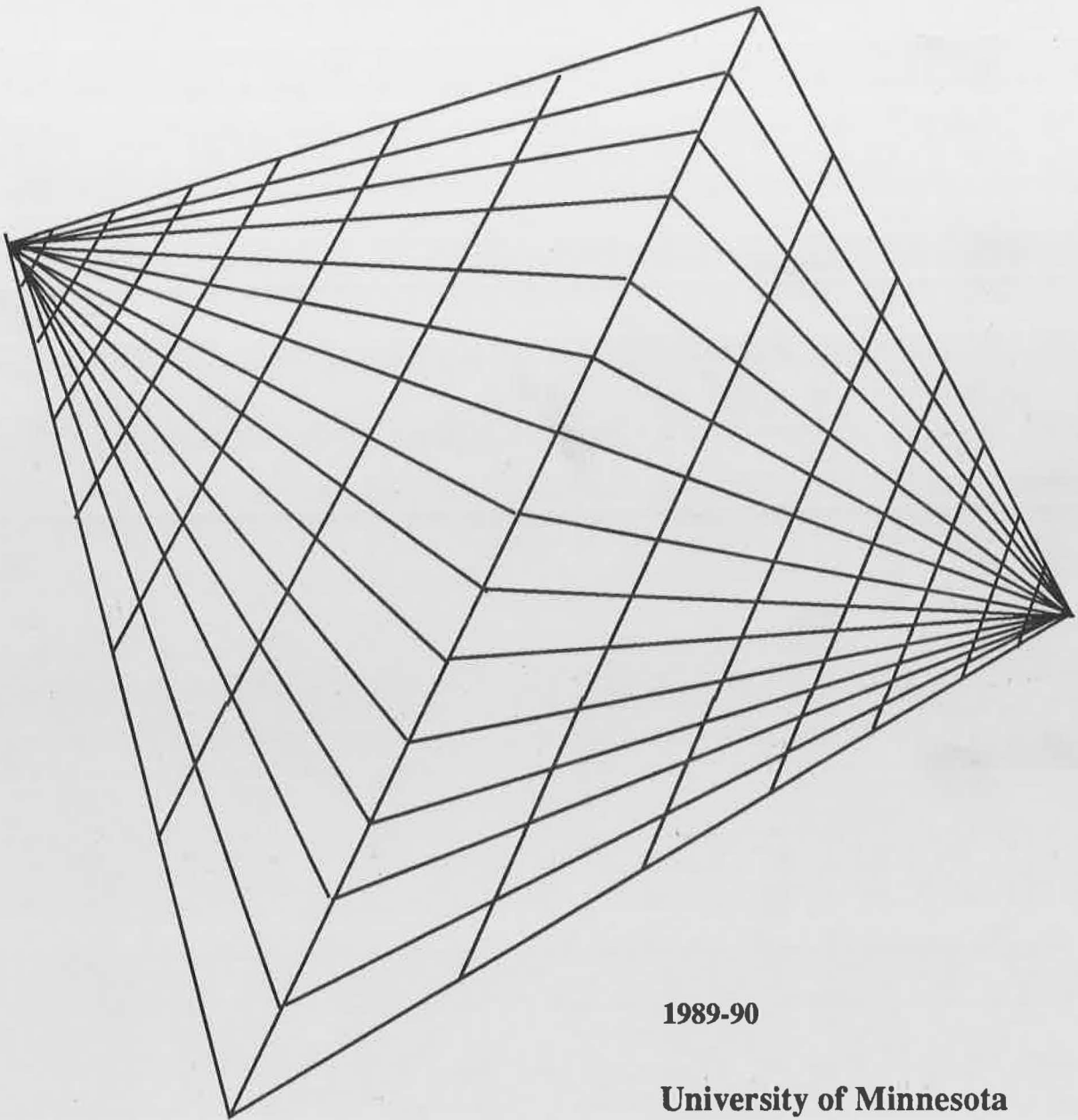


*Undergraduate Guide to the  
Scientific and Technical Communication Major*

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**1989-90**

**University of Minnesota**

**For general information about the  
B.S. in Scientific and Technical  
Communication**

**call (612) 624-4761  
(612) 624-3445**

**Human Rights Statement**

The Board of Regents has committed itself and the University of Minnesota to the policy that there shall be no discrimination on the basis of race, creed, color, sex, age, or national origin. In adhering to this policy, the University abides by the requirements of Title VI and VII of the Civil Rights Act of 1964, Revised Order No. 4, Executive orders 11246 and 11375, Sections 799A and 845 of the Public Health Service Act, and all other federal regulations and pertinent acts of Congress.

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Inquiries regarding compliance may be directed to Patricia Mullen, Director, Office of Equal Opportunity and Affirmative Action, 419 Morrill Hall, Minneapolis, Minnesota 55455, (612) 623-5387, or to the Director of the Office of Civil Rights, Departments of Health, Education and Welfare, Washington, D.C. 20201.

This guide originally prepared by Kathleen S. Gorak, Kathy E. Carter, and Sandra De Quesada as a project for Rhetoric 8510.  
Revised June, 1989 by Kathy E. Carter.

**Special Note to Current Technical  
Communication Students (enrolled  
prior to Fall, 1989):**

During the 1988-89 school year, major programs in the College of Agriculture were revised. In the case of the Technical Communication Program, the revisions resulted in the new Scientific and Technical Communication (STC) Program.

All students entering the STC program during Fall '89 must follow the requirements listed in this *Guide to the Major*. If you entered the Pre-major program prior to Fall '89, you can opt to follow either the previous requirements or the requirements in this *Guide*. Our goal is to provide the best possible program to prepare you for a career as a scientific and technical communicator.

Dr. Ann Hill Duin  
Coordinator, STC Program

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## **Introduction to Scientific and Technical Communication**

This guide has been written to help answer many of the commonly asked questions concerning the Scientific and Technical Communication program at the University of Minnesota. It includes information about the profession and the major, college admission requirements, your academic responsibilities and requirements needed for graduation, as well as general information about the University and different organizations associated with the profession.

Remember, this is only an unofficial guide. It cannot answer all of your questions. Your success in the program will be enhanced if you use this guide in conjunction with meetings with your advisor.

The Scientific and Technical Communication program at the University of Minnesota is located on the St. Paul campus in the Department of Rhetoric, a part of the College of Agriculture. The program at the University of Minnesota is one of approximately 70 programs in the United States offering an undergraduate degree. We are considered a leader in the field for educating and training scientific and technical communicators. Our graduates are in demand, our placement rate is high, and our program is growing.

The program at the University is flexible and gives you versatility so you can move into many different technical or management areas. The demand for trained, effective communicators increases each year and has not even begun to peak.

## Overview of the Field

Scientific and Technical Communication involves the gathering, analyzing, and disseminating of scientific and technical information efficiently and accurately for specific audiences.

Scientific and technical communicators work as writers, trainers and developers, technical editors, or as developers of computer-based instructional systems. Sometimes a scientific and technical communicator will perform more than one of these jobs in his or her workplace. The writer's job may consist of writing policy and procedure manuals, computer documentation, and information packets, or producing computer instructional systems, newsletters, or marketing materials. Trainers and developers may instruct employees in new procedures or computer applications. The telecommunication industry is employing scientific and technical communicators who can write scripts, design data bases, design and write computer documentation, research audiences, and select the most effective communication channels to reach target audiences.

*Where do scientific and technical communicators work?*

Scientific and technical communicators work in a variety of fields. They may work in industry, business, service organizations, or government. For example, some scientific and technical communicators work in agribusiness or for agricultural extension services, some work in the computer industry, some work in medical fields, and still others are in the telecommunication industry. Some scientific and technical communicators work as free lancers or for communication consulting firms on a contractual basis in a variety of areas.

*What skills should I have or learn to succeed in this profession?*

The skills necessary for success in this profession include strong writing and editing, oral communication, visual communication, and computer usage skills. Also, as a professional you will need a sound knowledge and understanding of the goals, methods, and

concepts involved in math and technology, as well as in a specific scientific area.

Personal qualities that will help you to succeed in this field include a curiosity about things scientific or technical, a synthesizing mind, the ability to explain difficult subjects simply but accurately, and a desire to work with people.

## **Overview of the Major**

### ***What is the Scientific and Technical Communication Major?***

The scientific and technical communication major is for students who are interested in pursuing a career as a scientific and technical communicator and have an interest in communication skills and science and technology. The major aim of this program is to provide a sound background in two major categories: communication and science/technology. An outline of the key content and experiences in each category are listed below.

### **COMMUNICATION**

- Skills in writing and editing
- Skills in effective small group and oral communication
- Practice with graphics and development of visual presentation skills
- Knowledge of page layout and design principles
- Knowledge of culture, values, technology, and organizational communication problems and strategies
- Background in communication theory and research strategies

### **SCIENCE AND TECHNOLOGY**

- An understanding of math concepts and computer technology
- Expertise in a specific scientific area



## Admission to the College of Agriculture

### *What are the admission requirements for the College of Agriculture...*

The Scientific and Technical Communication program is offered through the College of Agriculture at the University of Minnesota on the St. Paul Campus. To enter the program, you must first be admitted to the College of Agriculture.

#### *-if you are a high school student?*

If you are a high school graduate in the upper 60% of your class, you may enter the college if you have completed 12 accredited courses (each is defined as the equivalent of a year-long course) in grades 10 through 12. Required courses are one in a natural science or agriculture and three in mathematics: elementary algebra, plane geometry, and higher algebra or its equivalent. The other courses needed to make up 12 can be from English, social studies, history, and foreign languages.

You may seek exception to the above requirements if you can provide information indicating promise of academic success.

Apply by submitting an Application for Undergraduate Admission.

#### *-if you are transferring from another college or university?*

You apply by submitting an application for admission to the College of Agriculture. The general requirements for entrance by transfer include a minimum cumulative grade point average of 2.00 (where A=4.00, B=3.00, C=2.00, D=1.00, N or F=0.00) and a mathematics background at least equal to that required of high school graduates (see above).

You may seek exception to these requirements if you can provide information indicating promise of academic success.

After you have applied for and been accepted as a transfer student, the Office of Admissions and the College of Agriculture Office will evaluate all previous college work according to the standards of the University and the College of Agriculture. You will then be provided with a Transfer Credit Evaluation showing how your previous work has been evaluated and which requirements have been fulfilled.

As a transfer student, you will be required to complete all specific course and area distribution requirements of the program regardless of the number of credits accepted for transfer.

*-if you are transferring from within the Twin Cities campuses?*

If you are transferring from another college from within the Twin Cities campus of the University of Minnesota, you must meet the entrance requirements of the College of Agriculture as given previously. Apply for transfer at the Office of Admissions on the campus where you are currently registered or last attended classes.

*-if you are returning to college after working for several years?*

If you were a student at the Twin Cities campus and are returning to the University of Minnesota, you need to apply for a transfer at the Office of Admissions on the campus where you last attended classes. If you attended a different college or university you follow the instructions given previously for transferring from another college or university. To be accepted in either case, you must meet the entrance requirements of the College of Agriculture.

For more information about applying to the College of Agriculture or requests for applications, contact one of the following offices:

College of Agriculture Office  
277 Coffey Hall  
University of Minnesota  
1420 Eckles Avenue  
St. Paul, MN 55108  
or call (612)624-3045

Office of Admissions  
240 Williamson Hall  
University of Minnesota  
231 Pillsbury Drive S.E.  
Minneapolis, MN 55455  
or call (612)625-2008

The deadlines for submitting applications are:

Fall quarter admission	July 15
Winter quarter admission	November 15
Spring quarter admission	February 15

## The Advising System

*How can you find out more about this major?*

The advising system for the Scientific and Technical Communication major involves the initial viewing of a videotape to introduce you to the major. Those interested in pursuing the major will then work with pre-major advisors while completing the prerequisites for admission to the major. Once admitted into the major, you will work with a faculty advisor to plan your course of study.

### **Pre-major Status**

If you are interested in scientific and technical communication, contact the Scientific and Technical Communication program at (612) 624-4761 to arrange to see a fifteen minute videotape introducing you to careers in scientific and technical communication, the academic requirements of the major, and the admission procedures.

After you have seen the video, you can make an appointment with a pre-major advisor. The advisor will then answer any questions you still have and can help you understand the admission procedures to the Scientific and Technical Communication program. The pre-major advisor will guide you in meeting the prerequisites for applying to the major. This advisor can also assist you in making formal application to the major. You will work with this advisor until you are formally admitted to the program.

## **Advising Portfolio**

### ***What is an advising portfolio?***

Upon admission to the College of Agriculture, you will be given an advising portfolio. This portfolio is intended to provide an opportunity for you to analyze and synthesize your experiences from your academic work, relevant jobs, and outside projects. These portfolios will also aid you and your advisor in assessing the knowledge and experiences already gained, as well as what you will still need to fulfill your requirements for the major.

The purpose of the portfolio is to keep an ongoing list of the objectives you have met and a record of your courses and experiences. There are fourteen learner outcome objectives that need to be met before graduation from the College of Agriculture. The portfolio will help guide you to courses needed, as well as provide you with an easily accessible record that you can integrate into your resume and cover letters when you begin to look for jobs in your field.

## **Major Status**

### ***Who will be your major advisor?***

Once you are admitted into the major, you will be assigned to a faculty member who is a certified advisor. Your major advisor will help you select the best sequence of courses in meeting your career objectives and the requirements for graduation. You will meet with your advisor at least once per quarter to discuss the courses you plan to take for the next quarter and how your previous course experiences have helped you to meet the learning objectives in the advising portfolio. Also, you will be meeting with your advisor to prepare for and complete your internship.

## Admission to the Scientific and Technical Communication Major

### *What are the entrance requirements to the Scientific and Technical Communication Major?*

Admission to the College of Agriculture does not automatically admit you to the Scientific and Technical Communication Major. Rather, you enter at pre-major status. To be admitted to the program (i.e., full major status), the following are required:

- 32 prerequisite credits (upon acceptance into the major, these credits also apply to your major requirements)
- two forms:
  - application form
  - pre-major checklist
- college transcripts
- letter of intent
- marketing portfolio

### *What courses should you take before you apply?*

You must have completed 32 credits of required pre-Scientific and Technical Communication courses as follows:

- 8 credits in basic rhetoric, English, or composition
- 8 credits in physical and biological sciences
- 8 credits in social science
- 8 credits in math, computer science, or engineering

While you only need a 2.00 GPA to be admitted to the College of Agriculture, a 2.50 GPA is required in the 32 required credit hours for acceptance to the major. Obtain the Pre-major Checklist Form from the STC program office to list these classes and figure the GPA.

***How do you apply?***

To enter the Program you must submit both the application form and the pre-major checklist, during the quarter preceding the one you wish to enter as a major. At the same time, you must also submit a letter of intent, marketing portfolio, and college transcripts. Deadlines for submitting applications are as follows:

Fall quarter admission	April 15
Winter quarter admission	October 15
Spring quarter admission	January 15

Application forms and pre-major checklists may be obtained from

Scientific and Technical Communication Program  
325 Haecker Hall  
1364 Eckles Ave  
St. Paul, MN 55108

or call (612) 624-4761

***What transcripts are needed?***

Submit official transcripts of all college work. This includes all work done at the University of Minnesota, as well as at other colleges. These should be official transcripts and should show all coursework through the most recent quarter completed.

***What do you say in a letter of intent?***

Address your letter of intent to the Director of the Undergraduate Major and state your reasons for selecting scientific and technical communication as a profession. A letter of intent is your opportunity to tell the Admissions Committee why you would be an excellent addition to the Scientific and Technical Communication Program. In the letter, you highlight the aspects of your previous work and experiences reflecting strengths in skills needed for this field. Any of the following may be included:

- academic work pertinent to the major
- applicable extracurricular or job experiences (in communications, computers, technology, etc.)
- explanation of how you became interested in scientific and technical communication
- reasons why you want to pursue a major in this field
- career goals (workplace or job position desired)
- comments on your perception of yourself in the role of a technical communicator
- ways the program provides a means to achieving your goals
- discussion of your other interests (travels, hobbies, etc.) providing skills useful to a potential scientific and technical communicator

This is the first chance to sell yourself; do so here as you would when applying for a job.



***What goes into a "marketing portfolio?"***

A marketing portfolio will be used throughout your career as a scientific and technical communicator and is an important factor in getting a job. This is your opportunity to begin assembling one. Start with

- papers from classes which are samples of your best writing. Do not submit them in the form they were returned to you; retype them, correcting any mistakes the instructor noted.
- written work you have had published is another excellent addition. The length of writing is not important.
- examples of graphic work such as projects from art, drafting, or design classes, or photographs, slides, or videos you have done for work or pleasure. Any creative work done in academic or non-academic settings is acceptable.
- an updated resume (optional).

It is acceptable to produce examples for use in your portfolio that have not been used elsewhere.

***Presentation is important.*** Submit your work in good condition, inserting it into a professional portfolio or binder with looseleaf plastic pages. Submit slides in an 8 1/2 x 11 inch transparent slide carrier. This allows you to remove and add to your portfolio as your expertise increases. Start saving examples now of everything you produce in classes or at your job.

***When should you apply?***

You will apply to the major when you have completed the 32 prerequisite credits and have assembled materials for your portfolio. Apply during the quarter preceding the one you wish to enter as a major. You should apply before completing 100 quarter credits. Work with the pre-major advisor to determine the quarter to apply and while going through the application process.

***When will you learn if you've been accepted?***

The Admissions Committee, composed of members of the Scientific and Technical Communication faculty and the Director of the Undergraduate Program, will meet after each deadline and evaluate all applications. Each applicant will be accepted, rejected, or re-assigned pre-major status according to the following:

- academic record: overall GPA and performance in the 32 required credit hours
- letter of intent
- communication skills and experience as demonstrated in the portfolio

The Scientific and Technical Communication Program reserves the right to limit the number of students admitted to the program. Applicants will be notified by letter of the decision of the Admissions Committee within three weeks after each deadline. Those admitted must notify the Undergraduate Director of their intentions within a month after being accepted or their places will be forfeited.

## Graduation Requirements in the Major

### *What are the graduation requirements for the B.S. in Scientific and Technical Communication?*

Students majoring in the undergraduate program in Scientific and Technical Communication must complete requirements in each of the areas listed below. Required classes are listed. Use the Bulletin of the College of Agriculture in choosing electives to fulfill the remaining credit hours. Your advisor can offer guidance when planning your schedule.

### **A. Communication, Language, Symbolic Systems (29 credits minimum)**

Majors in Scientific and Technical Communication need to be able to communicate effectively in environments in which technical information is processed and exchanged. The program does not assume students inclined toward scientific and technical communication will enter with proficiency in communication sufficient to succeed in the program. However, we do require the following courses to build the introductory competencies:

- Rhet 1101—Writing to Inform and Persuade (4)
- Rhet 1104—Library Research Methods (1)
- Rhet 1151—Writing in Your Major (4)
- Rhet 1222—Public Speaking (4)
- Rhet 3562—Writing in Your Profession (4)

The environment in which scientific and technical communicators work also requires a knowledge and understanding of math and computer science. To provide a basic background, students are required to take the following two courses:

- Agri 1200—Computers in Your Profession (3)
- Math 1111—College Algebra and Analytical Geometry (5)

and one of the following:

AgET 3030—Introduction to Problem Solving with Computers  
(4)

CSci 3101—A FORTRAN Introduction to Computer  
Programming (4)

CSci 3102—Introduction to Pascal Programming (4)

CSci 3104—Introduction to Programming and Problem Solving  
(4)

IDSc 3030—Information Systems and Information  
Management (4)

**B. Physical and Biological  
Sciences  
(20 credits minimum)**

Since scientific and technical communicators write in environments in which technical information is developed and processed, students need an interest and an inclination for science. By taking basic courses in physical or biological sciences, students can decide if their interest is scientific and technical communication.

Only science courses with laboratories will count towards this requirement. These courses should build up prerequisites for your science and technology emphasis in Area E.

Select from the following courses:

BioC 3001—Elementary Biological Chemistry (4)

BioC 3031—Survey of Biochemistry (4)

BioC 5025—Laboratory in Biochemistry (2)

Biol 1009—General Biology (5)

Biol 1103—General Botany (5)

Biol 1106—General Zoology (5)

Chem 1001—Chemical Principles and Covalent Systems (5)

Chem 1002—Chemical Principles and Covalent Systems (5)  
(Organic Chemistry)

Geo 1001—Introduction to Geology and Lab (4, 1)

Geo 1111—Introductory Physical Geology (5)

MicB 3103—General Microbiology (5) (extension only)

MicB 5105—Biology of Microorganisms (5)

Phys 1001, 1005—The Physical World and Lab (4, 1)

Phys 1041, 1045—Introductory Physics and Lab (4, 1)

Phys 1042, 1046—Introductory Physics and Lab (4, 1)

**C. The Individual and Society**  
(14 credits minimum)

Scientific and technical communication students benefit from courses enabling them to understand the impact of science and technology on western culture. Possible courses which fulfill this requirement are anthropology, economics, geography, sociology, political science, and psychology. Work with your advisor in selecting a sequence of courses from the suggested courses in the Bulletin of the College of Agriculture.

Suggested courses must be from the following categories:

1. Analysis of Human Behavior and Institutions
2. Development of Civilization: Historical and Philosophical Studies (You must complete at least one course from this area.)

**D. Literature, Humanities, and Fine Arts**  
(16 credits minimum)

Literature, Humanities, and Fine Arts offer the student the background in liberal arts needed in order to have something to say, as well as the ability to say it. To be leaders in the profession, students need liberal arts courses to help them become culturally literate and to help them learn how to form intelligent and informed decisions. Possible classes in this area include American studies, classics, literature, music, and theatre. Advisors will guide students in selecting a sequence of courses to enable students to understand the issues related to the impact of science and technology on culture. See the College of Agriculture Bulletin for a list of suggested courses.

**E. Professional Courses in  
the Major  
(90 credits minimum)**

Students must complete a minimum number of courses for the major in a variety of competency areas. The Scientific and Technical Communication major is divided into seven areas of emphasis to reflect the communication and science and technology areas needed by the student. Certain core classes are required in each area with additional courses taken in the area you wish to emphasize further. Students must take more than the minimum number of credits to reach the total of 90 credits.

*What are the required courses  
in the major curriculum?*

**Writing and Editing Emphasis  
(18 credits minimum)**

Students must have strong writing and editing skills in order to communicate effectively in this profession. Writing and editing skills are baseline.

**Required:**

EngW 5401—Introduction to Professional Editing (4)

Rhet 3565—Writing for Publication (4)

Rhet 3572—Grammatical Editing for Technical Writers (2)  
(prerequisite for EngW 5401)

Rhet 5581—Document Design (4)

And **two** of the following:

Rhet 5572—Procedures and Policies Manual (2)

Rhet 5573—Grant Proposal (3)

Rhet 5574—Electronic Publishing (2)

Rhet 5575—Newsletter (3)

**Recommended:**

Comp 3014—Writing for Quantitative Social Sciences (4)

Comp 3015—Writing about Science (4)

Comp 3027—Advanced Expository Writing (4)

Comp 3050—Topics in Advanced Composition (4)

### **Oral Communication Emphasis (12 credits minimum)**

Students need to be able to retrieve, analyze and use information that they have effectively gathered from others and present this information orally. They must be able to locate, evaluate, and integrate diverse viewpoints of project teams and of their clients.

**Required:**

Rhet 3266—Communication, Discussion in Small Group  
Decision Making (4)

Rhet 5257—Scientific and Technical Presentations (4)

Rhet 5258—Interviewing: Dynamics of Face-to-Face  
Communication (4)

**Recommended:**

Rhet 3254—Advanced Public Speaking (4)

Spch 3201—Introduction to Broadcast Production (4)

Spch 3203—Radio Production (4)

Spch 3411—Small Group Communication Process (4)

### **Visual Communication Emphasis (5 credits minimum)**

Students must be able to communicate in visual as well as verbal forms. They must be able to understand flow diagrams and models of technical components.

**Required:**

Ind 1600—Drafting (3)

Jour 1002—Visual Communication (2)

**Recommended:**

- Ind 1602—Technical Design (3)
- Ind 1620—Visual Communication Technology (3)
- Ind 1622—Graphic Communication (3)
- Ind 1624—Photography (3)
- Rhet 3101—Functional Photography (4)

**Communication Systems Emphasis  
(8 credits minimum)**

Students must understand how to communicate in the corporate environment; therefore, they need to understand how to analyze systems of communication within the environment. Technical communicators must be able to manage human resources and provide leadership to project teams.

**Required (Two of the following):**

- Rhet 3xxx—Organizational Behavior (4)
- Rhet 5170—Managerial Communications (4)
- Rhet 5600—Transfer of Technology (4)

**Recommended:**

- Rhet 5165—Studies in Organizational Communication,  
Conflict, and Change (4)
- Rhet 5400—Dissemination and Utilization of Information (4)
- Spch 3111—Leadership Communication (3)
- GC 3464—Communicating in Organizations (4)  
or Spch 3441—Communicating in Organizations (4)
- Pol 5704—Organization Theory and Behavior (4)
- SW 5013—Interdisciplinary Team Training in Health  
Services Delivery (4)



### **Communication Theory and Research Emphasis (8 credits minimum)**

Students must be able to evaluate and integrate diverse viewpoints or data. They must effectively analyze multiple audiences/clients. In order to do this they also need to acquire and analyze appropriate information about their clients.

**Required:**

Rhet 1220—Principles of Human Communication (4)

Rhet 3700—Rhetorical Theory (4)

**Recommended:**

Clas 1045—Basic Program in Technical Terminology and  
Word Study (3)

Engl 3851—The English Language (4)

Engl 3852—Aspects of the English Language (4)

Engl 5815—History of English Language (4)

Engl 5831—American English (4)

EPsy 5115—Adult Learning and Educational Practice (4)

EPsy 5240—Principles and Methods of Evaluation (3)

Jour 1001—Introduction to Mass Communication (2)

Ling 3001—Introduction to Linguistics (5)

Psy 3011—Introduction to Psychology of Learning (4)

Rhet 5160—College Reading (4)

Rhet 5500—Research in Communication Strategies (4)

Rhet 5531—Technical Writing Course Development (2)

Rhet 5541—Readings in Scientific and Technical Prose (2)

Spch 3431—Role of Persuasion in the Modern World (4)

Spch 3601—Approaches to Public Discourse (4)

### **Culture, Values, and Technology Emphasis (8 credits minimum)**

Students must be able to apply a historical perspective to the role of science and technology in technical communication. They must apply global perspectives to scientific and technical issues and decisions. They must make responsible judgments on ethical and policy issues stemming from current technology and its use.

#### **Required:**

Rhet 3XXX—Culture, Values, and Technology (4)  
(available Spring 1990)

#### **Recommended:**

HMed 3001—Doctors and Disease in History  
HMed 300x—Medicine and Disease in History (4)  
HSci 17xx—Technology and Western Civilization (4)  
HSci 18xx—Introduction to History of Science (4)  
Hum 1003—Humanities in the Modern World III (4)  
Hum 3625—Science and the Humanities (4)  
Phil 3601—Scientific Thought (4)  
Phil 56xx—Philosophy of Science (4)  
Rhet 1303—Modern Thought and the Impact of Evolution (4)

## **Science and Technology Emphasis (20 credits minimum)**

While technical communicators need a general knowledge of math, science and technology, they also must develop expertise in a scientific and technical area. With the help of an advisor, you will select at least five additional classes in a scientific or technological area to enhance your technical emphasis. Eight credits must be at the 3000 level or above. Possible areas of emphasis are:

Agricultural Science: Animals	Health Sciences
Agricultural Science: Plants	Home Economics
Biological Science	Management Information Systems
Cognitive Science/Psychology	Natural Resources
Computer Science	Physical Science
Engineering	Vocational Education
Food Science/Nutrition	

You will package your rationale for choosing certain courses and your experiences in the courses in two places: the advising portfolio and the marketing portfolio.

## **Capstone Project (6-8 credits minimum)**

This project combines the two areas of emphasis into an integrated experience. The following courses are required:

Rhet 3582—Senior Seminar (2)  
Rhet 5180— Internship in Technical Communication (4-6)

***What is the Senior Seminar?***

As a major, you will participate in a seminar course during your senior year to provide you an opportunity to integrate and apply your educational experiences to your upcoming nonacademic work, to learn how to work with others in a cooperative environment, and to build your self-confidence as you begin your job search. Specifically, you will discuss ethical issues and problems related to scientific and technical communication, and will examine the problem-solving strategies of professional communicators. Several group projects will be completed as well as individual work.

***What is involved in an internship?***

You must complete at least one internship experience. The internship cannot be completed until you are officially enrolled in the major. More than one internship may be done, but the additional internships will not receive course credit. For the main internship experience, you will do the following:

- complete a contract detailing the duration, hours, duties, etc. of the internship
- meet with the advisor a minimum of three times during the duration of the internship
- submit a final internship report

You can learn of internship opportunities by reading the notices posted on bulletin boards in the department, talking with your advisor and other instructors, and through personal research.

**F. Electives**

You will complete the remaining 21 credits of the 190 required for graduation with electives of your choice.

## General Information

### Enrichment Activities

When you become a student in scientific and technical communication you are encouraged to participate in the following clubs and organizations:

**TEC-EASE**, an acronym for Technical Communicators Expanding Associations, Scholarship, and Encouragement is an undergraduate club, sponsored by the Rhetoric Department, for graduates and undergraduates in technical communication and interested others.

**NAMA**, or the National Agri-Marketing Association, is a national organization that has yearly competitions for marketing agricultural products. For the competition, students develop products and presentations meeting specific criteria designated by NAMA.

**Society for Technical Communication (STC)**, the umbrella professional organization for technical communication, offers student memberships. STC sponsors a journal, *Technical Communication*, and an annual conference, the ITCC (International Technical Communication Conference). The Rhetoric Department provides support for selected students to attend ITCC.

**Sigma Tau Chi (STX)** is an honorary fraternity for outstanding students in technical communication programs, sponsored by STC.

**UROP** is a University program allowing students to work in conjunction with faculty on faculty research.

***Minnesota Technolog***, a magazine sponsored by the Institute of Technology, is the product of undergraduate student writers, editors, and illustrators. The magazine publishes articles on research and innovations in science and technology, on public policy issues related to science and technology, and science fiction. Majors in technical communication have contributed articles and served as editors.

The ***Minnesota Daily*** welcomes technical communication students, especially those interested in writing feature articles on research being conducted on the St. Paul campus.

## **Computer Labs**

Students in the program have access to a variety of computing facilities. The University maintains computer labs around the campus with a variety of software and equipment. The Rhetoric Department maintains an assortment of software for use in its two departmental computer labs. You are encouraged to develop skills essential to the effective use of available computing equipment.

The Rhetoric Word Processing Lab, located in 329 Haecker Hall, has IBM PCs, ATs, Xerox 820s, and a Macintosh Plus, as well as a variety of word processing, database, graphics, and instructional design software. The Word Processing Lab is open to all majors.

The Rhetoric Macintosh Lab, in 302 Haecker Hall, is equipped with thirteen Apple Macintosh SE microcomputers and a variety of application programs. Computers in this lab may be used individually or linked as a local area network. The Macintosh Lab is for use only by authorized classes and for research work.

### **Library Facilities**

The University library system includes the St. Paul Campus Library and the Biomedical, Wilson, and Walter Libraries in Minneapolis. These libraries house a large collection of books and journals, including those relevant to the study of communication, science, and technology. In addition there are a number of specialized school and departmental libraries.

### **Housing**

The University maintains a housing office which has listings of both on-campus and off-campus housing. For assistance write or call:

Director, Housing Office  
Comstock Hall East  
210 Delaware St. SE  
Minneapolis, MN 55455  
(612) 624-2994

Students currently in the Program are another valuable source of housing information. The University operates a phone number for General Information at (612) 625-5000.

## **Financial Aid**

Financial aid for students is available in the form of grants, loans, scholarships, and work-study. To apply for financial aid through the Office of Student Financial Aid, students must obtain an application packet and complete the American College Testing Program's Family Financial Statement (ACT-FFS) and all other required documents. The application packet has further information and deadlines.

Some of the types of financial aid available are

- Pell Grant Program
- Minnesota State Scholarship and Grant-in-Aid Program
- College Work-Study Program
- Perkins Loan Program
- Guaranteed Student Loan (GSL)
- Supplemental Loans for Students (SLS)
- Loans for Parents (PLUS)
- Student Educational Loan Fund (SELF)
- University scholarships, grants, and loans

For an application packet and more information, contact the Office of Student Financial Aid. The St. Paul campus office, which offers limited service is in

197 Coffey Hall  
1420 Eckles Avenue  
St. Paul, MN 55108.

The Minneapolis campus office is in

210 Fraser Hall  
106 Pleasant Street SE  
Minneapolis, MN 55455  
or call (612) 624-1665.



## **Health Services**

The University's Boynton Health Service provides medical and dental care for students enrolled in the University. The St. Paul campus office is located at

109 Coffey Hall  
1420 Eckles Ave.  
St. Paul, MN 55108  
(612) 624-7700

In addition, the facilities of the University Hospital and Medical School are available for surgical and major medical needs.

## Faculty

- Becker, Sandra J.** M.A. in English, Pennsylvania State University  
B.A. in English, University of Wisconsin-Eau Claire
- Bennett, J. Michael** Ed.D. in Reading Education, University of Georgia  
M.A.E. in English Education, University of Florida
- Connolly, James E.** Ph.D. in Speech Communication, University of Minnesota  
M.A. in Speech Communication, University of Minnesota
- Duin, Ann Hill** Ph.D. in English Education, University of Minnesota  
M.A. in English Education, University of Minnesota
- Ferguson, Richard W.** Ph.D. in American Studies, University of Minnesota  
M.A. in English, North Dakota State University
- Hayes, Laurie S.** Ph.D. in Communication Arts, University of Wisconsin-Madison  
M.A. in Speech, University of Wisconsin-Madison
- Horberg, Richard O.** Ph.D. in American Studies, University of Minnesota  
M.A. in English, University of Minnesota
- McDowell, Earl E.** Ph.D. in Speech Communication, University of Nebraska  
M.A. in Speech Communication, West Virginia University
- Mikelonis, Victoria M.** Ph.D. in Language & Literature, Indiana University of  
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M.A. in Language & Literature, Indiana University of  
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- Schuelke, David** Ph.D. in Communication, Purdue University  
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Ph.D. in American Literature, University of Michigan  
M.A. in English, University of Michigan

**Walzer, Arthur E.**

Ph.D. in English, University of Minnesota  
M.A. in English, University of Minnesota

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**Notes**