 1986

SOC 391 Special Topics: Theory and Practice in Student Leadership

A seminar for students interested in developing communication and leadership skills. It will offer a combination of readings, directed observations, and experiential learning. The course will draw on sociology, social psychology, and developmental theory and will focus on organizations, small groups, leadership, and individual student development. Prerequisites: SOC 103 or 104; either SOC 201 or two other courses in the social sciences; permission of instructor (C. Vasquez)

Theatre Arts

Changes in expected semester of course offerings: THR 218, 246, and 371 will not be offered in Fall 1986. The spring course, THR 372, will be offered this fall. THR 130, 213, and 307 have been deleted from the curriculum. (THR 307 has been replaced by THR 297 and 397, below).

Information on changes in major and minor requirements resulting from course deletions is available in the department office.

The new courses, THR 297 and 397, have been added to the list of performance courses that may not count toward the 90 liberal arts credits required for the B.A. degree.

Although all the projects courses have been made repeatable up to a maximum of six credits in any one (see THR 481-487 and 489 below), the limit of six credits that may be earned in any combination of these courses remains in effect.

THR 223 Stage Costume I

An introduction to costume design, combining theory and practice. Students learn the tradition and history of costume design and complete exercises in rendering and conceiving designs and working through design ideas of their own. Written reports will detail the processes followed.

THR 230 Voice and the Actor (REVISED—formerly THR 331)
A practical course in voice production for the actor. Students will participate in exercises for developing the speaking voice with an emphasis on the involvement of the body.

Increasing resonance, range, articulation, and their link to acting and improvisation will be explored. The International Phonetic Alphabet will be studied.

Prerequisite: THR 105 or 112

THR 256 Stage Design I (REVISED)
An introduction to the aesthetics and worldwide traditions of stage design. The study will include exercises in design rendering with opportunities for students to conceive and work through design ideas.

THR 297 Rehearsal and Performance I (NEW)

Development of skills in performance through the preparation and rehearsal of a production. Students must audition, be cast in a principal role in a major department production, or be engaged in the entire rehearsal process to receive credit. May be repeated once.

Fall and spring, 1 credit

THR 312 Readers' Theatre (NEW)
The preparation and performance in a readers' theatre of plays selected from the department's list of required reading for majors. There will be performances for a local audience and for a community audience off campus. May be repeated once.

Prerequisite: THR 205
Fall or spring, 3 credits

THR 330 Oral Interpretation (NEW)
Continuation of voice study, exploring the voice as an instrument for readers' theatre. Emphasis on adaptation of non-dramatic material for the stage and on choral reading.

Prerequisites: THR 130 or 230; permission of instructor
Fall or spring, 3 credits

THR 340 Summer Theatre Workshop II (NEW)

Advanced students will be assigned to positions of responsibility for the running of the Summer Theatre. May count toward the major with THR 244 for a combined total of 6 credits. *Prerequisites:* THR 244; permission of instructor *Summer, 1 to 6 credits*

THR 397 Rehearsal and Performance II (NEW)

Further 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 department production, or be engaged in the entire rehearsal process to receive credit. May be repeated once.

Prerequisite: THR 297
Fall and spring, 1 credit

THR 481 Projects in Production Management (REVISED)

May be repeated up to a maximum of 6 credits. This is now a variable-credit course. 1 to 3 credits.

THR 482 Projects in Performance (REVISED)

May be repeated up to a maximum of 6 credits.

THR 483 Projects in Theatrical Design (REVISED)

May be repeated up to a maximum of 6 credits.

THR 484 Projects in Theatre History, Theory, Literature, and Criticism (REVISED)

May be repeated up to a maximum of 6 credits.

THR 485 Projects in Script Writing (REVISED)

May be repeated up to a maximum of 6 credits.

THR 486 Projects in Technical Theatre (REVISED)

May be repeated up to a maximum of

THR 487 Projects in Media (REVISED)

May be repeated up to a maximum of 6 credits.

THR 489 Projects in Directing (REVISED)

May be repeated up to a maximum of 6 credits.

Special Topics for Fall 1986

THR 299 Special Workshop: Basic **Audio Workshop**

A practicum in radio news production. 2 credits (N. Prusslin)

Unaffiliated Courses

Changes in expected semester of course offerings: INT 200, 224, and 250 will not be offered in Fall

HUM, SBS, SCI 291 Seminar on Contemporary Issues (REVISED) May be repeated as the topic varies.

HUM, SBS, SCI 491 Seminar on Contemporary Issues (REVISED) May be repeated as the topic varies.

Special Topics for Fall 1986

HUM 491 Seminar on Contemporary

Sec. 1: Science Fiction and Fantasy See Human Development section.

Sec. 2: Issues in Contemporary Catholicism

An examination of a number of issues in Catholicism including the role of women, liturgy, authority in the Church, and with special emphasis on the influence of the clergy. (The seminar will meet on Tuesdays from October 7 through November 4 only.) Prerequisite: Upper-division standing (A. Godfrey)

SBS 491 Seminar in Comparative Religion

See Human Development section.

Women's Studies

WNH 250 Women in the Third World (NEW)

The problems of women in Third World societies, as illustrated through narratives by and about women. Oppression, madness, the quests for freedom, love, identity, and fulfillment are themes to be approached through the texts of this course. The interrelationships between women and men, underlining the basic human need for personal fulfillment, will be studied. Spring, 3 credits

WNS 102 Introduction to Women's Studies (REVISED—formerly SSI 102)

WNS 307 Psychology of Women (REVISED-formerly SSI 307)

WNS 320 Women in Judaism (NEW) A survey of women in Judaism and in Jewish life from the Biblical period to the present, focusing on such topics as the representation of women in the Bible; Jewish law concerning women; the role of women in the enlightenment in Germany and America: immigrant women in America; women in the Holocaust; and women in Israel. Prerequisite: One JDS or WNH or WNS course Alternate years, 3 credits (not offered in 1987-88)

WNS 333 Women in U.S. History (REVISED-formerly SSI 333)

WNS 334 Women, Work, and Family in Modern European History (REVISED-formerly SSI 334)

WNS 407 Senior Seminar in Women's Studies (REVISED-formerly SSI 407)

Special Topics for Fall 1986

Special topics are being offered in two departments that should be of interest to students in the women's studies minor as well as other students interested in women's issues: CLT 361 and POL 401. See the appropriate section of the Supplement for further information



College of Engineering and Applied Sciences

Notice to Engineering and Computer Science Majors

Effective Spring 1986, ESE 218 became ESE 318. ESE 218 will be counted as an upper-division course to meet graduation requirements.

Applied Mathematics and Statistics

Changes in expected semester of course offerings: AMS 194 and 373 will not be offered in Fall 1986. The spring course AMS 210 will be offered in the fall.

AMS 110 Probability and Statistics in the Life Sciences (REVISED) Credit cannot be given for both AMS 102 and 110.

AMS 113 Foundations of Computer Science (NEW)

Crosslisted with CSE 113. See description under Computer Science.

AMS 315 Data Analysis (NEW)
Statistical analysis of data. Exploratory data analysis. Estimation. Parametric and nonparametric hypothesis tests. Use and interpretation of statistical computer packages, e.g. SPSS. Power. Robust techniques.

Prerequisite: AMS 310
Spring, 3 credits

AMS 335 Game Theory (NEW)

Introduction to game theory fundamentals with special emphasis on problems from economics and political science. Topics include: strategic games and Nash equilibrium; games in coalitional form and the core; bargaining theory; measuring power in voting systems; problems of fair division; optimal and stable matching.

Prerequisite: One semester of calculus Fall, 3 credits

Computer Science

Changes in expected semester of course offerings: CSE 105, 110, 370, and 373 will not be offered in Fall 1986. The spring courses CSE 306 and 345 will be offered this fall. It is anticipated that CSE 111 and 345 will not be offered in Spring 1987, and that the new course CSE 110 will be offered for the first time in Spring 1987 (and in both fall and spring semesters in subsequent years).

Revised Major Requirements
B. CSE 380 may be substituted for CSE 345 (as a Group I course). This is effective retroactively to all CSE majors.

K. Natural Science Requirements: PHY 105 may be taken instead of PHY 101

PHY 106 may be taken instead of PHY 102

Challenge and Proficiency Examinations

There is now a Challenge examination for CSE 111, as well as a proficiency examination.

Challenge examinations for CSE

hallenge and Proficiency

111, 113, 114, and 120 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 examinations to establish equivalency of transferred courses to serve as the prerequisite.

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

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

CSE 110 Introduction to Computer Science (NEW)

An introduction to fundamentals of computer science for non-majors. Topics covered include algorithms, problem-solving techniques, computer appliations, data structures, and machine principles. Students will gain experience using a modern higher level computer programming language (currently PASCAL) to solve a variety of numeric and non-numeric problems. Primarily for students not planning to major in computer science. May not be taken for credit in addition to CSE 105 or 111. Students who have a C or higher in CSE 114 may not take CSE 110.

Prerequisite: MAT 120 or passing Mathematics Placement Examination at entry level for MAT 125 or 131 Fall and spring, 3 credits (not offered in Fall 1986)

CSE 113 Foundations of Computer Science (REVISED)

Rigorous introduction to conceptual and mathematical foundations of computer science. Problem-solving techniques and mathematical concepts that aid analysis and solution of algorithmic problems will be stressed. Concentrates on general problem-solving principles, algorithmic problem solving, and discrete mathematics concepts including sets. Boolean logic, relations, graphs, counting principles, functions, sequences, induction, proof techniques, algorithms, algorithm complexity and verification language concepts, and recursion. Concepts considered within context of computer science and its applications. Presents some aspects of the programming language PASCAL, with primary emphasis on understanding (reading) programs, rather than details of writing or developing programs. Will prepare the student for further computer science courses where these fundamental ideas and concepts can be applied to the development of actual software systems. Crosslisted with AMS 113. Prerequisite: MAT 120 or passing

Mathematics Placement Examination at entry level for MAT 125 or 131 Fall and spring, 3 credits

CSE 491 Honors Seminar (NEW)
This course is designed for upper-division CSE majors who have demonstrated excellence in computer science courses and/or a special interest in the topic being offered. Each time the course is offered, a topic will be selected comprising material not otherwise presented in undergraduate courses. May be repeated.

Prerequisites: Computer science major; upper-division standing; permission of department

Fall or spring, 3 credits

Electrical Engineering

Changes in expected semester of course offerings: ESE 290, 304, 311, 330, 331, 346, 348, and 370 will not be offered in Fall 1986. The spring course ESE 345 will be offered in the fall.

ESE 305 Systems and Signals (NEW)

Concepts of linearity and time-invariance. Convulution and transfer function, Laplace transforms, z-transform, Fourier transforms and their relationships. Stability and its implications. Routh's test and Jury's test. Computer simulation, analog and digital. Provides common background for control, communication, and digital signal processing. *Prerequisite*: ESG 271

Fall, 3 credits

ESE 318 Digital Systems Design

(REVISED-formerly ESE 218) The physical and logical basis of digital circuitry is covered in depth. Electronic characteristics of gates and their consequences are discussed including an introduction to circuit theory. Gate structure minimization is explained. The design of basic digital devices (counters, multiplexers, arithmetic circuits) is stressed. Note: In past years this course was numbered 318, but it was changed for a short time to 218. Digital Systems Design meets appropriate major requirements and prerequisites when taken under either number.

Special Topics for Fall 1986

ESE 390 Special Topics in Digital Systems: Fundamentals of Graphics and Image Processing

Basic algorithms and data structures used for creating and analyzing images. Emphasis will be on bitmap graphics and binary image processing Specific topics will include graphics editors, splines, digitization of images, elementary shape analysis, etc. The laboratory will use the AT&T DMD5620 terminal and will have an ongoing project to create a simple graphics editor and a simple imaging system for integrating paper and electronic input. Prerequisites: CSE 114; ESE 340 or **CSE 201** (T. Pavlidis)

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.

All students entering the ESG major in or after the Spring 1986 semester will be required to fulfill, as part of their graduation requirements, at least three credits of design in their technical elective courses. The following courses have been defined as constituting 100 percent design: ESC 310, 328, 333, 334, 361; ESE 315, 318, 380; ESM 355.

ESG 312 Engineering Laboratory II (REVISED)

This is now a 3-credit course.

ESG 317 Engineering Experimentation: Mechanical

Engineering (REVISED)
Introduction to advanced experimental methodology. Application of electrical, mechanical, and optical transducer systems to engineering experiments in solid, thermal, and fluid mechanics. Engineering report writing.

Spring, 3 credits

Materials Science and Engineering

Changes in expected semester of course offerings: ESM 335 will not be offered in 1986-87. ESM 336 will not be offered in the fall, but will be offered in Spring 1987.

Mechanical Engineering

A brochure with information pertaining to Fall 1986 course offerings will be available in Light Engineering 113 on April 15.

Changes in expected semester of course offerings: ESC 346 and 350 will not be offered in Fall 1986. The spring course ESC 441 will be offered in the fall. ESC 336 and 361 have been deleted from the curriculum.

ESM 355 is changed from a required course to a technical elective in the approved mechanical engineering technical elective group. ESM will be a technical elective only for students meeting mechanical engineering major requirements with the revised ESG 317. (See Engineering Science section.)

Current listings of the mechanical engineering technical electives and the mechanical engineering design group are available in the department office.

ESC 102 Weather and Climate (NEW)

An introduction to the nature and causes of common meteorological phenomena, severe weather occurrences, and climatic patterns. Topics to be considered include formation and movement of air masses and large-scale storms; techniques for weather prediction; weather satellites; hurricanes, tornadoes, and thunderstorms; cloud and precipitation types; the climatic history of the earth; actual and potential effect of human activities on weather and climate, and of weather and climate on humans. Fall, 3 credits

ESC 330 Structural Analysis (REVISED)

Structural stability. Statically determinate and indeterminate structures. Analysis of trusses and frames in two dimensions. Displacement of structures using the method of virtual work. Method of superposition for analyzing statically indeterminate structures. Computer projects using matrix analysis for determinate and indeterminate trusses.

Three-moment equation. Introduction

to finite element analysis.

Prerequisites: ESG 363; CSE 111

ESC 363 Elements of Aircraft Design (NEW)

As an introduction to aerodynamics, performance, and stability and control, the generation of life forces and calculations of aerodynamic forces in two- and three-dimensional subsonic flows is studied. Typical airplane performance problems of range, endurance, rate of climb, etc. are also covered.

Prerequisite: ESG 364 Spring, alternate years, 3 credits (not offered in 1986-87)

ESC 411 System Dynamics and Control (NEW)

Differential equations for physical systems and their solutions; Laplace transformations; block diagram and transfer function; system response; system analysis and stability; system compensation and design.

Prerequisite: MAT 221

Fall, 3 credits

Technology and Society

Changes in expected semester of course offerings: EST 194, 360, and 420 will not be offered in Fall 1986. The spring courses EST 300, 320, and 370 will be offered in the fall.

EST 392 Engineering and Managerial Economics (REVISED) Applications of fundamental economics principles and systems analysis to problems of planning and design in manufacturing or service sectors of industry. Includes the time value of money, analysis of various types of cash flows, development of rate of return, benefit to cost ratios in their use to evaluate competing investment programs. Studies the role of depreciation and investment tax credits on the level of corporate taxation leading to the determination of after-tax rates of return. Cases from both manufacturing and service sectors illustrate techniques for analysis of multiple alternatives. Influences of inflation, sensitivity analyses, and probabilistic methods on economic forecasting are shown through problem-solving case studies.

EST 393 Production and Operation Analysis (REVISED)

Development of analytical techniques useful in supplying information for planning purposes in the manufacturing and service sectors. Introduction to mathematical modeling of production, inventory, distribution, and service systems using linear programming, network, and probabilistic methods. Applications of forecasting and materials requirements planning in the development of resources to meet anticipated needs. Practical, real-life case studies are used throughout with appropriate familiarization with the uses of the computer in problem solving and simulation.

W. Averell Harriman College for Policy Analysis and Public Management

Five-Year Bachelor's/Master's Degree Program in Government, Non-Profit, and Enterprise Management

Harriman College has expanded its Accelerated Program for Stony Brook students, allowing them to combine any Arts and Sciences or Engineering and Applied Sciences major on the undergraduate level with a master's degree program in government, non-profit, or enterprise management. This five-year program gives students ample time to develop expertise in their major area; and it makes the major marketable.

Coursework in the new Harriman program begins in the senior year (instead of the junior year, as was the case under the old program). Interested sophomores and juniors, who must have a G.P.A. of 3.0 or higher to be accepted, should take advantage of Prime Time advising hours to seek approval of their previous coursework and assistance in choosing appropriate courses for next year to complement the Harriman curriculum.

Stony Brook seniors start the curriculum with nine graduate courses and finish with ten courses in the next year, receiving the baccalaureate degree simultaneously with the graduate degree. Courses are tailored to the public, non-profit, or the private sectors. The nine graduate courses taken as a

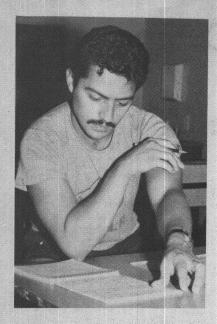
senior are counted as electives for the undergraduate degree. Application to the program is made at the end of the sophomore year and to the Graduate School at the end of the junior year. For further information, see Professor Owen Carroll, Director of Graduate Studies, in Harriman College, Old Physics.

PAM 345 Special Topics in Management (NEW)

An advanced course treating specific issues in the theory and practice of management. May be repeated for different topics.

Prerequisites: Upper-division standing; permission of Dean of Harriman College

Fall and spring, 3 credits



Marine Sciences Research Center

Changes in expected semester of course offerings: MAR 333 will not be offered in Fall 1986.

MAR 337 Primary Productivity in the Sea (NEW)

A review of classic and current research on primary production by marine phytoplankton and macroalgae. Topics will include phytosynthesis and growth, nutrients, temporal and spatial variability, competition, and predation. Prerequisites: CHE 132 or 142; BIO 152 and one upper-division BIO course as approved by the instructor; CHE 322 or 332 recommended Fall, 3 credits

MAR 390 Development of

Aquaculture (NEW)
A comprehensive, interdisciplinary description and analysis of the culture of aquatic organisms for man's use. The course covers both marine and freshwater aquaculture of plants, shellfish, and finfish. Basic principles of aquaculture are illustrated with specific examples of organisms cultured for staple and luxury foods, biochemicals, wastewater treatment, etc. The development of aquaculture as an industry and its role in managing aquatic resources are covered. While much of the course material is biological, economic, social, and legal aspects of natural resource allocation are also emphasized. Prerequisite: BIO 113 or 115 or MAR 104 Fall, 3 credits

MAR 413 Marine Biochemistry

Survey of biochemical features and adaptations characteristic of the marine biota. Specific topics to be discussed will include salinity, temperature and pressure adaptations, calcification and silicification, marine natural products and toxins, bioluminescence, photosynthetic light adaptation, and marine lipids. Prerequisite: BIO 361 Spring, 3 credits

