The Annenberg School of Communications is a graduate school founded in 1959. Pursuant to an agreement with the Trustees of the University of Pennsylvania, The Annenberg School of Communications conducts graduate instruction and research in the arts and sciences contributing to the understanding and improvement of communications among men.


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Graduate Studies: M.A., Ph.D. in Communications
To the Potential Applicant

Selecting the right program and admitting the right applicant is a two-way process of matching both people and purposes. Published guides may help potential applicants survey the at least dozen major communications graduate programs across the country. Careful examination of each catalog will help applicants clarify their own goals and select the program that can best support them.

Graduate schools must be equally selective. Successful completion of a demanding program requires both high level of achievement and sharing the goals that the curriculum supports.

The graduate program described in this Bulletin is flexible and in many respects unique. It is neither an extension of an undergraduate curriculum nor merely the application of existing knowledge to specific practice. The opportunity is too rare and the investment too great to be used for what can be learned—and often best learned—in other fields or on the job.

As the main purpose of the graduate program is to find unique ways to contribute to knowledge and to professional practice in a discipline, it is important for the potential applicant to grasp the challenge of the discipline and the meaning of professional accomplishment in it.

The Challenge of Communications

The study of communications cuts across the arts, humanities, social sciences, and many other disciplines. Yet communication study is not merely a crossroads; it is also a field of common problems and an intellectual domain with its own center of gravity. That center is the study of the nature, production, use, and role of messages (or statements, symbols, etc.) in life and society.

We develop ways of thinking, knowing, and relating to each other largely through the statements we share. Creating, sharing, and using symbols and statements is the "humanizing" process of man. A change in that process alters the nature of human affairs. We are in the midst of such a transformation. It stems from changes in the technological and social bases of symbol-production—an industrial revolution in information and popular culture. New media alter form, content, and context. New modes of communication change ways of selecting, composing, and sharing perspectives. New institutions of communication create publics and cultivate common consciousness across boundaries of time, space, status, and culture. New patterns of information animate societies and machines, and shape the terms of our engagement with each other and the world.

Change and its consequences also expose perennial problems to fresh scrutiny. How does a message, image, or story evoke and elicit, unite and divide, bind and release? How is information processed, transmitted, and integrated into given frameworks of knowledge? How do societies and technologies produce symbol systems, and assign value and weight to the issues and choices inherent in them? What standards can guide and what measures can test communication acts and policies in changing cultures?

It is convenient, in terms of this program, to sort these problems into three areas of emphasis and specialized contribution. The first is the codes and modes of communication—study of forms, meanings and means that "mediate" the message. The second is the behavior of communicators and interpreters—the characteristics of sources and receivers, and the nature of the interactions among them. The third is the institutional aspects—mass media and the communications components of all organizational and social life.

The meaning of professional accomplishment in such a venture rests in the contribution the scholar makes to knowledge and thus to practice both during his training and later in his career. Through his graduate education a student should become a professional inquirer and problem-solver in his discipline. He should be familiar with established and new theories, skilled in some specialized techniques, aware of gaps in knowledge, and competent in narrowing the gaps. These are the insights best learned in a graduate program. These are the professional qualities that the successful student will bring to any career in communications, whether in the media, business, government, the arts, or in academic life. The problems are lively and the tasks urgent. If we are to come to grips rather than only to terms with the "communication revolution" of our times.

George Gerbner,
Dean
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Marten Brouwer, B.A., M.A., Ph.D., Visiting Associate Professor of Communications. Managing editor, Polls: International Review on Public Opinion. Member, International Social Science Council Standing Committee on Social Science Data Archives. Member of the Board of the Steinmetz Institute, Amsterdam. Taught at the University of Amsterdam, Columbia University in the City of New York, the First European Seminar on the Uses of Survey Research in Cologne.

George Dessert, B.S., Lecturer. Director of Community Services, WCBS-TV, New York. Formerly Executive Producer for Documentaries; writer, director, producer. Major awards include: Sidney Hillman; Alfred E. DuPont; American Baptist; National Conference of Christians and Jews; San Francisco Film Festival; CINE Golden Eagle; Ohio State (15); New York and the Regional Emmys of the National Academy of Television Arts and Sciences.


Ilona Gerbner, Diploma, Royal Academy, Budapest, Hungary; B.A., M.A., Lecturer. Professional actress, stage director in university and community theaters.

Larry P. Gross, B.A., Ph.D., Assistant Professor of Communications. Studies in the social psychology of communications, aesthetics, and creativity.

Charles F. Hoban, Ph.D., Professor of Communications, Director of Instruction; Research Professor of Education, Member, Editorial Board, AV Communication Review. Co-author of Instructional Film Research, Visualizing the Curriculum, and Motion Pictures in Education, and author of Movies That Teach and Focus on Learning.


Michael Studdert-Kennedy, B.A., Ph.D., Associate Professor of Communications. Research interests are in psycholinguistics with emphasis on speech as a specialized signalling system. Author or co-author of "Perception of the Speech Code," "Cross Language Study of Vowel Perception," "High Performance Reading Machines for the Blind" and other studies.


Sol Worth, B.F.A., Associate Professor of Communications, Director of Media Laboratories, Head of the Documentary Film Laboratory. Conducting research in the "language" properties of visual communication. Photographic, motion picture producer, painter, Fulbright Professor of Documentary and Educational Film, the University of Helsinki, Finland. Film "Teatteri" chosen for permanent collection of documentary film, Museum of Modern Art, New York, and awards at Berlin and Cannes Film Festivals. Author of "The Navajo as Filmmaker: A Report of Research in the Cross-Cultural Aspects of Film Communication," "Filmmaking as an Aid to Action Research," "Cognitive Aspects of Sequence in Visual Communications," "Film as Non-Art," and other studies.

Klaus Krippendorff, Ph.D., Assistant Professor of Communication and communication theory, the methodology of content analysis, the sociology of communication, and particularly in the application of cybernetic models to social phenomena. Degree in Engineering, and Diploma, Ulm School of Design, Germany, Ford International Fellow.


Albert E. Rose, Jr., B.A., M.A.C., Lecturer, Head of the Television Laboratory, Executive Assistant for Program Administration, WCAU-TV.

The Degree of Master of Arts

The goal of the program is to provide a broad basis for achievement in the arts and sciences of communications and to prepare the candidate for making a specialized contribution. All requirements support the student in reaching that goal. In those areas that depend on further academic preparation for professional achievement, such as advanced research and teaching, the Ph.D. in Communications (see below) offers an extended program.

Career opportunities for which the Master of Arts is a desirable or necessary qualification exist in educational, commercial, civic, and governmental organizations, and in the media.

Requirements for the Master's Degree

The course of study leading to the Master of Arts requires a minimum of twelve course units of graduate work. The maximum load is four courses (four units) a semester. Therefore, the Master's program can be completed in three of four semesters of full-time study.

The Master of Arts is awarded only upon satisfying credit, project, and scholarship standards, and all other outstanding obligations. Requirements are determined by the School's faculty, and are subject to change. The responsibility for knowing and meeting all requirements rests with the student.

Academic requirements applicable to all Master's candidates are the completion with a B average or better of twelve units of approved graduate work of which at least nine units must be from those listed under "Courses of Study" in this Bulletin. Four specific courses are required of all candidates: 500, Proseminar; 522, Introduction to Communications Research; 600, Colloquium; and an Advanced Project (710, 720, or 730). Research conducted in a Seminar on the 600 level may be accepted as satisfying the Advanced Project requirement upon petition and upon the recommendation of the Seminar instructor and the student's adviser.

The balance of the candidate's program is flexible in order to round out the student's background in the arts and sciences of communications, and to assure adequate preparation for an Advanced Project in the area selected for a specialized contribution. The course of study will normally include (1) at least three units on the 500 level (including Proseminar, Introduction to Communications Research, and laboratory work in a medium); (2) at least three units on the 600 level, including Colloquium; and (3) at least one unit of Advanced Project credit. No more than two units of media laboratory credit is applicable toward the Master's degree.

Before enrolling in the second semester of full-time studies, the candidate must present to the Director of Instruction a tentative program for the balance of his studies, taking into account both general and specific requirements leading to an Advanced Project in the final semester. This tentative program will be the basis for the selection of a faculty adviser who will guide and approve the candidate's studies and who may supervise the candidate's Advanced Project. An Advanced Project topic should be selected by the student in ample time to allow for the necessary preparation and development of a written project proposal. A faculty committee will then review each proposal and make a recommendation to the adviser who will usually supervise the project. The adviser's approval of the proposal is required for enrollment in an Advanced Project. Upon completion, each project will be presented or summarized by the student at an open meeting of students and faculty.

An Advanced Project may require work in a medium, or it may lead to research into some aspect of communication behavior or of institutional structure, function, or policy. These alternatives indicate broad differences in focus but not necessarily sharp distinctions, although there may be significant differences in the specific preparation required for different types of Advanced Projects. The student is advised to consult early and closely with his adviser about the focus of his Advanced Project work and the preparation necessary for it.

Requirements leading to Advanced Projects:

<table>
<thead>
<tr>
<th>Topic</th>
<th>Units</th>
<th>Courses Offered</th>
</tr>
</thead>
<tbody>
<tr>
<td>in a Medium</td>
<td></td>
<td>500 Proseminar</td>
</tr>
<tr>
<td></td>
<td>1 unit</td>
<td>Laboratory work in a medium selected from 510-511, Writing, 512-513, Graphic</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Communications; 514-515, Documentary Film; 516-517, Television, or 618-518,</td>
</tr>
<tr>
<td></td>
<td>2 units</td>
<td>Theater</td>
</tr>
<tr>
<td></td>
<td>1 unit</td>
<td>600 Colloquium</td>
</tr>
<tr>
<td></td>
<td>6 units</td>
<td>Electives and other preparation recommended by Advanced Project adviser and</td>
</tr>
<tr>
<td></td>
<td></td>
<td>specified as prerequisites, including at least two additional 600 courses</td>
</tr>
<tr>
<td></td>
<td>1 unit</td>
<td>710 Advanced Project</td>
</tr>
<tr>
<td></td>
<td>12 units</td>
<td></td>
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</tbody>
</table>

| in Communication Behavior                  |       | 500 Proseminar                                                                |
|                                            | 1 unit| 522 Introduction to Communications Research                                  |
|                                            | 1 unit| 524 Introduction to Statistical Analysis                                     |
|                                            | 1 unit| 600 Colloquium                                                                |
|                                            | 7 units| Electives and other preparation recommended by Advanced Project adviser and   |
|                                            |       | specified as prerequisites, including at least one of 622, 624, 660, or 680   |
|                                            |       | and at least one additional 600 course                                        |
|                                            | 1 unit| 720 Advanced Project                                                          |
|                                            | 12 units|

| in Communication Institutions              |       | 500 Proseminar                                                                |
|                                            | 1 unit| 522 Introduction to Communications Research                                  |
|                                            |       | At least one additional 500 level course                                     |
|                                            | 1 unit| 600 Colloquium                                                                |
|                                            | 7 units| Electives and other methodological and theoretical preparation recommended by |
|                                            |       | Advanced Project adviser and specified as prerequisites, including 660 or 668  |
|                                            |       | and at least one additional 600 course                                        |
|                                            | 1 unit| 730 Advanced Project                                                          |
|                                            | 12 units|
The Degree of Doctor of Philosophy

The degree of Doctor of Philosophy in Communications is awarded by The Graduate School of Arts and Sciences of the University of Pennsylvania. It is administered by a Doctoral Group consisting of the following members of The Annenberg School of Communications faculty and of other University departments:

Percy H. Tannenbaum, M.S., Ph.D.
Professor of Communications and Psychology, Chairman
Martien Brouwer, B.A., M.A., Ph.D.
Visiting Associate Professor of Communications
George Gerbner, B.A., M.S., Ph.D.
Professor of Communications and Dean
Hiram Haydn, M.A., Ph.D., Litt.D.
Professor of Communications
Klaus Krippendorff, Ph.D.
Assistant Professor of Communications
Michael Studdert-Kennedy, B.A., Ph.D.
Associate Professor of Communications
Sol Worth, B.F.A.
Associate Professor of Communications

Lee Benson, B.A., Ph.D.
Professor of History
John W. Carr, III, Ph.D.
Professor of Electrical Engineering
Thomas C. Cochran, A.B., Ph.D., M.A.
(Cantab.)
Professor of History
Roland M. Frye, A.M., Ph.D.
Professor of English
Ralph B. Ginsberg, Ph.D.
Assistant Professor of Sociology
Dell H. Hymes, M.A., Ph.D.
Professor of Anthropology
Albert Peptone, Ph.D.
Professor of Psychology
Henry J. Teune, M.A., Ph.D.
Associate Professor of Political Science
Harvey Winston, Ph.D.
Associate Professor of Psychology
Julian Wolpert, M.S., Ph.D.
Associate Professor of Regional Science

Distinctive contribution to knowledge and competence in conducting advanced research are the major goals of the Ph.D. program. In general, the Ph.D. can be attained in about four years of full-time effort beyond the Bachelor's degree. The amount of time required is likely to vary with the relevance and quality of preparation prior to entering the doctoral program, and with the nature of the research undertaken in the program.

For dates of awarding degrees and diplomas, for deadlines related to these dates, and for all other details not noted in this Bulletin, consult the relevant provisions of the Bulletin of The Graduate School of Arts and Sciences.
Preliminary Examination

Upon completion of most or all formal course and seminar work, and when the student is ready to present a dissertation proposal, he may petition, with the approval of the major adviser, to take the Preliminary Examination. The Preliminary Examination must be taken at least one academic year prior to the submission of the completed dissertation, or no later than in October of the same academic year. In the event of failure on the Preliminary Examination, the student may petition for a second examination, but not before the lapse of at least one full semester.

The Preliminary Examination will consist of a written and an oral part. The written examination will be in four sections, one of which is the submission of a formal and fully developed dissertation proposal. The other three sections of the written examination will demonstrate the student’s grasp of theory and research in three different areas, and his preparation for advanced independent research in one of those areas. In selecting the three areas, the student has the following option: (a) he may elect to be examined in the three “core” areas of communications study described below, or (b) he may select one of the three “core” areas and a third area of related specialization based on his preparation in another discipline such as social psychology, cultural anthropology, sociology, linguistics, English, information science, economics, regional science, political science, history, etc. In any case, the examination is designed to assess both substantive and methodological preparation, and the capacity to conduct independent research. At least two of the three areas must be selected from the following “core.”

Communication Codes and Modes. General theories and models of information and communication; coding and processing of messages in different “languages,” media, and modes; analysis of meaning, content, and message systems.

Communication Behavior. Individual and social interaction and experience through messages; encoding and decoding characteristics of sources and receivers; attitude formation and change; public opinion and collective behavior; the consequences of exposure to messages; processing and storage of coded information.

Communication Institutions. History and theories of public communication and popular culture; organization and functions of communication institutions; communication structures in social organization.
Courses of Study

Courses numbered 500-599 are graduate courses which require no specialized prior preparation for graduate students and may be taken in the first semester of studies (except for the second semester of media laboratories). Advanced undergraduates may be admitted to those courses open and available to them at the time of registration but must first obtain the consent of the instructor.

500, fall
Proseminar
Staff
Introduction to concepts, problems, and areas of communications study. Required of all candidates for a degree in Communications.

510-511, two terms
Writing Laboratory
Haydn
Critical analysis and theory focused on and developing from the student's work. Open only to candidates for a degree in Communications.

512-513, two terms
Graphic Communications Laboratory
Main
Integration of visual and verbal images with emphasis on idea presentation, form and structure as prepared for the printed page. Utilizing photography, typography, graphic design, and the written word. Explorations of trends in contemporary visual graphic expression. Open only to candidates for a degree in Communications.

This listing includes graduate work that may be applied toward the minimum of nine units in Communications out of the total required for the degree.

Courses are subject to change. The final course list may be obtained from The Annenberg School of Communications prior to registration each semester.

514-515, two terms
Documentary Film Laboratory
Worth
Film history and theory combined with concepts and craft of filmmaking. Each student will produce a black and white 16 mm sound film from initial script treatment to final negative preparation. Camera editing, sound, and all laboratory procedures. Open only to candidates for a degree in Communications.

518-519, two terms
Theater Laboratory
Students produce scenes and plays to test their ideas and develop their skills on the stage of the graduate theater laboratory.

522, each term
Introduction to Communications Research
Studdert-Kennedy
The logic of scientific inquiry, systematization of observation, research design, sampling, interviewing, instrument construction, data processing. Knowledge of statistics is helpful. Required of all candidates for a degree in Communications.

516-517, two terms
Television Laboratory
Dessart, Rose. Taylor
Bases for judgment in translating ideas into television terms. Students write, produce, and direct different types of programs designed to illuminate the process of solving problems of creative work in television. Open only to candidates for a degree in Communications.

524, fall
Introduction to Statistical Analysis
Studdert-Kennedy
The analysis of variance is developed and emphasized as the fundamental procedure through which all other techniques may be understood. The course covers basic descriptive statistics, elementary probability theory, analysis of variance, correlation, and some non-parametric methods.

550, fall
Broadcasting as an Institution
Shayan
Examination of network and station organization and programming operations. Bases of decision-making and policy formation.
552, fall
Book Publishing
Haydn
Examination of the historical, legal, economic, technological, and editorial aspects of book production and publishing.

566, each term
Mass Media Criticism
Shayon
The creative, social, and philosophical assumptions of mass media criticism. Weekly student critiques of broadcasts and films are examined in class. Criticism as a creative act; its theoretical framework and implications for the student, producer, receiver of communications, and for the citizen.

570, fall
Classic Studies of Mass Communication
Hoban
Critical examination of historical development of major research studies of medium and message characteristics, audience composition, behavior change, and response to various channels and modes of mass communication, including films, radio, television, and comics.

572, spring
Communication in Education
Hoban
An inquiry into the basic principles and modes of communication in institutionalized education. Interpersonal (face-to-face) and technologically mediated (film, ITV, programmed instruction, and computer-aided) instruction examined in terms of underlying theories, functions, costs, logistics, and relevance to educational goals. Attention will be given to the systematic interrelations of communication, education, and technology.

Courses numbered 600-699 require prior or concurrent completion of 500, Proseminar, at least one additional unit of work on the 500 level, and prerequisites as noted or the consent of the instructor.

600, each term
Colloquium
Shayon, Hoban, staff, and guests
Social scientists, artists, executives, and other professionals report on their work and discuss current issues and problems in communications. Attendance is recommended for Special Students and required each semester of candidacy. Candidates enroll for special assignments and one unit of credit after completing at least three courses on the 500 level. The Colloquium is open to all University of Pennsylvania students, faculty, and guests.

622, spring
Experimental Research Design
Tannenbaum
The conception and design of laboratory and field experiments. Development of theoretical rationale and the justification of problems for investigation. Appropriateness of research design; methods of analysis; interpretation of data. Emphasis is on multivariate design. Prerequisite: 522 and 524.

660, fall
Theory and Analysis of Message Content
Krippendorff
Inquiry into what communications are about; also called quantitative semantics, study of symbols, propaganda analysis, etc. Examination of the theoretical foundations, empirical problems, and generalized models of content inference. Case studies and practical projects range from mass media to personal document analyses. Prerequisites: 522 and 524 or equivalent.

622, spring
Fundamentals of Visual Communication
Worth
The examination of moving and still pictures as communication from the viewpoint of technology, aesthetics, the social sciences, linguistics, and information theory. Comparison of various theories, research, methods, and analytic procedures as applied to specific visual communications media. Prerequisites: 522, and at least one of 512, 514, 516, 518, or equivalent.

See also: Linguistics 501, General Survey of Linguistics; Anthropology 529, The Ethnography of Symbolic Forms; History 530, History of the Book; Listed under "Courses offered by other Schools" below.

624, each term
Public Opinion
Brouwer
History of the public opinion concept. Its relations to individual attitudes, to collective behavior and to the process of mass communication. Surveys and other techniques for measuring public opinion. Prerequisites: 522 and 524.
668, spring
Studies in Public Communications
Gerbner
A framework for the analysis of communication acts, processes, and institutions as producers of message-systems affecting popular culture and public policy.

680, fall
Models of Communication
Krippendorff
Introduction to the formal study of communication and control processes in artificial, biological, and social systems, with emphasis on communication models in the social sciences. Theories of information, communication, and control; cybernetic approaches to such complex systems of interaction as computers, living brains, and societies; philosophy of social communication science.

672, fall
Collective Behavior
Brouwer
Theories of collective behavior. Analyses of crazes, panics, hostile outbursts, and social movements. Mass observation and other techniques for registering collective behavior. Prerequisites: 522 and 524.

682, spring
Cybernetics and Society
Krippendorff
Models of communication and control are applied to various social phenomena and contrasted with other conceptual frameworks in the social sciences. Among the topics discussed are information processes and the foundations of symbolic behavior, feedback and teleology of social organization, natural, social, and artificial intelligence. Prerequisite: 680.

Advanced Projects are open to degree candidates upon the prior or concurrent completion of at least two units of work on the 600 level, prerequisites as stated, and other preparation recommended by the adviser. The satisfactory completion of at least one Advanced Project is required for the Master's degree. (A research project conducted in an 800 level Seminar may be accepted as satisfying this requirement upon petition and upon the recommendation of the seminar instructor and the student's adviser.) For additional information about Advanced Projects, see "Requirements for the Master's Degree," page 14.

710, each term
Advanced Project in a Medium
Staff
Prerequisite: two units of media laboratory, at least two units of work on the 600 level, and preparation recommended by the adviser.

720, each term
Advanced Project in Communication Behavior
Staff
Prerequisites: At least two units of work on the 600 level including 622, 624, 660, or 680 and preparation recommended by the adviser.

730, each term
Advanced Project in Communication Institutions
Staff
Prerequisites: At least two units of work on the 600 level, including 660 or 680, and preparation recommended by the adviser.

See also: Anthropology 603, Language and Culture; Anthropology 726, Seminar in Linguistic Anthropology; Law 636, Legal Aspects of Communications; Regional Science 657, Models of Information Diffusion; described under "Courses offered by other Schools" below.
Seminars on Special Topics numbered 800-899 usually require prior or concurrent completion of at least two units of work on the 600 level, prerequisites as noted, and the consent of the instructor.

Seminars on Special Topics, are offered by faculty members engaged in special projects of theoretical development or research work at a particular time. These seminars focus on a range of problems in the three areas of communications study, and change from time to time. Information about necessary preparation may be obtained from the instructor, whose permission is required for enrollment.

810, spring
Literature and Communication
Haydn
An inquiry into the creative and communicative processes in imaginative literature, and an exploration of the methods that may be effectively employed in the study both of the creative process and of the relationship between writer and reader.

812, fall
Decoding of Symbolic Forms
Tannenbaum
Examination of different coding systems, and how these are processed and stored by the human organism. Both “natural” and artificial codes will be considered in an effort to uncover similarities and differences in decoding.

820, spring
Secondary Analysis of Survey Data
Brower
Models for the casual analysis of non-experimental data. How to make use of social science data archives. Application to cross-national data on communications behavior. Prerequisite: 624.

999, each term.
Dissertation Research
Staff
Doctoral candidates who have completed all course requirements work on their dissertation under the guidance of their thesis supervisor and other members of the doctoral committee. Enrollment is required until the dissertation is completed.

Courses offered by other Schools. The courses listed below are applicable toward the minimum credit in Communications out of the total required for the degree.

Linguistics 501, fall, spring
General Survey of Linguistics
Sapir, Sherzer, fall
The science of linguistics; grammatical structure; phonology, morphology and syntax.
Hoenigswald, Cardona, spring
Language families, linguistic change and history, language and culture; linguistics and formal systems.

Anthropology 529, spring
The Ethnography of Symbolic Forms
Sapi
The problems of field work and formal analytical method in the study of verbal art (myth, metrics and song, ritual drama, proverbs, riddles, chanting and oratory), approached from the perspective of the ethnography of communication.

Anthropology 603, spring
Language and Culture
Sherzer
Survey of the anthropological study of language from the evolutionary standpoint, types of speech community, socio-linguistic change and its interpretation. Prerequisite: Linguistics 501 or equivalent.

Anthropology 728, each term
Seminar in Linguistic Anthropology
Sherzer
Advanced training for graduate students specializing in the study of language and speech. Problems will vary with the interests of the instructor and students. Prerequisites: Linguistics 501 or Anthropology 663 or equivalents and consent of the instructor.

History 530, fall
History of the Book
Hirsch
From manuscripts to the mass production of printed books, ca. 1400-1600. Students are expected to read the language pertinent to their research. Advice of the instructor is recommended before enrollment in the course.

Regional Science 657, fall
Models of Information Diffusion
Wolfert
A review of major analytic and simulation approaches to information diffusion on local, regional, national, and international levels. Emphasis on methods of detecting interaction channels, motivation to communicate, attitudes toward acceptance of information, and barriers to communication flow.

Law 636, fall
Legal Aspects of Communications
Bender
Study of case materials and of relevant statutory and constitutional provisions introduce students to the legal bases of protection and restraint in mass communications and to legal methods of problem analysis. Problem areas include copyright, doctrines of “property” and competition, and the laws of defamation, privacy, obscenity, and misrepresentation.

Economics 997, spring
Communications Industries and Their Regulation
Phillips, Schwartz, and Spritzer
This seminar emphasizes relations between the technologies of communications and public regulation of communications industries. Federal state and local regulatory policies are considered in relation to the rapidly expanding demand by households, business and government for a large variety of communication services. In addition to consideration of the present status of commercial television, radio and telephone regulation, the seminar treats such topics as closed-circuit TV, subscription TV, educational TV, data transmission for computer facilities, community antenna and related communications receiving and disseminating systems and other novel communications developments.
Application and Admission

The Communications program is designed primarily for full-time graduate study for an advanced degree. Except for qualified seniors of the University of Pennsylvania (whose admission is governed by the rules for submatriculates described in the Bulletin of The Graduate School of Arts and Sciences), and for University of Pennsylvania advanced undergraduates wishing to enroll in 500 level courses open to them, only college or university graduates may be admitted to studies in Communications.

No specific undergraduate major or professional experience is necessary. Adequate preparation in the social sciences and humanities, and verbal and quantitative proficiency on the graduate level, are required for admission.

With a total enrollment of fewer than 100 students, only outstanding applicants have a good chance of admission to candidacy, and only the best qualified are eligible for financial aid. The records of all students are reviewed at the end of each semester to determine whether their performance meets standards for satisfactory progress toward the degree, or for continued financial aid.

Students admitted to the graduate program in Communications may enroll in classes of other graduate schools of the University of Pennsylvania, subject to their rules and regulations. Students admitted to other graduate schools of the University of Pennsylvania may enroll in classes in Communications open and available to them. All others must apply under one of the following categories of admission.

Admission to candidacy. Applications are considered each spring for September admission only, except from those already enrolled as Special Students. Applications for admission to candidacy for the M.A. in January will be accepted from Special Students who have completed at least 500, Proseminar, and one other course in the fall semester. Others applying for admission to graduate studies in January may enter, if admitted, only as Special Students.

Applications for candidacy for the Ph.D. are considered from applicants who have completed at least one year's graduate work in Communications or its equivalent in a related discipline. Others wishing to pursue studies leading to the Ph.D. should first apply for admission to the Master's program and then apply for candidacy for the Ph.D. after completing at least a year's work in Communications.

Admission as Special Student. A few qualified applicants who do not gain admission to candidacy or who apply for admission in January may be admitted as Special Students. Applicants accepted in this category may enroll for no more than a total of three courses. After successfully completing at least two courses, students in this category may apply for candidacy for a graduate degree. After completing three courses, the student who wishes to continue studies in Communications must apply for candidacy. If his application is approved, he may continue as a regular candidate for the degree in Communications.

Special Students may not enroll in laboratories or courses reserved for degree candidates only, and are not eligible for financial aid. Courses successfully completed under this program may be credited toward the degree.

Application

The applicant for candidacy for the M.A. must submit to the School:

- An application fee of $15.00, by check or money order drawn to the order of the University of Pennsylvania.
- A completed application form available from the School.
- Official transcripts covering all college or university work, including evidence of college or university graduation (Baccalaureate degree or equivalent).
- A letter by the applicant, taking note of the instructions given on the application form.
- At least three recommendations on forms available from the School from persons familiar with the applicant's abilities and scholarly work, including, if possible, professors under whose direction the applicant has studied.
- Graduate Record Examination (GPA) test results. Information may be obtained from Educational Testing Service, P.O. Box 955, Princeton, New Jersey 08540; Suite 202, 610 Church Street, Evanston, Illinois 60201; or 1947 Center Street, Berkeley, California 94704 or from the applicant's university. Examination should be taken well in advance of application. (To avoid delay, report of the test scores should be sent to The Annenberg School code, R0203.)

Applications are not considered complete until all materials have been received.

Applicants for admission as Special Students need to submit only the first four items. Special Students requesting a change of status must submit all items, including recommendations from at least two members of the School's faculty, before the deadlines for applications for candidacy (see below).

A student who has not completed undergraduate work at the time of application must arrange to have a final transcript sent upon graduation. Admission will not be considered final until evidence of graduation is received.

An acceptance deposit of $25.00 is required upon admission (see below).

The materials required for application for candidacy for the Ph.D. are similar to those of the M.A. but require different forms. Ph.D. application forms may be obtained from the Chairman of the Doctoral Group.

The Annenberg School of Communications, and completed applications must be returned to the same address.
Transfer credit
The request for transfer of graduate credit should be made on the application for admission to candidacy. Approval of transfer credit will be given only upon the recommendation of the faculty adviser after the completion of at least three courses at the School.

Deadlines for submitting applications, and notification of applicants
Vacancies for candidacy, graduate positions, and financial aid are normally filled by March 15 for the following fall, and by December 15 for the following spring term. Applications for admission to candidacy or financial aid are not accepted after July 1 for the fall term and December 15 for the spring term. Applications for admission as Special Students are considered between July 1 and July 15 for the fall term and December 15 and 20 for the spring term.

Acceptance of admission
Upon receiving notice of admission, the applicant must inform the School of acceptance of the terms and conditions of admission. Those admitted to candidacy must deposit $25.00 within 30 days. This sum will be forfeited if the applicant fails to matriculate at the School. For those who enter, it will be retained as a deposit to cover loss, damage, or breakage of University property, laboratory material, or any charge not paid by the student in some other way. When the student leaves the University, the balance remaining in the deposit is refundable. Any such balance will be forfeited if the student withdraws or is dropped from the School and fails to request a return of his money.

An acceptance deposit is required of foreign students only upon arrival on campus.

An applicant who has been admitted but who does not enroll for the initial term indicated on the application must reapply unless reaplication is waived by writing the Dean.

The date of receipt of the applicant's acceptance deposit determines priority for enrollment in courses and laboratories. Late acceptance deposit may necessitate the student to a waiting list.

Students from abroad
Persons applying for admission from outside the United States should obtain information about the place and date of the nearest testing center administering the Graduate Record Examination in order to be able to take the examination and submit a completed application at least six months in advance of the desired entrance date.

Applicants from abroad who require financial aid should consult the nearest United States Consulate or Cultural Affairs Office to determine how they may apply for aid through the Institute of International Education. Applicants from abroad who expect to be self-supporting require at least $8,000 for each academic year for tuition, fees, and living expenses, plus the cost of round trip travel.

Students should not leave their homeland without having adequate financial resources for all expenses of living and study in the United States. All students from abroad are required to subscribe to the health services offered by the University. (See "Financial Obligations.") Acceptance deposit is required upon arrival.

Students admitted from abroad should arrive ten days to two weeks before the beginning of the semester to make arrangements for housing accommodations and to participate in the University's orientation program. Those whose native language is not English must also take the University's English language examination. The result of this examination will determine eligibility for registration in graduate courses.

Housing
Dormitories for graduate students are under construction but will not be ready in 1968-69.

Information about private accommodations may be obtained from the University's Residence Listing Service, 37th and Spruce Streets, Philadelphia.

Standards of Scholarship

The minimum standard for the Master's degree is a B average. The minimum qualification for financial aid from the School is the completion of all work undertaken with a B- average or better at the time of application for the award. A student whose performance falls below the B average may be advised to withdraw or may be dropped from the program.

The mark of I (Incomplete) is given only for work of satisfactory quality that cannot be completed in time because of unusual problems that justify a specific extension of time. If the work is completed by the extended deadline, the instructor will assign a grade for the course, taking into account the additional time required for the completion of the work. Any grade still incomplete by the extended deadline will be changed to an F. The maximum extension allowed is one calendar year from the official ending of the course.

Under no circumstances can students who are failing in their performance, or whose lack of accomplishment makes it impossible to judge the quality of work, receive an Incomplete in a course. A student who fails to complete the work of a course without having his status changed, or having the instructor certify arrangements made for the completion of the work, will receive a grade of F.

A student in good standing whose work for the degree is incomplete, who has not been granted a leave of absence, and who wishes to maintain his candidacy for the degree, must continue to enroll in the School until the completion of all degree requirements.

Limitations of time
The requirements for the Master's degree must be completed within six consecutive years. All course, language, and examination requirements for the Ph.D. must be completed within five consecutive years from the time of the first enrollment after the granting of the Master's degree.

A student admitted to graduate studies in Communications who does not enroll in courses during a regular semester and fails to obtain an official withdrawal or leave of absence will be dropped from the School.

The granting of a leave of absence does not automatically change the time limit. A student granted a leave of absence or official withdrawal must submit a written request for readmission and may be required to file a new application.

Course changes
Courses may be added after registration only with the permission of adviser and instructor and only during the first two weeks of a semester.

A student may request that his status in a course be changed to that of auditor, or that he be permitted to withdraw from a course without prejudice, if the request is submitted before the middle of the term. A student holding a graduate position or receiving financial aid from the School must submit such a request to the Dean, and may have his stipend reduced accordingly.
Registration and Financial Obligations

Registration is required of every student before the beginning of each term. Registration will not be valid unless the student’s bill has been presented to the cashier and stamped as paid. This bill then constitutes the matriculation card and should be carefully preserved. Students exempt from tuition charges must nevertheless obtain the official stamp of the cashier. Student programs must be approved by a faculty adviser prior to registration.

Students in good standing who expect to continue their studies must preregister for each term at the dates designated on the Calendar. Preregistration is University-wide, and necessary for planning student programs, priorities in courses, new admissions, and student registration in courses outside the School. Student programs must be approved by a faculty adviser prior to preregistration.

The Trustees of the University of Pennsylvania reserve the right at any time to amend the regulations concerning fees and method of payment, and to make such changes applicable to students at present in the University, as well as to new students.

Payments may be made in cash, or by check, bank draft or postal money order drawn to the order of the University of Pennsylvania for the exact amount due.

Tuition and fees
The actual cost to the School of graduate education in Communications is in excess of $5,000 per student per year. However, the cost to the student is as follows:

The tuition is $250 per course unit, with a maximum tuition charge of $975 per semester or $1950 per academic year.

A general fee of $100 per semester is charged to each student enrolled in four or more course units. This fee is adjusted for part-time students.

The Student Health Service is available to all students who pay the $100 general fee. Students who pay a lesser general fee may qualify for Health Service benefits by paying an additional $30. All foreign students must carry this service.

Late registration fee
A student who fails to complete registration (including financial arrangements for tuition or other charges) by the appointed registration date is deprived of the privileges of the School. Reinstatement within one week may be obtained by permission of the Dean after the student has met the financial obligations and paid the late registration fee of $20.00.

Auditors
Auditors pay regular fees but receive no credit.

Fee for transcript
One certified transcript of a student’s record will be issued without charge. For each additional transcript a charge of $1.00 will be made. No transcript will be issued unless all financial obligations to the University have been satisfied.

Special rules
All University bills for tuition and fees are due in two installments, in September and January. A student who withdraws, or who is granted a leave of absence, before the end of the fourth week of classes during either semester of the academic year, will be eligible for a refund of tuition. The effective date of separation from the University is the date on which the student files a request for withdrawal or leave of absence in the Office of the Dean. The refund allowable depends on the date of separation. Within the first two weeks of classes, the refund is 75%. Within the third and fourth weeks of classes, the refund is 50%. Thereafter there is no refund.

A student who is required to withdraw because of violation of University regulations shall receive no refund.

A student who has not received full academic credit for the term and who is called to service through the draft law, or through enrollment in a military reserve unit, or through enlistment in the military service, shall be refunded full tuition and general fee, provided a request, substantiated by the proper evidence, is filed with the Dean.

No one shall be granted course credit or a degree who has not met all financial obligations to the University and has not returned or accounted for all books, supplies, materials, keys and other equipment provided by the School.

Estimated expenses for an academic year
The acceptance deposit of $25.00 is payable only at the time of admission. For an academic year, costs are estimated at $3,800 ($2,150 for full-time tuition and general fees; $1,100 for room and board; $100 for books; and $450 for personal expenses). This estimate does not include travel.

Solicitations
No individual or group may solicit scholarships, fellowships, or other contributions for or on behalf of The Annenberg School of Communications, or act in the name of the School in any fund raising or undertaking not part of their established duties, without prior approval of the Joint Committee of The Annenberg School of Communications and the Trustees of the University of Pennsylvania, upon the recommendation of the Dean of the School.
Fellowships, Scholarships, and Other Awards

The purpose of an award is to enable highly qualified candidates who could not otherwise pursue their studies to complete the requirements for the degree in minimum time. Assistantships and fellowships also provide opportunities for research training in close collaboration with members of the faculty. Scholarships and stipends do not ordinarily include fees, or the cost of personal study or research supplies, or cover tuition beyond the credit units required for the degree.

Application and renewal
Applicants for financial aid are expected to have exhausted all other sources of assistance. Applicants from abroad who need financial aid are advised to apply to the Institute for International Education through the nearest U.S. Consulate or Cultural Affairs Office. An educational budgeting plan is available to those who wish to pay University charges in monthly installments. (Information about the plan may be obtained from the Student Accounts Section, Comptroller's Office, Franklin Building, Philadelphia, Pennsylvania 19104.)

Applications for a graduate student position or award, and for its renewal, are considered by the faculty committee that also determines admission. As the deadline for certain fellowships and scholarships for Ph.D. candidates is February 1 of the preceding academic year, early submission of applications enhances the possibility of such financial aid. The deadlines for assistantships and other types of financial aid are the same as those for application for admission. The application procedure is indicated on each application form.

Awards and appointments are reviewed at the end of each semester to determine continued eligibility on the basis of the quality and completion of work undertaken. An appropriate award or appointment may be renewed if the candidate is making satisfactory progress toward satisfying minimum degree requirements in the shortest time, maintains a grade average of B- or better, and meets other current standards for scholarship students. Applications for renewal are due at the end of the spring semester.

Research fellowships
Research fellowships are awarded to qualified candidates on the basis of demonstrated ability to conduct independent research under faculty supervision. A research fellow performs research directly related to his field of concentration. Applications for research fellowships should include a research plan or a proposal approved by a member of the faculty. A research fellow is expected to devote full-time to his graduate studies and research during the period of his appointment. He may not receive compensation from other employment except with the specific approval of the Dean. Stipends for research fellowships begin at $1,000 and range up to $3,000 plus tuition and fees. Internal Revenue Service regulations state that the stipend of a research fellow is exempt from income, social security, and city wage taxes.

Information about National Science Foundation Graduate (Predoctoral) Fellowships is available from The Fellowship Office, National Academy of Sciences, National Research Council, 2101 Constitution Avenue, N.W., Washington, D.C. 20418. Institute for International Education Development Fellowships are available for foreign students from certain countries who agree to return to their home countries. For information and application write to the Office of International Services, University of Pennsylvania, Philadelphia, Pennsylvania 19104.

Harry A. Batten Fellowship
A fellowship in communications research paying $2,000 was established by the Armstead Foundation (N. W. Ayer & Son, Inc., Advertising Agency) in memory of Harry A. Batten, late chairman of the board.

Research Assistantships
A research assistant is engaged to aid the research and other academic duties of a member of the faculty, and is expected to devote half-time to the performance of his duties. The normal academic load of a research assistant is three graduate courses (3 units) a semester.

Stipends for research assistants carrying a normal load begin at $1,600 plus tuition and fees and range up to $2,400 plus tuition and fees. These appointments are made in terms of experience, ability, and the need for assistance on research projects and other academic duties. Application for research assistantship usually requires prior arrangement with a faculty member or at least one semester's residence in the program, or both.

Scholarships
Scholarships ranging from part or full tuition to tuition plus a cash stipend are available to outstanding candidates in need of financial assistance. Some scholarships are sponsored by organizations and agencies in the communications field. Applicants requesting and selected for awards are notified of the scholarships available and appropriate to their needs and interest.

Senatorial scholarships are awarded each year to students who are residents of Pennsylvania. Inquiries should be directed to the senator from the student's state senatorial district.

Library service scholarships provide free tuition and are awarded on the basis of superior academic achievement. The holders are required to work one hour a week in the University libraries on projects useful to the libraries, and falling within the scope of the recipient's field of specialization. Applications should be made to the Director of Libraries, Main Library, University of Pennsylvania, Philadelphia, Pennsylvania 19104.

Placement Service
The University placement program is available to communications students and alumni. The activities of the University Placement Office are an integral part of the student's total educational experience. Staff, library, and publications are available to assist individuals in their thinking about a career. This office is eager to help students learn how to take interviews and assess job opportunities.

Students are invited to use this service anytime during their graduate years. They will be provided with the latest information on occupations, employment opportunities in business and industry, government, and teaching. A Placement Coordinator in the School's Office is also available to provide information about current opportunities.
Pictured above, and on the back cover, is the building given in memory of Moses L. Annenberg, father of the founder of The Annenberg School of Communications, designed by Alfred Easton Poor and completed in 1962. All School activities are housed in this building.

The great glass front of the School opens on the Annenberg Plaza near the center of the spreading campus of the University of Pennsylvania. Straight ahead is the Wharton School of Finance and Commerce.
## Calendar

<table>
<thead>
<tr>
<th>Date</th>
<th>Event Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall term 1968:</strong></td>
<td></td>
</tr>
<tr>
<td>September 4</td>
<td>Final day of registration for fall term</td>
</tr>
<tr>
<td>5</td>
<td>Fall term classes begin</td>
</tr>
<tr>
<td>20</td>
<td>Final day to add courses (with permission of instructor and adviser)</td>
</tr>
<tr>
<td>October 16</td>
<td>Final day to apply for M.A. degree in December</td>
</tr>
<tr>
<td>18</td>
<td>Final day to withdraw from or change to an auditor in a course without academic penalty</td>
</tr>
<tr>
<td>28</td>
<td>Preregistration for spring term begins</td>
</tr>
<tr>
<td>November 1</td>
<td>Preregistration for spring term ends</td>
</tr>
<tr>
<td>11</td>
<td>Final day to submit draft of Advanced Project to adviser for M.A. degree in December</td>
</tr>
<tr>
<td>27</td>
<td>Thanksgiving recess begins at close of classes</td>
</tr>
<tr>
<td>December 2</td>
<td>Thanksgiving recess ends at 8:00 a.m.</td>
</tr>
<tr>
<td>11</td>
<td>Fall term classes end</td>
</tr>
<tr>
<td>16-21</td>
<td>Final examinations</td>
</tr>
<tr>
<td>21</td>
<td>Fall term ends</td>
</tr>
<tr>
<td><strong>Spring term 1969:</strong></td>
<td></td>
</tr>
<tr>
<td>January 10</td>
<td>Final day of registration for spring term</td>
</tr>
<tr>
<td>13</td>
<td>Spring term classes begin</td>
</tr>
<tr>
<td>24</td>
<td>Final date to add courses (with permission of instructor and adviser)</td>
</tr>
<tr>
<td>February 28</td>
<td>Final date to withdraw from or change to an auditor in a course without academic penalty</td>
</tr>
<tr>
<td>March 7</td>
<td>Final day to apply for M.A. degree in May</td>
</tr>
<tr>
<td>8</td>
<td>Spring recess begins at close of classes</td>
</tr>
<tr>
<td>17</td>
<td>Spring recess ends at 8:00 a.m.</td>
</tr>
<tr>
<td>24-28</td>
<td>Preregistration for fall term</td>
</tr>
<tr>
<td>31</td>
<td>Final day to submit draft of Advanced Project to adviser for M.A. degree in May</td>
</tr>
<tr>
<td>April 3</td>
<td>Easter recess begins at close of classes</td>
</tr>
<tr>
<td>7</td>
<td>Easter recess ends at 8:00 a.m.</td>
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<tr>
<td>30</td>
<td>Spring term classes end</td>
</tr>
<tr>
<td>May 5-10</td>
<td>Final examinations</td>
</tr>
<tr>
<td>19</td>
<td>Commencement</td>
</tr>
<tr>
<td><strong>Fall term 1959:</strong></td>
<td></td>
</tr>
<tr>
<td>September 4</td>
<td>Fall term classes begin</td>
</tr>
</tbody>
</table>

Ph.D. candidates should consult the *Bulletin* of the Graduate School of Arts and Sciences for dates referring to particular Ph.D. requirements.