

Stanford University

COURSES
AND DEGREES
1967-68

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Stanford, California
Published by the University

COMMUNICATION

Emeritus: Chilton R. Bush (*Professor*)

Executive Head: Clifford F. Weigle

Director, Institute for Communication Research: Wilbur Schramm

Director, Professional Journalism Fellowship Program: Herbert Brucker. Associate Director: Julius C. Duscha

Professors: Herbert Brucker, Nathan Mac-
coby, Wilbur Schramm, Clifford F. Weigle

Associate Professors: Edwin B. Parker, William L. Rivers

Assistant Professors: Henry S. Breitrose,
William J. Paisley. *Acting:* Godwin C.
Chu

Instructor: Janet K. Voelker

Lecturers: Julius C. Duscha, Lyle M. Nelson,
Templeton Peck

The Department of Communication engages in research in communication and offers a curriculum which prepares its students for careers in print and broadcast journalism, documentary film, and communication research.

The main objectives of the professional curriculum are to provide a broad program in the social and humanistic studies; to present courses in the processes and effects of communication, and to equip the student with an adequate set of professional values.

A secondary objective is to provide that amount of training in skills and techniques that will sustain the student's interest in his chosen profession and will assist him in beginning his career.

The technical courses provide not only practice but a content that is an application of some of the principles of the behavioral sciences and humanities. The technical curriculum in this sense is like the curricula of the Schools of Medicine and Engineering which apply the principles of the biological and physical sciences.

ADMISSION

Undergraduate students who have been admitted by the University are accepted as majors provisionally for one quarter. Thereafter, the student's record is reviewed quarterly by the Department.

Students who wish an undergraduate minor in the Department may arrange for a

Prospective undergraduate students should write the Office of Admissions.
Prospective graduate students.

Prospective graduate students should write to: Executive Head, Department of Communication, Redwood Hall, Stanford University, Stanford, California 94305. The Department requires that

The Department requires that applicants for graduate admission include verbal and quantitative scores from the Graduate Record Examination (area scores are optional). Applicants who hope to work toward a Ph.D. are also required to submit scores from the Miller Analogies Test. These test requirements may be waived after written petition to the Department only if exceptional circumstances prevent the applicant from taking the tests.

PROGRAMS OF STUDY

BACHELOR OF ARTS

Two Bachelor of Arts degree programs are offered, one in Journalism and one in Broadcasting and Film. Requirements are as follows:

1. Two courses in general or English literature; Psychology 1; Sociology 1 or Anthropology 1. In addition, Journalism students are required to take Economics 1 and Political Science 1 and 10 or 20. (The student who wishes to take both Political Science 10 and 20 may substitute 15a and b.)

2. A unified program totaling not less than 20 units of courses numbered 100 or higher shall be arranged, with the approval of the adviser, from one or two other departments such as Anthropology, Art, Economics, English, History, Music, Philosophy, Political Science, Psychology, Sociology, or Speech and Drama.

3. Undergraduate majors must have a grade point average of 2.50 or higher in Communication Department courses in order to receive the departmental recommendation for graduation. Also, undergraduates must have been enrolled as majors in the department for at least three quarters.

- 4a. Broadcasting and Film: Communication 1, 100, 105b or c; 123; 141 or 142, and 180.

- 4b. Journalism: Twenty-five to thirty units in communication of which the following courses are required: 1, 50, 51, 107, 108, 140 and 169. In addition, the student preparing for newspaper or press association editorial

work will take Comm
dent interested prim
sumer magazines and
will take Communica
While the Depart
subjects as s

While the subjects as such are not technical writing, or public programs of study for interested students. For the science writer can substitute a unified treatment of the physical sciences "as" above.

Commun

Majors in Commu
of the following in
programs:

Behavioral Sciences
Quantitative Methods
Humanities Undergraduate
Social Sciences (Honors)
Thought and Institutions

COMMUNICATION HON

In addition to the regular programs in communication Honors Program exceptionally able students, their major, to pursue a what independent study. This program is directed by a substantial body of both communication and scholarly skills by independent guidance, small seminars. Particular emphasis is placed on the planning of an independent study that will cover interests with a body of communication. The plan will be aimed at helping the student to prepare for a comprehensive examination in the final quarter. The plan will include a continuous supervised work or in communication. The work done will be submitted as an independent study at the end of the next to the student's senior year. It is required to elect both the Communication Honors Program and one of the disciplinary honors programs.

work will take Communication 175; the student interested primarily in writing for consumer magazines and industrial publications will take Communication 150.

While the Department offers no courses in such subjects as science reporting, technical writing, or public relations, appropriate programs of study can be arranged for interested students. For example, a prospective science writer could be permitted to substitute a unified program of courses in the physical sciences in lieu of requirement "2" above.

Majors in Communication may elect one of the following interdisciplinary honors programs:

Behavioral Sciences (Honors Programs in Quantitative Methods)

Humanities Undergraduate Honors Program

Social Sciences (Honors Program in Social Thought and Institutions)

COMMUNICATION HONORS PROGRAM

In addition to the regular undergraduate programs in communication, a Communication Honors Program is designed for those exceptionally able students who wish, in their major, to pursue an intensive and somewhat independent study of communication. This program is directed toward the integration of a substantial body of theoretical and factual information and the development of both communication skills and creative scholarly skills by independent study, tutorial guidance, small seminars, and research experience. Particular emphasis is placed on the planning of an individual program for the student that will combine his specialized interests with a body of basic knowledge about communication processes. The plan will be aimed at helping the student prepare for a comprehensive examination to be taken in the final quarter of his senior year, over his entire area of communication study. The plan will include arrangements for continuous supervised work in communication skills or in communication research. A report of the work done under this plan will be submitted as an undergraduate thesis at the end of the next to final quarter of the student's senior year. It is possible for a student to elect both the Communication Honors Program and one of the three interdisciplinary honors programs listed above.

MASTER OF ARTS

The Master of Arts degree is awarded by the Department in the fields of Journalism, Broadcasting and Film, or Communication Research. Requirements are as follows:

1. The candidate must earn 45 units in graduate residence at Stanford; he must be enrolled as a major in the department for at least two quarters; he must earn an average grade of B on his entire program of study. An independent project under the direction of a major professor must be undertaken. Three to six hours of credit in independent study may be applied to this requirement. A report of the project must be made to the professor directing the independent study. A candidate may petition the Department by the end of the second week of the second quarter for permission to submit the report as a thesis.

2. A unified program of advanced course work is to be arranged with the approval of the adviser. This includes appropriate grounding in research methodology and communication theory; it includes training in one or more communication media; and, it includes the equivalent of a minor in a related field—or a cohesive group of courses in several fields.

3. Students in Broadcasting and Film, upon completion of academic work, including the independent project, must pass a comprehensive written examination, after which they spend a three-month internship with a professional film or broadcasting organization. (No tuition is charged for the internship period.) Academic work will include 100, appropriate 105 and 110 courses, 215, 220, 310, 311, and 312.

No particular specialization in undergraduate work is expected of a candidate. Special programs of study may be arranged for individual candidates, which will take account of the nature of their previous preparation.

DOCTOR OF PHILOSOPHY

The Department offers the Doctor of Philosophy degree in Communication, with programs in Mass Communication Research, in Developmental Communication, and in Public Affairs Communication.

In addition to fulfilling the course and residence requirements for the degree, Ph.D. candidates are required to:

1. Complete requirements for a Master's degree in Communication, and complete a research project. Holders of the Master's degree may be excused from this first year research requirement if the faculty feels that the previous research has been sufficient.

2. Pass a comprehensive written examination in the subjects required of all candidates and in the area of advanced specialty of the particular candidate.

3. Demonstrate reading knowledge of a foreign language. Except by special permission, this language will be Russian, French, or German.

4. Pass the University oral examination, which may be either a comprehensive examination covering the same areas as the written examination or a defense of the dissertation.

5. Complete at least one year of research experience in the Institute for Communication Research, or in comparable research activities.

6. Have some familiarity with at least one medium of mass communication. Such familiarity may be obtained prior to graduate study by working for a communication medium. Students without such practical experience will be expected to take some media-oriented courses, such as the Summer Radio-Television-Film Institute or journalism courses, as part of their graduate program.

7. Complete a dissertation satisfactory to an advisory committee of three or more members and to the University Committee on the Graduate Division.

The following is an example of a typical Ph.D. program in Mass Communication Research. The curriculum for Developmental Communication is virtually identical, but includes a sequence in developmental psychology and a dissertation in the area of how people, as they mature, learn to use and in turn are influenced by the mass media.

1. Communication Theory

- Comm. 211. Theory of Communication I
- Comm. 212. Theory of Communication II
- Comm. 213. Theory of Communication III

2. Methodology

- Comm. 217. Research Methods I
- Comm. 218. Research Methods II
- Comm. 219. Research Methods III
- C.S. 126. Computing for Nonscientists

3. Statistics

- Psych. 60. Statistical Methods
- Psych. 152. Analysis of Data
- Stat. 161. Statistical Methodology

4. Experimental Psychology (at least two of the following)

- Psych. 103a. Experimental Psychology: Higher Mental Processes
- Psych. 103b. Experimental Psychology: Perception
- Psych. 103c. Experimental Psychology: Animal Learning
- Psych. 103d. Experimental Psychology: Social Processes

5. Social Psychology and Personality

- Psych. 212. Advanced Social Psychology
- Psych. 261. Seminar in Social Psychology
- Psych. 220. Human Motivation
- Psych. 213. Advanced Personality

6. Sociology

- Sociol. 137. Advanced Organizational Behavior
- Sociol. 161. Advanced Interpersonal Behavior
- Sociol. 165. Advanced Social Stratification

Preparation for examinations and for the dissertation should include selected courses from among the following:

- Comm. 220. Mass Communications in Society
- Comm. 255. International Communication
- Comm. 256. Communication in Economic and Social Development
- Psych. 209. Advanced Perception
- Psych. 210. Advanced Learning
- Psych. 211. Advanced Developmental Psychology
- Psych. 221. Organizational Processes and Task Performance
- Psych. 251. Psychopathology
- Psych. 254. Principles of Behavioral Modification I
- Psych. 267. Seminar in Interpersonal Processes

Phil. 157a,b. Logic
Phil. 164. Philosophy
Stat. 206, 207. Mathematical Statistics
Behavioral Science
Anthr. 167. Language
Anthr. 158. Culture
Pol.Sci. 382a, 382b. Political Behavior
Pol.Sci. 312. Comparative Politics
of Development

Other courses and independent studies may be taken with the adviser.

The following is a typical Ph.D. program in Communication:

1. Communication Theory

- Comm. 211, 212.

2. Structure and Function

- Comm. 220. Mass Society
- Comm. 230. Mass Communication
- Comm. 240. Economic Communication
- Comm. 255. International Communication

3. Methodology

- Comm. 217, 218. Research Methods
- Comm. 227. Analytical Evidence

4. Statistics

- Psych. 60. Statistical Methods
- Stat. 50. Elementary Statistics
- One other statistics course

5. Law

- Law 104. Law in Society

6. Political Science, History, and Unified program of these fields, and those of the others.

- Pol.Sci. 108. Seminar in Responsibility
- Pol.Sci. 152. Modern Political Thought
- Pol.Sci. 158. Theoretical Political Sociology

- Phil. 157a,b. Logic
 Phil. 164. Philosophy of Science
 Stat. 206, 207. Mathematical Models in Behavioral Sciences
 Anthr. 167. Language and Culture
 Anthr. 158. Culture and Personality
 Pol.Sci. 382a, 382b. Research Seminar in Political Behavior
 Pol.Sci. 312. Research Seminar in Comparative Politics—Problems in Politics of Development

Other courses and special advanced reading courses may be selected in conference with the adviser.

The following is an example of a typical Ph.D. program in Public Affairs Communication:

1. *Communication Theory*

- Comm. 211, 212. Sequence in Communication Theory

2. *Structure and Function of the Mass Media*

- Comm. 220. Mass Communications in Society
 Comm. 230. Mass Media and Government
 Comm. 240. Economics of the Mass Media
 Comm. 255. International Communication

3. *Methodology*

- Comm. 217, 218. Sequence in Research Methods
 Comm. 227. Analysis of Documentary Evidence

4. *Statistics*

- Psych. 60. Statistical Methods, or
 Stat. 50. Elementary Statistics
 One other statistics course

5. *Law*

- Law 104. Law in Society

6. *Political Science, History, Economics* — a unified program of five courses in one of these fields, and three courses in one or both of the others. Suggested:

- Pol.Sci. 108. Seminar in Administrative Responsibility
 Pol.Sci. 152. Modern Political Thought
 Pol.Sci. 158. Theoretical Foundations of Political Sociology

- Pol.Sci. 170. The Supreme Court and the Constitution
 Pol.Sci. 211. Seminar in the Theory of Comparative Politics
 Pol.Sci. 312. Research Seminar on Comparative Politics
 Pol.Sci. 321. Advanced Seminar on British Political Systems
 Pol.Sci. 383a. Research Seminar in Political Behavior
 Pol.Sci. 383b. Research Seminar in Political Behavior
 Hist. 32. Twentieth Century Europe
 Hist. 93. East Asian Civilizations—The recent period.
 Hist. 122a. Russian Foreign Policy 1700–1917
 Hist. 122b. Russian Foreign Policy Since 1917
 Hist. 164. A Political History of the American People since 1914
 Hist. 166. American Intellectual History: Nineteenth Century
 Hist. 167. American Intellectual History: Twentieth Century
 Econ. 117. Economic History of the United States
 Econ. 118. Underdeveloped Economies
 Econ. 120. Comparative Economic Systems
 Econ. 158. Organization and Social Control of Industry
 Econ. 165. International Economics
 Econ. 200. Topics in the History of Economic Thought
 Econ. 215. Economic Development I
 Econ. 216. Economic Development II
 7. Selected courses from these and other departments chosen in consultation with an adviser, in preparation for the degree examinations and the dissertation.

Ph.D. candidacy expires five years after admission to candidacy by the University Committee on the Graduate Division. Reapplication will require reexamination.

Other programs leading toward the Ph.D. and involving communication may be pursued in the Graduate Division Special Programs. Such programs are individually planned for unusually well-qualified students.

Minor for the Degree of Doctor of Philosophy—Candidates for the degree of Doctor of Philosophy in other departments who

elect a minor in Communication will be required to complete a minimum of 15 units of graduate courses in the Communication Department, including one research methods course and either Communication 211 or Communication 212. The Communication 217 requirement may be waived when comparable research methodology courses have been taken in some other department. The remainder of the course program will be adapted to the particular needs of each candidate.

THE INSTITUTE FOR COMMUNICATION RESEARCH

The Institute for Communication Research operates as an office of project research for the faculties of the Department of Communication and other departments, on grants from foundations, communication media, and other agencies, on government contracts, and on its own funds. A few research assistantships are available to qualified graduate students. Among the qualifications which will be highly valued in applicants are high scholarship, training in the behavioral sciences (preferably psychology and sociology, including training in statistics and research methodology), and training for or experience with the mass media. For further information about the Institute write to the Director.

COURSES OPEN TO UNDERGRADUATES AND GRADUATES

I. GENERAL

#1. **Mass Communication and Society** — An introductory survey of the structure, functions, philosophy, process, and effects of mass and interpersonal communication in modern society. Taught from a behavioral science perspective. Open to non-majors.
5 units, Win (Maccoby) MTW 10 and section

70. **Introduction to Survey Research** — An introductory course in survey research methods. Formulation of problems, study design, sampling, interviewing, data processing and analysis, and writing of reports of public opinion surveys. Designed primarily for undergraduate non-majors. Prerequisite: Psychology 60 or equivalent.
3 units, Spr (Maccoby)

190. **Comparative Communication Systems** — Foreign press, broadcasting, and film; their control and support; their relations to economic and social development, political systems, and cultural patterns; and their roles in public opinion and national policy.
4 units, Spr (—) by arrangement, given 1968-69

199. **Individual Work** — Major students with high academic standing are permitted to undertake individual work.

1 to 4 units, any quarter (Staff) by arrangement

II. JOURNALISM

50. **Editorial Techniques I** — Theory and techniques of news communication for newspapers and radio-TV; analysis of journalistic audience; representative media; journalistic vocations. To be taken concurrently with Communication 51. Open to non-majors.

3 units, Aut (Rivers) MWF 11
Spr (—) MWF 9

51. **Editorial Techniques I Laboratory** — Practice in news writing. Weekly conferences, laboratory, outside assignments. To be taken concurrently with Communication 50. Open to non-majors. Prerequisite: typing skill of 35 words per minute.

1 unit, Aut (Rivers) by arrangement
Spr (—) by arrangement

107. **Editorial Techniques II** — Copy editing, headline writing, news display, illustration, typography, printing processes. To be taken concurrently with Communication 108. Prerequisites: 50 and 51.

3 units, Win (Weigle) MWF 9

108. **Editorial Techniques II Laboratory** — Work includes editing daily teleprinter report of Associated Press or United Press International. To be taken concurrently with Communication 107.

2 units, Win (—) by arrangement

140. **History of Anglo-American Journalism** — Open to non-majors.

3 units, Aut (Weigle) TTh 9

150. **Forms of Journalistic Writing** — Practice in writing magazine articles, with emphasis on marketing manuscripts. Conferences. Prerequisites: 50 and 51.

3 units, Win (Rivers) TTh 11

152. **Magazine Editing** — Magazine writing, production, magazine editors, editing. Prerequisite: 151.
3 units, Spr (Rivers)

169. **Legal Aspects of Journalism** — Contempt, constitution, copyright, in Open to non-majors.
3 units, Spr (—)

175. **Reporting of State, Federal and General Administration** — Open only to majors or graduate students.
4 units, Win (—)

121. **Advanced Practice** — executive positions staff of *The Star* Chaparral; weekly undergraduate Communication qualify by election to graduate student total of 7 units credited in fulfillment of requirements for degree.
1 to 2 units, each by arrangement

183. **San Francisco Journalism** — Majors who have completed entire program, and permitted to work senior or graduate with San Francisco under supervision of S men and faculty of
5 units, Spr (Weigle)

III. BROADCASTING

100. **Visual and Audio Techniques** — An introduction to the standpoint of ideas. Students will learn film, television No previous knowledge required. This course further production value.

5 units, Aut (Breitner) 1:15-3:05

101. **Film Aesthetics** — History of the nature of

Communication Systems—broadcasting, and film support; their relations to social development, political patterns; and their opinion and national policy.

Work—Major students with standing are permitted to work.

quarter (Staff) by

JOURNALISM

Techniques I — Theory and communication for news-TV; analysis of journalistic media; journalistic taken concurrently with 51. Open to non-majors.

(Rivers) MWF 11
(—) MWF 9

Techniques I Laboratory — Writing. Weekly conferences, outside assignments. Taken concurrently with Communication majors. Prerequisite: typewords per minute.

(Rivers) by arrangement
(—) by arrangement

Techniques II — Copy editing, news display, illustration, printing processes. Taken concurrently with Communication majors: 50 and 51.

(Weigle) MWF 9
(—) by arrangement

Anglo-American Journalism — Practice editing daily teleprinter in United Press or United Press. Taken concurrently with 107.

(Weigle) TTh 9
Journalistic Writing — Practice magazine articles, with editing manuscripts. Conferences: 50 and 51.
(Rivers) TTh 11

152. Magazine Editorial Techniques—Planning, writing, production studied with local magazine editors, correspondents; industrial editing. Prerequisite: 150.
3 units, Spr (Rivers) Th 4:15-6:05

169. Legal Aspects of Journalism — Libel, contempt, constitutional guaranties, privacy, copyright, inspection of public records. Open to non-majors.
3 units, Spr (—) MW 11

175. Reporting of Public Affairs — Local, state, federal courts; municipal, state, federal administration in the local community. Open only to major students with senior or graduate standing.
4 units, Win (—) MWF 10

Practice Courses

121. Advanced Practice — Practice work in executive positions on editorial or business staff of *The Stanford Daily*, *Quad*, and *Chaparral*; weekly conferences. Open to undergraduate Communication majors who qualify by election or appointment; not open to graduate students. Students limited to total of 7 units credit. Credit may not be offered in fulfillment of Communication unit requirements for degrees in Communication.
1 to 2 units, each quarter (Weigle) by arrangement

183. San Francisco Newspaper Practice — Majors who have made a high record in their entire program, and especially in 175, are permitted to work in San Francisco in the senior or graduate year, by arrangement with San Francisco newspapers. Work is under supervision of San Francisco newspapermen and faculty of the Department.
5 units, Spr (Weigle) by arrangement

III. BROADCASTING AND FILM

100. Visual and Aural Communication Techniques—An investigation of the techniques of film, television, and sound from the standpoint of the communication of ideas. Students will produce short still picture, film, television and sound assignments. No previous knowledge of the media is required. This course is a prerequisite for all further production work in film and television.
5 units, Aut (Breitrose, —) MW 1:15-3:05

101. Film Aesthetics—A systematic examination of the nature of the film medium, and

of attempts to construct theories of film. Attention is given to the problems of aesthetics and communication from the viewpoints of practitioner, critic, and audience.
4 units, Aut (Breitrose) MWF 9

105b. Television Production I—Elementary course in which students study local television shows and work out their own productions in a San Francisco studio. Prerequisites: 100 and consent of instructor.
4 units, Win (—) MW 1:15-3:05

105c. Film Production I — A beginning course in which students produce their own short films. Prerequisites: #101 and consent of instructor.
4 units, Win (—) TTh 10-12

110b. Television Production II—Primarily for graduate students producing television projects for a degree. Admission by recommendation of instructor only. Prerequisite: 105b.
3 units, Spr (—) W 1:15-4:05

110c. Film Production II — Primarily for graduate students producing film projects for a degree. Admission by recommendation of instructor only. Prerequisite: 105c.
3 units, Spr (—) Th 1:15-4:05

123. Writing for Broadcasting and Film I.
3 units, Aut (—) TTh 10-12

124. Writing for Broadcasting and Film II.
3 units, Win (—) MW 10-12

125. Writing for Film and Broadcasting III.
3 units, Spr (—) M 1:15-3:05

141. History of Film—Studies in the development of the motion picture as an art form and a means of communication. Lab.: Screenings of films announced in class.
4 units, Win (Breitrose) MWF 9; lab. by arrangement

142. Broadcast Communication — The development of American broadcasting and its contemporary problems.
3 units, Win (—) TTh 9

180. Broadcasting and Film Criticism — The techniques and role of criticism based upon the objectives and potential of these media. For advanced students. Prerequisite: 141 or 142 and consent of instructor.
3 units, Spr (—) MWF 11

Summer Radio-Television-Film Institute
(See Summer Session Bulletin for 1968.)

COURSES FOR GRADUATES

202. Process and Effects of Print Media Communication — Theory of communication process for journalism A.M. candidates. 3 units, Aut (Parker) Th 7-10 p.m.
203. Process and Effects of Communication — Theory of communication process for A.M. candidates in communication research. 3 units, Aut (Chu) W 2:15-4:05
204. Communication Theory — Readings and conferences. By permission of the instructor. 3 units, Aut, Win, Spr (Schramm, Staff) by arrangement
207. Survey of Communication Research Methods—Research designs, sampling, data collection, and data analysis. For Journalism A.M. students. 5 units, Win (Chu) MW 4:15-6:05
211. Theory of Communication I—Seminar and tutorial meetings, extensive readings and papers. For doctoral candidates planning to continue with the sequence on theory. 3 units, Aut (Schramm) W 2:15-4:05
212. Theory of Communication II—Theory of the communication process. Analysis of the experimental literature in attitude change. Prerequisite: consent of instructor. 5 units, Win (Maccoby) MW 2:15-4:05
213. Theory of Communication III — Theory of communication in groups and communication networks. The theory of information and meaning. Analysis of the literature. Prerequisite: consent of instructor. 5 units, Spr (Paisley) M 2:15-4:05, and additional meetings by arrangement
215. Process and Effects of Broadcasting and Film Media — Theory of communication process for A.M. students in broadcasting and film. 3 units, Aut (Maccoby, Breitrose) Th 7-10 p.m.
217. Communication Research Methods I—Methods of research in mass, group, and interpersonal communication. Application of scientific method to communication research. Design of communication studies for laboratory and field experiments and sample surveys. Conceptualization of variables, sampling, data collection, interview tech-

niques, data processing and data analysis. Report preparation. Prerequisite: previous or concurrent registration in elementary statistics.

4 units, Aut (Parker) TTh 2:15-4:05

218. Communication Research Methods I—Continuation of 217.

4 units, Win (Paisley) TTh 2:15-4:05

219. Communication Research Methods II—Continuation of 218.

4 units, Spr (Parker) TTh 2:15-4:05

220. Mass Communications in Society — The nature and social responsibilities of the media, the structure of the industry, problems of regulation, management, educational and commercial interests. For first-year graduate students.

3 units, Spr (Rivers) T 4:15-6:05

Sum (Staff) by arrangement

222. Documentary Film — Analysis of the techniques and strategies of films designed to effect attitudinal and behavioral change. Prerequisite: consent of instructor.

4 units, Spr (—) by arrangement

225. Problems of the Mass Media — For A.M. Journalism candidates.

1 unit, Aut, Win, Spr (Staff) by arrangement

227. Analysis of Documentary Evidence.

4 units (Staff) by arrangement

230. Mass Media and Government.

5 units, Win (Rivers) by arrangement

240. Seminar in Mass Media History.

4 units (Staff) by arrangement

245. Economics of the Mass Media.

4 units (Staff) by arrangement

255. International Communication — Characteristics of mass communications throughout the world; philosophies behind them; economic, social, political reasons why a given kind of pattern develops where it does; channels by which nations, cultures communicate with each other; kinds of barriers which intervene in those channels; manipulative communication between nations which is characteristic of the "cold war."

4 units, Spr (Chu) M 2:15-4:05

256. Communication in Economic and Social Development — Seminar on the communication problems of economic and social development, and on the uses of

mass media for national change, and education in countries. Special use of communication research. Case studies and planning. 3 to 5 units, Spr (Schramm)

270. Advanced Communication Method Seminar I — Toward a General Theory of Communication. May be repeated. Instructor change each year. 3 units, Aut (Schramm)

271. Advanced Communication Method Seminar II — Communication Among Nations. May be repeated for credit. Topic and instructor change each year. Prerequisite: 219. 3 units, Win (Parker)

272. Advanced Communication Method Seminar III — Mass Media in Learning. May be repeated for credit. Topic and instructor change each year. Prerequisites: 213 and 219. 3 units, Spr (Maccoby)

275. Communication Analysis and Scaling — Reducing and ordering data. Computerized content analysis. Procedures of Thurstone, Likert, Garsfeld, Shepard, and others. 2 quarters of statistics, Calculus, and a background in measurement of the instructor. 4 units, Aut (Paisley) T

299. Advanced Individual Projects. Majors may supplement individual projects of other courses. 1 to 5 units, any quarter, by arrangement

300. Thesis. 6 to 10 units, (Staff) by arrangement

309. Directed Graduate Research in connection with a student's Master's thesis. 3 to 6 units, (Staff) by arrangement

310. Seminar in Broadcasting. 2 units, Aut (—) by arrangement

311. Seminar in Broadcasting. 2 units, Win (—) by arrangement

processing and data analysis.
Prerequisite: previous
registration in elementary sta-

(Parker) TTh 2:15-4:05
Research Methods
of 217.

(Paisley) TTh 2:15-4:05
Research Methods
of 218.

(Parker) TTh 2:15-4:05
Communications in Society—
social responsibilities of the
structure of the industry, pro-

duction, management, educa-
tional interests. For first
students.

(Parker) T 4:15-6:05
(Staff) by arrangement

ary Film — Analysis of the
strategies of films designed
for social and behavioral change
with consent of instructor.

(Parker) by arrangement
of the Mass Media — For
candidates.

(Parker) in, Spr (Staff) by
at

Documentary Evidence.
by arrangement

Media and Government.
(Parker) by arrangement

Mass Media History.
by arrangement

of the Mass Media.
by arrangement

Mass Communication — Chi-
cultural philosophies behind them
and political reasons why

which nations, cultures com-
municate with each other; kinds of barriers
in those channels; man-

communication between nations
characteristic of the "cold war."
(Chu) M 2:15-4:05

Education in Economic and So-
cial — Seminar on the com-
plex problems of economic and so-
cial development, and on the uses of

mass media for national integration, social
change, and education in the developing
countries. Special uses and difficulties of
communication research in these countries.
Case studies and planning exercises.

3 to 5 units, Spr (Schramm) T 4:15-6:05

270. Advanced Communication Theory and
Method Seminar I — Topic for 1967-68:
Toward a General Theory of Communica-
tion. May be repeated for credit. Topic and
instructor change each year. Prerequisites:
213 and 219.

3 units, Aut (Schramm) by arrangement

271. Advanced Communication Theory and
Method Seminar II — Topic for 1967-68:
Communication Among Scientists. May be
repeated for credit. Topic and instructor
change each year. Prerequisites: 213 and
219.

3 units, Win (Parker) by arrangement

272. Advanced Communication Theory and
Method Seminar III — Topic for 1967-68:
Mass Media in Learning. May be repeated
for credit. Topic and instructor change each
year. Prerequisites: 213 and 219.

3 units, Spr (Maccoby) by arrangement

275. Communication Research: Content
Analysis and Scaling — Techniques of re-
ducing and ordering data. Manual and com-
puterized content analysis. Scaling proce-
dures of Thurstone, Likert, Guttman, Laz-
arsfeld, Shepard, and others. Prerequisites:
2 quarters of statistics, Comm. 219 or equiv-
alent background in methodology, and con-
sent of the instructor.

4 units, Aut (Paisley) TTh 2:15-4:05

299. Advanced Individual Work—Graduate
majors may supplement certain courses with
individual projects of distinctly advanced
order.

1 to 5 units, any quarter (Staff) by
arrangement

300. Thesis.

6 to 10 units, (Staff) by arrangement

309. Directed Graduate Project—Research
in connection with a staff project, in lieu of
Master's thesis.

3 to 6 units, (Staff) by arrangement

310. Seminar in Broadcasting and Film.

2 units, Aut (—) by arrangement

311. Seminar in Broadcasting and Film.

2 units, Win (—) by arrangement

COMPUTER SCIENCE

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312. Seminar in Broadcasting and Film.
2 units, Spr (—) by arrangement

COMPUTER SCIENCE

Executive Head: George E. Forsythe

Professors: George B. Dantzig, George E.
Forsythe, John G. Herriot, John McCar-
thy, William F. Miller

Associate Professors: Edward A. Feigen-
baum, Gene H. Golub

Assistant Professors: Jerome A. Feldman,
Joyce B. Friedman, David J. Gries, Wil-
liam M. McKeeman, D. Rajagopal Reddy,
Niklaus E. Wirth (on leave 1967-68)

Lecturers: Gene M. Amdahl, Robert T. Bra-
den, John R. Ehrman, Harwood G. Kol-
sky, Bertram Raphael, Arthur L. Samuel,
Giovanni Wiederhold

Research Associates: Kenneth M. Colby,
Lester D. Earnest, Manfred H. Hueckel

Affiliated Faculty:

Professor: Robert V. Oakford (Industrial
Engineering)

OFFERINGS AND FACILITIES

The Department aims to acquaint a vari-
ety of students with the technological and
intellectual roles of automatic digital com-
puters, and to educate research workers in
computer science. In spite of the diversity
of the applications, the methods of attacking
problems with computers show a consider-
able unity, and computer science is con-
cerned with the underlying principles. The
field is still young, and the student will find
many more questions than answers.

Of the numerous areas of computer sci-
ence, the Department has competence in
numerical analysis, operations research, arti-
ficial intelligence, computational linguistics,
programming systems and languages, logi-
cal design of computer systems, and com-
puter control of external devices.

Courses in data processing are offered by
the Industrial Engineering Department and
in the Graduate School of Business. Courses
in optimization and mathematical program-
ming will mainly be found in the Opera-
tions Research Program.

Since computer science is inherently in-
terdisciplinary, graduate students of com-