



Department of Rhetoric

*Scientific and Technical Communication*

2004-2005

Undergraduate Handbook

B.S. in  
Scientific and Technical  
Communication

UNIVERSITY OF MINNESOTA

# **Undergraduate Handbook**

Bachelor of Science  
Scientific and Technical Communication

2004–2005

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The University of Minnesota, founded in the belief that all people are enriched by understanding, is dedicated to the advancement of learning and the search for truth; to the sharing of this knowledge through education for a diverse community; and to the application of this knowledge to benefit the people of the state, the nation, and the world.

The University's threefold mission of research and discovery, teaching and learning, and outreach and public service is carried out on multiple campuses and throughout the state.

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## Department of Rhetoric Connections

Visit the Department of Rhetoric at 64 Classroom Office Building, 1994 Buford Avenue, St. Paul campus of the University of Minnesota. Mail the Department of Rhetoric at:

Department of Rhetoric  
64 Classroom Office Building; 1994 Buford Ave.  
St. Paul, MN 55108

Call the Department of Rhetoric at (612) 624-3445 and visit our Web site at [www.Rhetoric.umn.edu](http://www.Rhetoric.umn.edu).

### Director, Undergraduate Major

**Prof. Vickie Mikelonis**, Director, Undergraduate Major. Contact Prof. Mikelonis for information about the S&TC major and internships at:

[mikeL001@umn.edu](mailto:mikeL001@umn.edu)  
74 ClaOff  
(612) 624-6206

### Office Specialist

**Shannon Klug**, Office Specialist. She will take your photo for the student picture board and assist you with departmental information and resources. Contact Shannon at:

[klugx004@umn.edu](mailto:klugx004@umn.edu)  
64 ClaOff  
(612) 624-3445

### RASTEC

(Rhetoric's Association for Student Technical Communicators)

Stop by 41 ClaOff to introduce yourself to this year's RASTEC officers, or contact them at [rastec@umn.edu](mailto:rastec@umn.edu).

Also check out RASTEC's website at <http://www.rhetoric.umn.edu/rastec.html>.

### Asst. Director, Undergraduate Major

**Barb Horvath**, Asst. Director, Undergraduate Major. Contact Barb for information about the S&TC major. She is the first contact for prospective students and is usually the first advisor for new majors. You can reach Barb at:

[Horva003@umn.edu](mailto:Horva003@umn.edu)  
91 ClaOff  
(612) 624-1902

### Department Head

Department Head, **Prof. Laura J. Gurak**, in her office in 58 COB. If you'd like to make an appointment to talk with Prof. Gurak, you can arrange it through **Barbara Jensen**, Assistant Head, at:

[jense095@umn.edu](mailto:jense095@umn.edu)  
56 ClaOff  
(612) 624-2283

### Programs Administrator

**Mary Wrobel**, Programs Administrator. Mary can assist you with information about our Partnership Program, undergraduate, and graduate programs. Contact Mary at:

[wrobe005@umn.edu](mailto:wrobe005@umn.edu)  
60 ClaOff  
(612) 624-4761

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## Overview of Scientific and Technical Communication

Welcome to the Department of Rhetoric and to the Scientific and Technical Communication Bachelor of Science program!

The Scientific and Technical Communication Bachelor of Science degree is offered by the Department of Rhetoric, which is in the College of Agricultural, Food, and Environmental Sciences (COAFES) on the St. Paul campus of the University of Minnesota. The Scientific and Technical Communication Bachelor of Science degree at the University of Minnesota is one of approximately 70 programs in the United States offering a scientific and technical communication undergraduate degree.

This **Student Handbook to the Scientific and Technical Communication Bachelor of Science Degree** is designed to answer many of the questions students ask about the Scientific and Technical Communication Bachelor of Science degree at the University of Minnesota. The handbook includes information about scientific and technical communication as a degree and as a profession. Also included are:

- College admission requirements
- Academic requirements necessary for graduation
- General information about the University and organizations associated with the profession

Using this handbook in conjunction with advisor meetings and other resources will greatly enhance your success in the program. Other resources include the *University of Minnesota Undergraduate Catalog* and the Scientific and Technical Communication Internship Guide. Additional information about the Department of Rhetoric is available on the World Wide Web (<http://www.rhetoric.umn.edu>) and on the electronic mailing list, UMRHET. New majors are added to this email list. For additional information, see Department of Rhetoric Resources on page 19.

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## Overview of the Field of Scientific and Technical Communication

According to the Society for Technical Communication, an international organization with more than 20,000 members worldwide, scientific and technical communication is defined as: "*all processes by which humans convey meaning about the development and use of technology.*"

In essence, scientific and technical communication involves gathering, analyzing, and distributing scientific and technical information efficiently and accurately for specific audiences.

## **More than Just Writing**

Scientific and technical communicators do far more than write. In fact, some spend more than half their time gathering information, and for this reason, they must possess excellent interpersonal skills. For example, communicators may work with scientists, engineers, doctors, or computer programmers to learn about products or services, or they may work with product developers in the design stage, giving their input on user needs and design considerations.

Scientific and technical communicators transform concepts and ideas into forms that audiences can use and understand. Communicators analyze their audience, the purpose of the communication, and the information to be presented. They select appropriate formats such as reports, newsletters, policy and procedure manuals, brochures, user manuals, videos, online documentation, multimedia, or World Wide Web sites based on their analyses. Finally, they design, produce, and implement the presentation or document, and they test it for usability.

## **Job Titles of Technical Communicators**

Because of rapid advances in science and technology, scientific and technical communicators are in demand; fortunately, that demand has yet to peak. As a professional, you may have any number of job titles including any of the following:

- Communication Consultant
- Communication Manager
- Documentation Engineer
- Documentation Specialist
- Freelance Writer
- Information Developer
- Information Engineer
- Information Architect
- Instructional Designer
- Marketing Writer
- Multimedia Specialist
- Program Planner
- Publications Specialist
- Technical Editor
- Technical Writer
- Training Specialist
- Usability Engineer
- Video Scriptwriter
- Webmaster
- Website Designer

In addition, scientific and technical communicators frequently advance into management because of their excellent communication skills.



## Rewarding Careers with Outstanding Companies

Although the majority of our graduates work for private industry, they also find work in governmental or educational organizations. A growing number of our graduates also choose self-employment, working as independent contractors. For example, some of our graduates work in agribusiness or for agricultural extension services while others work in computer or medical industries. Our program is proud to report nearly a 100 percent placement rate of our graduates within six months after graduation. Our students consistently find rewarding careers with outstanding companies, including the following companies:

- 3M
- Argonne National Laboratory
- Attorney General's Office
- Bolger Publication
- Boston Scientific Corporation
- Cardiac Pacemaker, Inc.
- Cardiometrics
- Central Engineering Company
- Computer Task Group, Inc.
- Cray Research
- Cyber Optics
- Dasche and Thompson
- Deluxe Corporation
- Desk Top Ink
- EarthWatch Communications
- Fredrickson Communications
- IBM-Rochester
- IBM-Santa Teresa Laboratory
- Interactive Technologies, Inc.
- Intergraph
- Locus Computing Corporation
- Logis
- Medtronic
- MGS Systems
- Microsoft
- National Board of Medical Writers
- Norwest
- Premis Corporation
- Protein Design Labs
- Seagate Technology
- UNISYS
- Writar
- Xerox
- Yamamoto Moss

## Graduate School Placement

Other S&TC graduates use the Scientific and Technical Communication Bachelor of Science degree as a foundation for pursuing graduate school. Our graduates have been accepted into graduate programs around the country, including the following institutions:

- Carnegie Mellon University
- Georgetown University
- Hamline Law School
- Harvard University
- Michigan Technological University
- New Mexico State University
- Rensselaer Polytechnic Institute
- Texas Tech University
- University of Minnesota
- University of Washington

## Salaries

In 2004, the Society for Technical Communication mailed 12,500 survey questionnaires to United States and Canadian members employed as technical writers/editors. More than 2,000 questionnaires were completed and returned. The following is an excerpt of their results for the United States published in the 2004 Technical Communicator Salary Survey:

<u>Employment Level</u>	<u>Mean Salary</u>
Entry	\$41,630
Mid-Level, Non-Supervisory	\$55,600
Mid-Level, Supervisory	\$67,330
Senior-Level, Non-Supervisory	\$80,630
Senior-Level, Supervisory	\$72,930

The average (mean) salary for all technical writers/editors was \$65,200 in the U.S. and \$60,130 in Canada (in Canadian Dollars).

## Overview of the Bachelor of Science Degree

The Department of Rhetoric at the University of Minnesota is one of six institutions nationwide offering a Ph.D., making it a premier program for graduate and undergraduate students alike. We offer two degrees (B.S., M.S.) in Scientific and Technical Communication, two degrees (M.A., Ph.D.) in Rhetoric and Scientific and Technical Communication, a certificate in Organizational and Professional Communication, and four undergraduate minors.

The Scientific and Technical Communication Bachelor of Science degree is for the student who is interested in pursuing a career as a scientific or technical communicator and who has an interest in communication skills as well as science or technology. The major aim of the Bachelor of Science degree is to provide a sound background in two categories:  
1) *Communication* and 2) *Science or technology*.

### **A Mixture of Communication and Scientific or Technical Emphasis**

You show your aptitude for science and technology by completing the liberal education requirements and by emphasizing studies in a scientific or technical field. Your emphasis combines with your training in communication theories and methods. An outline of the key content and experiences in each category are listed on the following page:

### **Communication**

- Skills in writing and editing
- Skills in effective small group, interpersonal, and organizational communication
- Practice with graphics and development of visual presentation skills
- Knowledge of information design and management
- Knowledge of how culture, values, technology, and organizational communication problems and strategies interact
- Background in communication theory and research strategies

### **Science and Technology**

- An understanding of mathematical concepts and computer technology
- An understanding of physical and biological sciences
- Expertise in a scientific or technical field

Contact the Admissions/Advising Counselor or your faculty advisor with questions about how to combine your interests into a fulfilling degree and future career.

## **Overview of the Department of Rhetoric**

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The Scientific and Technical Communication Bachelor of Science program is offered by the Department of Rhetoric, which is in the College of Agricultural, Food, and Environmental Sciences (COAFES) on the Twin Cities campus of the University of Minnesota.

The Twin Cities campus is split into three geographical areas: the East and West Banks (on the banks of the Mississippi River in Minneapolis) and St. Paul, which is commonly called the St. Paul campus. The students say that the East and West Banks have a metropolitan feel to them, whereas the St. Paul campus has a small community feeling—yet all have the advantages of being in a metropolitan area. Students move back and forth among the campuses on a free, inter-campus bus system.

The Department of Rhetoric is on the St. Paul campus in the Classroom Office Building. Rhetoric classes typically are held in the Classroom Office Building (frequently abbreviated ClaOff Bldg), the Magrath Library, and the Vocational & Technical Education Building (frequently called VoTech).

The Department of Rhetoric usually has around 60 students in the Bachelor of Science program. You'll get to know your classmates through your classes and your involvement in RASTEC (Rhetoric's Association for Student Technical Communicators), the *free*-membership student group (see page 23).

To learn more about the Department of Rhetoric, visit our website at <http://www.rhetoric.umn.edu> and take Rhet 1001: Introduction to Scientific and Technical Communication—a fun and informative 2-credit course that introduces you to the major.

## **Overview of the University of Minnesota Partnership Program**

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As a student in this department, you will have the opportunity to participate in one of the most innovative university programs available in the field of scientific and technical communication: the Partnership Program. This Program links the University of Minnesota—Twin Cities and the University of Minnesota—Rochester.

Students on the Rochester campus may complete the undergraduate degree in Scientific and Technical Communication from there. Communication technology—such as Interactive Television (ITV), the Internet, and other distance learning technologies—make pursuing this degree possible.

During your career as a technical communicator, you are likely to collaborate with people around the world and use technology to support and facilitate your work. This Partnership Program enables you to simulate your professional future by working with faculty, students, and resources (including the library) throughout the state of Minnesota. The Program also challenges you to push the limits of the technology—to use it to build relationships, collaborate on class projects, meet with your instructor, conduct research, and engage in a myriad of other learning activities. You'll probably also find yourself establishing across-the-state friendships, discussing your jobs and other classes, and learning of career opportunities.

In addition you'll quickly realize that, just within this state, the work of technical communicators varies greatly. Thus, you'll learn about technical communication projects and opportunities that focus on medical devices, medical research, computers, networks, crops, agricultural machinery, fish and wildlife, sports medicine, sports management, government, veterinary medicine, education, financial services, graphic design, digital arts, food science, equine science, engineering, and a range of other topics—depending on the classes you take and the backgrounds of the students in those classes. We're in a field that thrives on information, so this Partnership Program gives you direct access to experiences and incredible amounts of primary information that simply are not available to students who take only local classes.

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## Beginning the S&TC Major

The Scientific and Technical Communication (S&TC) Bachelor of Science program is offered by the Department of Rhetoric, which is in the **College of Agricultural, Food, and Environmental Sciences (COAFES)**. The department and college are both located on the St. Paul campus of the University of Minnesota—Twin Cities. You must first be admitted to the college before entering the Major. The following pages will be your guide for getting started as a S&TC major.

### Necessary Steps

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If the Scientific and Technical Communication Bachelor of Science degree sounds right for you, follow these steps:

- Step 1.** Apply for admission to COAFES.
- Step 2.** Make an appointment to meet with the Asst. Director, Undergraduate Major for suggestions on your coursework for your first year in the program.
- Step 3.** Complete your liberal arts requirements and introductory Rhetoric classes. The Admissions/Advising Counselor will be available to help you tailor your program up to this point.
- Step 4.** Complete your upper division coursework, including an internship.

After your first year in the program (Step 3), you will be assigned a faculty advisor who will help you meet your educational and career objectives and plan your upper division coursework (Step 4). It is a good idea to meet with your advisor at least once per term to discuss the courses you plan to take the next term, as well as to discuss your personal and professional development as a technical communicator.

### Applying for Admission to the College

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Step 1 toward becoming a Major in the Scientific and Technical Communications program is to apply for admission to COAFES. To get your application materials contact COAFES Prospective Student Services:

Prospective Student Services  
College of Agricultural, Food, and Environmental Sciences  
Coffey Hall 190  
St. Paul, MN 55108  
(612) 624-3045 or (800) 866-2474

Prospective Student Services can also help you learn more about COAFES or take a guided tour of the St. Paul campus.

After you've sent in your application and have been accepted as a student in the college, COAFES will evaluate any previous college work according to the standards of the University and COAFES. You will then receive an **APAS** (Academic Progress Audit System) report, which shows how your previous work has been evaluated and which requirements have been fulfilled. Be sure to contact Prospective Student Services for details on College requirements and deadlines.

Students must complete 120 credits to graduate, including 66 credits in the major (see form for major requirements). Students must also complete the University's liberal education requirements. All required courses must be taken A-F, and a grade of at least C- is required in all major degree requirements. The College of Agricultural, Food, and Environmental Sciences requires that candidates for graduation earn a cumulative GPA of at least 2.00 for coursework taken at the University. To complete a degree at the University, a student must complete at least 30 semester credits offered through the University, including 24 credits taken after admission to the major or program and taken from the college offering the major or program. For more information, please see the University of Minnesota's *Undergraduate Catalog*.

### **Once You're Admitted to the College...**

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The rest of this handbook will walk you through what you need to do to complete your course work and graduate with a degree in Scientific and Technical Communication. In other words, it will provide you with the details you need to complete Steps 2–4 for beginning and completing a major in the S&TC program.

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## Completing the Required Courses

To earn your Scientific and Technical Communication Bachelor of Science degree, you must complete courses in the following areas:

- Liberal education requirements
- Scientific and Technical Communication program requirements

Contact the Asst. Director, Undergraduate Major, Barb Horvath at horva003@umn.edu or 612-624-1902 if you have questions about your liberal education requirements.

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### Liberal Education Requirements

Several of your liberal education requirements will be fulfilled with your program requirements. These have been listed below and on the next few pages.

For those liberal education requirements that cannot be fulfilled with program requirements, please consider taking **elective** courses from the Department of Rhetoric. Our outstanding faculty members offer engaging and informative courses geared toward students with interests in the scientific and technical fields.

#### Writing Intensive

##### First-Year Writing (1 course)

Although not a program requirement, *Rhet 1101 Writing to Inform, Convince, and Persuade* is a pre-requisite for Rhet 1152W and Rhet 3562W and fulfills the first-year writing requirement.

##### Four Writing Intensive Courses

###### Lower Division

- Rhet 1152W Writing on Issues of Science and Technology
- Rhet 1381W Rhetorical Fictions & 20<sup>th</sup> Century Conflicts: West Africa, Vietnam, & the Middle East

###### Upper Division (at least two)

- Rhet 3108W Gender and the Rhetoric of Science and Technology
- Rhet 3221W Theories of Human Communication
- Rhet 3376W Terrorism
- Rhet 3382W War
- Rhet 3562W Technical and Professional Writing (counts as two)
- Rhet 3577W Rhetoric, Technology, and the Internet
- Rhet 3701W Rhetorical Theory and Scientific and Technical Communication
- Rhet 4105W Corporate Video for Technical Communicators
- Rhet 4573W Writing Proposals and Grant Management
- Rhet 4662W Emerging Technologies in Scientific and Technical Communication

#### Diversified Core

##### Social Science

- Rhet 3221W Theories of Human Communication
- Rhet 3384 From Soil to Civilization: Agriculture & the Emergence of the Modern World

##### Physical Science with Lab

There are no program requirements that meet this liberal education requirement.

##### Biological Science with Lab

There are no program requirements that meet this liberal education requirement

### **Historical Perspectives**

- Rhet 3371 Technology, Self, & Society

### **Arts and Humanities—Literature**

- Rhet 1311 The Family in American Experience
- Rhet 1381W Rhetorical Fictions & 20<sup>th</sup> Century Conflicts: West Africa, Vietnam, & the Middle East
- Rhet 3361 The Literature of Social Movements in the US: 1950-2000

### **Arts and Humanities—Other**

- Rhet 1302 Science, Religion, and the Search for Human Nature
- Rhet 1315 The Land in American Experience
- Rhet 3381 Twentieth Century Culture
- Rhet 3382W War (The Ethics of War)
- Rhet 3383 In Search of Nature

### **Mathematical Thinking**

There are no program requirements that meet this liberal education requirement.

## **Designated Themes**

### **Citizenship and Public Ethics**

- Rhet 1152W Writing on Issues of Science and Technology
- Rhet 3221W Theories of Human Communication
- Rhet 3266 Group Process, Team Building, and Leadership
- Rhet 3361 The Literature of Social Movements in the US: 1950-2000
- Rhet 3371 Technology, Self, & Society
- Rhet 3376W Terrorism
- Rhet 3382W War
- Rhet 3577W Rhetoric, Technology, and the Internet

### **Environment**

- Rhet 3383 In Search of Nature

### **International Perspectives**

- Rhet 1381W Rhetorical Fictions & 20<sup>th</sup> Century Conflicts: West Africa, Vietnam, & the Middle East
- Rhet 3376W Terrorism
- Rhet 3384 From Soil to Civilization: Agriculture & the Emergence of the Modern World

### **Cultural Diversity**

- Rhet 1311 The Family in American Experience
- Rhet 1315 The Land in American Experience
- Rhet 3108W Gender & the Rhetoric of Science & Technology

## **Questions**

If you have any questions about the liberal education requirements, please see your advisor or the COAFES Student Services office. COAFES and the Liberal Education committee give final approval of the liberal education requirements. The Major Coordinator gives final approval of the program requirements. Use the Liberal Education Worksheet on the following page to assist you in planning your liberal education coursework.



## Liberal Education Worksheet

The worksheet below is designed to help you and your advisor keep track of the liberal education courses you take so you can complete your degree program confidently and efficiently. If you keep them up-to-date, your advisors will be better able to work with you on your educational and career goals as you move through the program. Refer back to the program requirements in this handbook on pages 9–10 for choices. For more information on Liberal Education requirements, see page 31 of the 2002-2004 *Undergraduate Catalog*.

**Note:** Required Rhetoric courses for your major may fulfill many of your liberal education requirements. See pages 9–10 for further details.

Name: \_\_\_\_\_

### Liberal education requirements

**Course name** **Designator** **Credits** **Term taken**

At least 3 credits in first-year writing or composition (Rhet, EngC, EngW), depending on your enrollment.  
(Refer to liberal education Writing requirement.)

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At least 8 credits in lab-based or field-based physical or biological sciences.  
(Refer to liberal education Biological Sciences [Biol/L] and Physical Sciences [Phys/L] requirement.)


At least 3 credits in math, computer science, engineering, or technology.  
(Refer to liberal education Mathematical Thinking requirement)

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At least 15 credits in historical perspectives (3), social science (6), and arts and humanities (6).  
(Refer to liberal education History and Social Science requirements and the Arts and Humanities requirements)


## S&TC Program Requirements

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You need to complete 120 semester credits to graduate, including the University's liberal education requirements and at least 66 credits in the major (See the checklist on the following page). Please note that *all required courses must be taken for A-F grades*, except for the internship, Rhet 4196, which must be taken S/N. A grade of at least C- is required for all degree requirements.

In addition to meeting COAFES residency requirements, as a major in S&TC, you must earn 30 of your last 45 credits after you are assigned a faculty advisor. This requirement ensures that you have some time to work with your faculty advisor in planning and completing your internship and in taking your advanced coursework in the Major and in your area of emphasis.

Courses in your Scientific or Technical Emphasis will be taken outside the department in a scientific or technical field. The purpose of the scientific or technical emphasis area is for students to develop a familiarity with a science or technology, so they can competently communicate with professionals in that scientific or technical field. Thus, the courses are strictly limited to courses in science and technology areas. In addition to the liberal education requirements, you must also elect courses in a scientific or technical area in consultation with your advisor. At least one course must be at the 2000-level or above and one course must be at the 3000-level or above. Your courses may be from multiple departments. Your courses may include, but are not limited to, the following designators:

- Aerospace
- Accounting
- Agricultural engineering technology
- Agronomy and plant genetics
- Animal science
- Astronomy
- Biochemistry
- Biology or microbiology
- Biomedical engineering
- Biosystems and agricultural engineering
- Cell biology and neuroanatomy
- Chemical engineering
- Chemistry
- Civil or industrial engineering
- Computer science
- Dental hygiene
- Economics
- Ecology, evolution, and behavior
- Electrical or mechanical engineering
- Food science and nutrition
- Forest resources
- Genetics and cell biology
- Geological engineering
- Geology and geophysics
- Kinesiology
- Lab medicine and pathology
- Mathematics
- Medical biochemistry or technology
- Mortuary science
- Natural resources and environmental studies
- Naval science
- Neuroscience
- Nursing
- Physical medicine and rehabilitation
- Physics
- Physiology
- Plant biology or pathology
- Psychology
- Science in agriculture
- Soil science
- Veterinary medicine or pathobiology
- Wood and paper science

## SCIENTIFIC & TECHNICAL COMMUNICATION MAJOR REQUIREMENTS CHECKLIST

<b>BOLD/SHADED courses are <i>absolutely</i> required</b>			
<i>Remaining courses should be chosen by students, in consultation with advisors, to fulfill requirements within each area</i>			
<b>ENTRANCE TO THE MAJOR – Two Credits</b>	<b>2</b>	<b>Offered</b>	
Rhet 1001: Introduction to Scientific and Technical Communication	2	F, S	
<b>WRITTEN COMMUNICATION – Ten Credits</b>	<b>10</b>		
Rhet 3562W: Technical Professional Writing (Writing Intensive – Counts as two)	4	F,S,SS	
Rhet 4561: Editing and Style for Technical Communicators	3	F,S,SS*	
Rhet 1152W: Writing on Issues of Science and Technology (Writing Intensive)	4	F, S	
Rhet 5664: Science Writing for Popular Audiences	3	F	
<b>ORAL COMMUNICATION – Six Credits</b>	<b>6</b>		
Rhet 1223: Oral Presentations in Professional Settings	3	ALL	
Rhet 3257: Scientific and Technical Presentations	3	F,S,SS	
<b>PROFESSIONAL PRACTICE – Nine Credits</b>	<b>9</b>		
Rhet 4196: Internship in Scientific and Technical Communication	3+	ALL	
Rhet 3266: Group Process, Team Building, and Leadership	3	F,S,SS	
Rhet 4165: Managerial & Organizational Communication, Planning, & Change	3	F	
Rhet 4573W: Writing Proposals and Grant Management (Writing Intensive)	3	S, SS	
Rhet 5534: Designing Technical Training for Intercultural Audiences	3	F*, S*	
Rhet 5562: Theory and Practice in International Business Communication	3	F*	
<b>RESEARCH – Six Credits (choose two from these three)</b>	<b>6</b>		
Rhet 4501: Usability and Human Factors in Technical Communication	3	F*,S	
Rhet 5258: Information-Gathering Techniques in Scientific & Technical Comm.	3	F, S*	
Rhet 5511: Research in Scientific & Technical Communication	3	S	
<b>THEORY – Eight Credits</b>	<b>8</b>		
Rhet 3221W: Theories of Human Communication (Writing Intensive)	4	F, S	
Rhet 3701W: Rhetorical Theory and S&TC (Writing Intensive)	4	S	
<b>SCIENCE, TECHNOLOGY, AND SOCIETY – Nine Credits</b>	<b>9</b>		
Rhet 3371: Technology, Society, and Self	3	F, S*	
Rhet 3108W: Gender and the Rhetoric of Science and Technology (Writing Int.)	4	S	
Rhet 1302: Science, Religion, and the Search for Human Nature	3	F,S	
Rhet 3577W: Rhetoric, Technology, and the Internet (Writing Intensive)	3	F	
<b>PRINT AND MEDIA DESIGN – Ten Credits</b>	<b>10</b>		
Rhet 3671: Project Design and Development I	3	F	
Rhet 3672: Project Design and Development II	3	S	
Rhet 4662W: Emerging Technologies in Technical Communication (Writing Int.)	4	S	
Rhet 4105W: Corporate Video for Technical Communicators (Writing Intensive)	4	F	
<b>SCIENTIFIC OR TECHNICAL EMPHASIS – Six Credits</b>	<b>6</b>		
2000-level or above course in science or technology	3	ALL	
3000-level or above course in science or technology	3	ALL	
<b>TOTAL REQUIRED CREDITS for the MAJOR – Sixty-Six</b>	<b>66</b>		

LEGEND: F = Fall; S = Spring; SS = Summer; \* = sometimes Courses have traditionally been offered these semesters, however, they are subject to change. Please consult the Class Schedule on One Stop or speak with the Dept. of Rhetoric staff for future class offerings.

## UNIVERSITY-WIDE REQUIREMENTS

Students must complete 120 credits to graduate, including 66 credits in the major (see form for major requirements). A grade of C- is required in all major degree requirements. Students need a GPA of 2.00 in major and in all coursework taken at the university. At least 30 credits must be completed in the Department of Rhetoric.

Requirement Taken	Course	Semester
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### WRITING INTENSIVE REQUIREMENTS

<b>First-Year Writing (1 course)</b> <i>Rhetoric options: 1101</i>		
<b>Writing-Intensive (4 courses)</b> <i>Rhetoric options: 1152, 1381, 3108, 3221, 3376, 3382, 3562(counts as two), 3577, 3701, 4105, 4573, 4662</i>		

(NOTE: If students complete the Minnesota Transfer Curriculum at any participating Minnesota college or university, they fulfill the University's Twin Cities campus liberal education requirements, including the first-year writing requirement.)

### DIVERSIFIED CORE REQUIREMENTS

#### **Physical and Biological Sciences (8 cr)**

Physical science with laboratory or field experience		
Biological science with laboratory or field experience		

#### **Social Science and Humanities (15 cr)**

Social Science (6 cr) <i>Rhetoric options: 3221W, 3384</i>		
Historical Perspective (3 cr) <i>Rhetoric options: 3371</i>		
Humanities—Literature (3 cr) <i>Rhetoric options: 1311, 1381, 3361</i>		
Humanities—Other (3 cr) <i>Rhetoric options: 1302, 1315, 3376W, 3381, 3382W, 3383</i>		

#### **Mathematical Thinking (3 cr)**

There are no program requirements that meet this liberal education requirement.		
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#### **Designated Themes of Liberal Education (12 cr)**

Environment (3 cr) <i>Rhetoric options: 3383</i>		
Cultural Diversity (3 cr) <i>Rhetoric Options: 1311, 1315, 3108W</i>		
International Perspectives (3 cr) <i>Rhetoric options: 1381, 3376, 3384</i>		
Citizenship Public Ethics (3 cr) <i>Rhetoric Options: 1152W, 3221W, 3266, 3361, 3371, 337W6, 3382W, 3577W</i>		

(Note: some diversified core courses also meet one theme requirement. Other courses may satisfy two theme requirements. Students who have completed the required coursework in the diversified core or designated theme areas but are missing one credit in either may apply for a one-credit waiver.

## Sample 4-year Plan

*A sample 4-year plan:*

<b>YEAR 1</b>	<b>YEAR 2</b>	<b>YEAR 3</b>	<b>YEAR 4</b>
<i>Fall</i>	<i>Fall</i>	<i>Fall</i>	<i>Fall</i>
Rhet 1001 (2)	Rhet 3257 (3)	Rhet 3562W (4)	Rhet 4196 (3)
Rhet 1101 (3)	Environ Designator (3)	Rhet 3671 (3)	
Mathematical Thinking (3)	Rhet 3221W (4)	Emphasis course (3)	* one more rhet course if needed or course toward grad (3)
Physical Sci (4)	Rhet 3371 (3)	Prof practice or research or print and media (3-4)	Course toward grad (3 or 4)
Social science (3)	Rhet 3266 (3)		Course toward grad (3)
		**Prof practice or research (3)	Course toward grad (3)
<b>15 credits</b>	<b>16 credits</b>	<b>14-16 credits</b>	<b>15-16 credits</b>
<i>Spring</i>	<i>Spring</i>	<i>Spring</i>	<i>Spring</i>
Rhet 1223 (3)	Rhet 1302 (humanities other and sci, tech, society) (3)	Rhet 3672 (3)	Course toward grad (3 or 4)
International Perspectives (3)	Rhet 3108W (4)	Emphasis course (3)	Course toward grad (3)
Bio Sci (4)	Humanities lit (3)	Rhet 4561 (3)	Course toward grad (3)
Rhet 1152W (4)	Rhet 3701W (4)	Research (3)	Course toward grad (3)
		Prof practice or print and media (3-4)	Course toward grad (3)
<b>14 credits</b>	<b>14 credits</b>	<b>15-16 credits</b>	<b>15-16 credits</b>

		W-I	SS	PSL	BSL	HP	AH-L	AH-O	MT		CPE	ENV	IP	CD
	<b>COURSE TITLE</b>	3+6 upper	6	8	3	6	3				3	3	3	3
1001	Introduction to S&TC													
1101	Writing to Inform . . .	W-I lower												
1152	Writing on Issues of S&T	W-I									CPE			
1223	Oral Presentations													
1302	Science, Religion . . .							AH-O						
1311	Family in American Experience						AH-L							CD
1315	Land in American Experience							AH-O						CD
1381	Fictional History	W-I					AH-L						IP	
3102	Digital Photography													
3108	Gender and the Rhetoric . . .	W-I upper												CD
3221	Theories of Human Comm.	W-I upper	SS								CPE			
3257	S&T Presentations													
3266	Group Process										CPE			
3270	Special Topics													
3361	Literature of Soc. Movements						AH-L				CPE			
3371	Tech., Society, & Self					HP					CPE			
3376	Terrorism										CPE		IP	
3382	War							AH-O			CPE			
3383	In Search of Nature							AH-O				ENV		
3384	From Soil to Civilization		SS										IP	
3401	Internet Communication . . .													
3470	Essentials, Grammar & Style													
3562	Tech. and Prof. Writing	upper x 2												
3577	Rhet., Tech, & Internet	W-I upper									CPE			
3671	Project Design I													
3672	Project Design II													
3701	Rhetorical Theory & S&TC	W-I upper												
4105	Corporate Video	W-I upper												
4165	Managerial & Organizational													
4196	Internship in S&TC													
4501	Usability & Human Factors													
4561	Editing and Style													
4573	Writing Proposals & Grant Mgt.	W-I upper												
4662	Emerging Technologies	W-I upper												
5258	Information Gathering													
5511	Research in S&TC													
5534	Designing for Intercultural												IP	
5562	International Bus. Comm.												IP	
5664	Science Writing . . .													

LIB. ED. and DIVERSIFIED CORE REQUIREMENTS

DESIGNATED THEMES

W-I = Writing Intensive  
 SS = Social Science  
 PSL = Physical Science with Lab  
 BSL = Biological Science with Lab  
 HP = Historical Perspectives  
 AH-L = Arts & Humanities-Literature

AH-O = Arts & Humanities-Other  
 MT = Mathematical Thinking  
 CPE = Citizenship & Public Ethics  
 ENV = Environment  
 IP = International Perspectives  
 CD = Cultural Diversity

LEGEND

Required = BOLD/SHADED  
 BOLD = Optional  
 TALIC = Elective

## **Study Abroad in Scientific & Technical Communication**

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“Intercultural education is provocative by nature and design. Study abroad fosters intercultural education and transformational learning, which shapes students and produces enthusiastic and far-reaching changes in their world views.”

Dr. Victoria Mikelonis  
Director, Undergrad Program  
Scientific & Technical Communication,

Study abroad programs that fit for Scientific and Technical Communication majors are available in regions all over the world including Africa, Oceania, Asia, Europe, and the Americas. By using this resource, your study abroad experience will be integrated into your degree, so it won't delay your graduation. Plan your study abroad program today and see the world!

### **Study abroad can help you...**

- Find unique and challenging coursework in many different fields of scientific and technical communication around the world
- Understand scientific and technical communication issues from an international perspective
- Expand your cross-cultural communication and problem-solving skills
- Prepare to work in an increasingly diverse and international workplace
- Broaden your academic horizons
- Globalize your world view
- Improve your language skills

The opportunity to experience another culture and gain an international perspective on your career is invaluable to your professional development. International experience will add to your career options and avenues for professional advancement.

### **Set goals and plan for results**

The process of selecting a study abroad program is similar to selecting your major or minor.

- Begin planning as soon as possible. It is never too early to start.
  - Set some goals. There are many good study abroad programs, and the best one for you depends on what you want .
  - Prioritize your goals. Consider long-term academic and professional goals, as well as on-campus degree requirements.
  - Prepare academically. You may need to take language or other prerequisite courses for your chosen program.
  - Give yourself time to research and talk to advisers and students who have studied abroad.
- We have screened hundreds of international programs and identified several with a proven track record for on-site service, academic excellence, and good fit with the needs of Scientific

and Technical Communication students. Careful consideration of these program options will allow you to find a program that meets your individual needs.

### **Can I afford to study abroad?**

YES! Early planning for study abroad helps you make cost-effective program decisions, and it also helps you prepare your finances through savings, scholarships, and financial aid. Financial aid applies to study abroad and, in some cases, your eligibility will increase to cover additional expenses.

The University of Minnesota offers more than \$300,000 in scholarships for study abroad. The Learning Abroad Center provides resources on these and a variety of other scholarships available to undergraduate students. Stop by the Learning Abroad Center to research all your options.

The College of Agricultural, Food, and Scientific and Technical Communications also offer significant scholarships through the Academic Enhancement Program. The Academic Enhancement Program supports students incorporating an overseas experience as part of their education while at the University. Go to 190 Coffey Hall or call 612.624.2710 for more information.

### **What are my next steps?**

Attend a First-Step Meeting Learn about study abroad resources and advising by attending a First Step Meeting at the Learning Abroad Center. See [www.UMabroad.umn.edu](http://www.UMabroad.umn.edu) or call 612.626.9000 for the latest schedule.

### **Investigate Programs**

You can find a program that fits your goals by visiting International Agricultural Programs in 190 Coffey Hall (contact John Vreyens at 612-624-3221) and using the Learning Abroad Center's catalog, website, advisers, and resource centers.

### **Talk to your COAFES adviser**

Use an Academic Planning for Study Abroad (APSA) form to get approval for the courses you plan to take abroad. Meet with either Professor Mikelonis or Professor Anderson, the departmental study abroad advisers, who will work with the undergraduate studies committee to pre-approve your study abroad course selections.

Learning Abroad Center  
University of Minnesota  
230 Heller Hall  
271 19th Avenue S  
Minneapolis, MN 55455  
612.626.9000  
888.700.UOFM  
[UMabroad@umn.edu](mailto:UMabroad@umn.edu)  
[www.UMabroad.umn.edu](http://www.UMabroad.umn.edu)



## Resources

### Department of Rhetoric Resources

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#### **Bulletin Board**

Check the bulletin board in the hallway outside the Department's front door for job postings, announcements, and your photo. If your photo is not on the bulletin board, please visit the Programs Coordinator.

#### **RASTEC Room**

Visit RASTEC's hangout in ClaOff 41 (across from the Rhetoric lunchroom, which is inside ClaOff 64) to chat with your classmates, study, and learn more about RASTEC's activities.

#### **UMRHET List**

UMRHET-S is an electronic mailing list for the Department of Rhetoric. Subscribers include undergraduate and graduate students, faculty, staff, alumni, and Society for Technical Communication members. Any information posted to the list is sent to the email accounts of all list members. You'll receive job postings, RASTEC announcements, postings about upcoming scholarship deadlines—just about anything related to rhetoric or scientific and technical communication of interest to everyone in the department. To subscribe to the list, send your email address to the [rhetoric@umn.edu](mailto:rhetoric@umn.edu).

#### **Online Writing Center**

Visit the Online Writing Center to get help with your writing or to find handouts to help you. The Online Writing Center is sponsored by our own Department of Rhetoric.  
<http://www.owc.umn.edu>.

#### **Department of Rhetoric Web Site**

The Department of Rhetoric supports an extensive website. Here, you will find information on the Department of Rhetoric history, links to online rhetoric and scientific and technical communication resources, and much more. <http://www.rhetoric.umn.edu>.

#### **Department of Rhetoric Multimedia Lab**

The Department of Rhetoric maintains an extensive library of books and journals in the field of scientific and technical communication. Stop in the Multimedia Lab in room ClaOff 59 to check out materials on technical writing, professional writing, oral communication, and much more.

## **Industrial Affiliates Program**

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The Industrial Affiliates Program fosters collaborative relationships between Rhetoric's Scientific and Technical Communication Program and technical communication professionals in business and industry. Our affiliates provide internship and employment opportunities for our students. For more information go to <http://www.rhetoric.umn.edu/IAP/>.

## **Medtronic Technical Communication Scholarship**

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Medtronic, a member of Rhetoric's Industrial Affiliates Program, is the world's leading medical technology company, providing lifelong solutions for people with chronic disease. Medtronic's mission is to contribute to human welfare by application of biomedical engineering in the research, design, manufacture, and sale of instruments or appliances that alleviate pain, restore health, and extend life. To better serve our diverse clinician customers and their patients worldwide, Medtronic strives for a diverse workforce. Medtronic also has a commitment to contribute to the advancement of education. Helping students to fully realize their potential supports Medtronic in developing a diverse workforce and, ultimately, in fulfilling the corporate mission.

**Award:** To provide a \$2,000 scholarship award to undergraduate student(s) who are majoring in the field of Scientific and Technical Communications (S&TC). The award may be given to a freshman and may be continued for four years if the student makes satisfactory progress toward a B. S. degree. (Sophomores and juniors may apply as well as seniors with at least two semesters of full-time coursework remaining.)

**Criteria:** The recipient(s) shall be studying toward a major in Scientific and Technical Communications with a minimum 3.0 GPA. The award may be renewable for additional years while the student is pursuing the degree, however, students are required to apply each year for continued funding. Members of underrepresented ethnic or racial minorities are encouraged to apply. Application and an interview are required. Medtronic will select the final recipient from candidates approved by the college.

### **Application Process:**

Application instructions are available at [http://www.rhetoric.umn.edu/medtronic\\_scholarship.html](http://www.rhetoric.umn.edu/medtronic_scholarship.html).

## **Library Facilities**

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University Libraries include the Magrath Library on the St. Paul campus and Wilson and Walter Libraries in Minneapolis, plus several discipline-specific libraries throughout campus. The libraries house a large collection of books and journals, including those relevant to the study of rhetoric, communication, science, and technology.

### **LUMINA**

LUMINA is the online computer system of the University Libraries—Twin Cities. Use LUMINA to search for books and journals through the online catalog, called MNCAT, and to search for articles in online indexes. Use LUMINA via the Internet from the University Libraries website at <http://www.lib.umn.edu>.

### **Research QuickStart**

Use Research QuickStart to begin your research. The tool will help you through the first steps of the research process and provide you with lists of links to essential resources tailored to your area of study. <http://research.lib.umn.edu>.

### **Research QuickStudy**

Research QuickStudy guides you through the complete process of conducting effective library research. <http://tutorial.lib.umn.edu>.

## **Computer Support and Facilities**

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### **Free Email**

All University students, faculty, and staff have an email account. Initiate your account via the Web (if you already have Internet access) at <http://www.umn.edu/validate/> or at a computer facility.

### **Computer Facilities**

Students have access to computing facilities in many locations on the University campus. These facilities, sponsored by Academic and Distributed Computing Services, support both PC and Macintosh platforms equipped with a variety of software applications. Using the software in the computer facilities, you can register for classes, access electronic mail, write papers, browse the Internet, create multimedia productions, and do a variety of other activities. One such computer facility—ClaOff 17—is located across the hall from the Department's front door.

### **Academic and Distributed Computing Services Short Courses**

Courses in the following topics are offered through Academic and Distributed Computing Services. For additional information on short courses or to receive the Short Course Bulletin, browse the website at <http://www.umn.edu/adcs> or call (612) 625-1300.

Short course topics include the following topics:

- Basic Computing Skills and Operating Systems
- Email and Internet Services, including **free** email and Internet orientation
- Office Computing
- Multimedia and Electronic Presentation
- Statistics

### **Computer Hardware and Software Purchases**

Purchase computer hardware and software at discount prices through the Computer Store. The Computer Store is located inside the Williamson Hall bookstore on the East Bank. You can also buy some items at the St. Paul Bookstore. You can browse the price lists online at <http://www.computerstore.umn.edu>. Books may be purchased online, as well, from the U of M Bookstore link at <http://www.bookstore.umn.edu/>.

Purchase an Internet Kit from the ADCS Computer Helpline or Computer Store for approximately a nominal fee. The Internet kit contains software and instructions for connecting your computer to the Internet, as well as many popular Internet programs and utilities.

### **ADCS Technology Helpline**

[www.umn.edu/adcs](http://www.umn.edu/adcs)

Having computer problems? You can get help from the Academic and Distributed Computing Services (ADCS) Computer Helpline: (612) 301-HELP. Have the following information readily available when you contact the Helpline:

- Your University of Minnesota I.D. card
- Platform you are using (i.e. Windows 3.1, Windows 95, MacOS)
- Brand and model of computer
- Brand and speed of modem, if applicable
- Name and version of application that is causing problems (i.e. Word 6.01, Popmail 2.3b7, Netscape 2.02)
- Text of any pertinent error messages

## **Opportunities to Enhance Your Resume and Portfolio**

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There are several organizations specifically for scientific and technical communicators. It is highly recommended that you get involved with them as many students find it adds to the learning experience.

### **Career Services**

#### **St. Paul Campus Career Center**

The St. Paul Campus Career Center serves undergraduate and graduate students in the following colleges:

- \* College of Agricultural, Food and Environment Sciences
- \* College of Human Ecology
- \* College of Natural Resources

The new office is now located in 198 McNeal Hall

The St. Paul Campus Career Center is open daily from 8:00am-4:30pm.

Drop in hours (Resume, C.V. or cover letter critiques, brief interview/job search questions) are available at <http://career.coafes.umn.edu/>.

The St. Paul Campus Career Center Office offers a strong combination of services and resources for students of the college. The office also works closely with companies and organizations looking to recruit students for internships and/or full-time employment. But the link to students does not end with graduation. St. Paul Campus Career Center welcomes College alumni looking to use their services.

## **Student Organizations**

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### **RASTEC**

Founded in 1995, Rhetoric's Association for Student TECHNICAL Communicators (RASTEC) provides an excellent opportunity for new students to meet students who have spent some time in the Scientific and Technical Communication program. Participation in RASTEC events is open to all majors. RASTEC meets at various times throughout the year and plans various events, speakers, and panels of interest to students in the Scientific and Technical Communication program. Events are posted on the bulletin board outside 64 Classroom Office Building and on the electronic mailing list, UMRHET. RASTEC is free: no dues, no fees. For more information, email RASTEC at [rastec@umn.edu](mailto:rastec@umn.edu) or visit the RASTEC room in ClaOff 41 or the RASTEC website at <http://www.rhetoric.umn.edu/rastec.html>.

### **Sigma Tau Chi (STX)**

Sigma Tau Chi (STX) is an honorary society for outstanding students in technical communication programs, sponsored by the Society for Technical Communication. Become a member of Sigma Tau Chi by providing letters of recommendation, a resume, and an official transcript. See [http://www.stc.org/sigma\\_application.html](http://www.stc.org/sigma_application.html) for more details and for the application. The yearly deadline for applying is November 1.

## Professional Organizations

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### **Society for Technical Communication (STC)**

Joining the Society is a great way to get involved in the professional community of scientific and technical communicators. The Society for Technical Communication (STC) sponsors several publications, including the journal *Technical Communication* and the trade magazine *Intercom*; scholarships for undergraduate students pursuing a degree in scientific and technical communication; and an annual conference, the International Technical Communication Conference (ITCC). Membership in Society for Technical Communication gives you automatic membership in the Twin Cities Chapter of Society for Technical Communication. For more information about the local chapter, visit the website at <http://www.stctc.org>. An application is also provided at the end of this guide.

### **Association of Teachers of Technical Writing (ATTW)**

Association of Teachers of Technical Writing (ATTW) was established in 1973 to encourage dialogue among teachers of technical communication and to develop technical communication as a discipline. ATTW publishes *Technical Communication Quarterly* (TCQ).

## Grants and Scholarships

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### **Medtronic Technical Communication Scholarship**

See page 20.

### **Undergraduate Research Opportunities Program (UROP)**

Undergraduate Research Opportunities Program (UROP) is a University grant that allows students to work with faculty on research relevant to rhetoric or scientific and technical communication. Contact Career Services or the Major Coordinator for more information.

### **Society for Technical Communication Scholarships**

The Society for Technical Communication sponsors fourteen scholarships of \$2,000 each for school tuition and expenses. Seven awards are granted to graduate students and seven to undergraduate students. Full-time undergraduate students who have completed at least one year of a post-secondary education studying communication of information about technical subjects, and who have at least one year of study to complete their degree are eligible to apply. Applications must be postmarked by February 15 of the year for which they will be granted. Please see [http://www.stc.org/scholarship\\_info.asp](http://www.stc.org/scholarship_info.asp) for more information and for an application form.

## **Study or Work Abroad**

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### **S&TC Study Abroad Program**

See page 17.

### **The Global Campus**

Your first stop for information about study, travel, and work abroad. The Global Campus offers advising, a resource library, outreach and exchange programs, and various travel services and products such as rail passes, passport photos, travel books/maps, and Youth Hostel memberships. Visit their home page: <http://www.umabroad.umn.edu>.

You can also call (612) 626-9000, email [umabroad@tc.umn.edu](mailto:umabroad@tc.umn.edu) or drop by the office in 230 Heller Hall on the West Bank.

Effective Fall 2004, the Department of Rhetoric intends to offer a study abroad opportunity in the Scientific & Technical Communication major. Watch for a study abroad guide.

### **Campus Publications**

#### **Minnesota Daily**

The *Minnesota Daily* welcomes scientific and technical communication students, especially those interested in writing feature articles on research conducted on the St. Paul campus. Please see <http://www.daily.umn.edu> for more information.

#### **Minnesota Technolog**

*Minnesota Technolog*, a magazine sponsored by the Institute of Technology, is the product of undergraduate and graduate 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 on science fiction. Students in scientific and technical communication have contributed articles and served as editors. To find out more contact: *Minnesota Technolog*; 5 Lind Hall; 207 Church Street SE; Minneapolis MN 55455-0134; (612) 624-9816.

## **Access for Students with Disabilities**

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The Department of Rhetoric is committed to providing access for students with disabilities.

### **Rights and Responsibilities\***

People with disabilities at the University have the following rights:

- Equal access to courses, programs, services, jobs, activities, and facilities offered through the University
- An equal opportunity to work and to learn, and to receive reasonable accommodations, academic adjustments, and/or auxiliary aids and services
- Appropriate confidentiality of all information regarding their disability and to choose to whom, outside of the University, information about their disability will be disclosed, except as disclosures are required or permitted by law

People with disabilities at the University have the following responsibilities:

- Meet qualifications and maintain essential institutional standards for courses, programs, services, jobs, activities, and facilities
- Identify as an individual with a disability when an accommodation is needed to seek information, counsel, and assistance as necessary
- Demonstrate and/or document (from an appropriate professional) how the disability limits their participation in courses, programs, services, jobs, activities, and facilities
- Follow published procedures for obtaining reasonable accommodations, academic adjustments, and/or auxiliary aids and services

The University and the Department have the following rights:

- Identify and establish essential functions, abilities, skills, knowledge, and standards for courses, programs, services, jobs, activities, and facilities and to evaluate faculty, staff, and students on this basis
- Request and receive, through Disability Services, current documentation that supports requests for accommodations, academic adjustments, and/or auxiliary aids and services
- Deny a request for accommodations, academic adjustments and/or auxiliary aids and services if the documentation demonstrates that the request is not warranted, or if the individual fails to provide appropriate documentation
- Select among equally effective accommodations, adjustments, and/or auxiliary aids and services
- Refuse an unreasonable accommodation, adjustment, and/or auxiliary aid and service that imposes a fundamental alteration on a program or activity of the University

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\* Reprinted from *Access for Students with Disabilities: Policies, Procedures, and Resources*.



The University and the Department are responsible for the following tasks:

- Provide information to faculty, staff, students, and guests with disabilities in accessible formats upon request
- Ensure that courses, programs, services, jobs, activities, and facilities, when viewed in their entirety, are available and usable in the most integrated and appropriate settings
- Evaluate faculty, staff, students, and applicants on their abilities and not their disabilities
- Provide or arrange reasonable accommodations, academic adjustments, and/or auxiliary aids and services for faculty, staff, students, and guests with disabilities in courses, programs, services, jobs, activities, and facilities
- To maintain appropriate confidentiality of records and communication, except where permitted or required by law

Certify your disability with Disability Services so that the Department can meet your needs.

Disability Services  
McNamara Alumni Center, Suite 180  
200 Oak Street SE  
Minneapolis, MN 55455  
612-624-4037 (V/TTY)

## **Society for Technical Communication (STC)**

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Become a member of the Society for Technical Communication! Complete the application form (<http://www.stc.org/>), get a faculty signature to show that you are a student, send the application fee to the Society, and reap the rewards! See <http://www.stc.org/join.asp> for more information.

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## Department of Rhetoric Faculty

**Sandra Becker, Extension Educator and Professor, Minnesota Extension Service**  
M.A. in English, Pennsylvania State University

Recent Projects

- *Youth Work Matters* (online course)
- *Diseases and Posts of Honey Bees* (online course)
- *Parents Forever* (a seven-video series in Spanish)
- *The Work of Technical Communication* (a streaming video TEL grant)

**Carol Berkenkotter, Professor**

Ph.D. in English, University of Iowa  
M.S. in English, Western Illinois University

Recent Projects

- Genre Theory
- Rhetoric of Science
- Discourse in the Professions
- Sociocultural Contexts of Writing
- Qualitative Research Methodology

**Janel Anderson Crider, Assistant Professor**

Ph.D. in Organizational Communication, Purdue University  
M.S. in Speech Communication, Emerson College

Recent Projects

- Distance Education
- Computer-mediated communication
- Organizational communication
- Leadership

**Richard J. Graff, Assistant Professor**

Ph.D. in Communication Studies/Rhetoric, Northwestern University  
M.A. in Communication Studies/Rhetoric, Northwestern University

Recent Projects

- "Reading and the 'Written Style' in Aristotle's Rhetoric." *Rhetoric Society Quarterly*, forthcoming.
- "Style and Persuasion through Character in Aristotle's Rhetoric" paper presented at the American Society for History of Rhetoric National Communication Association Annual Convention, 1999
- Book-length study of ancient theories of rhetorical style
- Teaching interests include rhetorical criticism, public speaking, contemporary rhetorical theory, and classical rhetoric

**Alan G. Gross, Professor**

Ph.D., English, Princeton University

M.A., English, Princeton University

Recent Projects

- *Communicating Science* (forthcoming)
- *Chaim Perelman* (forthcoming)
- *Re-reading Aristotle's Rhetoric*, with Art Walzer
- *Theoretical Issues in Rhetoric*
- Scientific Controversy Project in Tel Aviv, Israel
- *The Rhetoric of Science*
- "Reinventing Certainty: The Significance of Ian Hacking's Realism"

**Laura J. Gurak, Department Head, Professor, and Chair of the Industrial Affiliates Program**

Ph.D., Communication and Rhetoric, Rensselaer Polytechnic Institute

M.S., Technical Communication, Rensselaer Polytechnic Institute

Recent Projects

- Director, Internet Studies Center. [www.isc.umn.edu](http://www.isc.umn.edu)
- *Cyberliteracy: Navigating the Information Landscape with Awareness*. New Haven: Yale UP, 2001.
- *A Concise Guide to Technical Communication*. New York: Addison Wesley Longman, 2001. With John M. Lannon.
- *Oral Presentations for Technical Communication*. Allyn & Bacon Series in Technical Communication, Series ed. Sam Dragga. New York: Allyn & Bacon, 2000.
- *Body Talk: Rhetoric, Reproduction, Technology*. Ed. Mary M. Lay, Laura J. Gurak, Cynthia Mynti, and Clare Gravon. Madison: University of Wisconsin Press, 2000.
- *Persuasion and Privacy in Cyberspace: The Online Protests Over Lotus MarketPlace and the Clipper Chip*. New Haven: Yale UP, 1997, issued in paperback 1999.

**Lee-Ann Kastman Breuch, Assistant Professor**

Ph.D. in English, Iowa State University

M.A. in English, Iowa State University

Recent Projects

- "Developing Sound Tutor Training for Online Writing Centers: Creating Productive Peer Reviewers." *Computers and Composition* 17.3, December, 2000. With Sam Racine.
- "Conducting Technical Communication Research via the Internet: Guidelines for Privacy, Permissions, and Ownership in Educational Research." *Technical Communication* 46.4 (1999): 460-469. With Laura J. Gurak.
- "Writing Across the Disciplines in Agriculture." *Language and Learning in the Disciplines* 2.3 (April 1998): 36-43. With Susan Booker.
- "Teaching Composition: Current Theories and Practices." *Handbook of Academic Learning*. Gary Phye, Ed. New York: Academic Press, 1997. With Rebecca E. Burnett.
- Writing-Intensive Sources for Scientific and Technical Disciplines. <http://www.agricola.umn.edu/writingintensive>. Web site design by Jenni Swenson.

**Mary M. Lay, Professor**

Ph.D., English, University of New Mexico

M.A., English, University of New Mexico

Recent Projects

- *The Rhetoric of Midwifery: Gender, Knowledge, and Power*. Rutgers University Press, 2000.
- *Body Talk: Rhetoric, Reproduction, Technology*. Ed. Mary M. Lay, Laura J. Gurak, Cynthia Mynti, and Clare Gravon. Madison: University of Wisconsin Press, 2000.
- *Technical Communication*. 2<sup>nd</sup> ed. Ed. Mary M. Lay, Billie Wahlstrom, Carolyn Rude, Cynthia Selfe, and Jack Selzer. Boston: Irwin/McGraw Hill, 2000.
- "The Value of Gender Scholarship to Professional Communication Research"
- "The Emergence of the Feminine Voice, 1526-1640: The Earliest Published Books by English Renaissance Women"
- "Imagines of Women in Business Magazines 1840-1920."

**John Logie, Assistant Professor**

Ph.D. in English, Pennsylvania State University

M.A. in English, University of Illinois at Chicago

Recent Projects

- "Online Protests: From Text to Web." In *Cyberactivism: Critical Theories and Practices of Online Activism*. Mike Ayers and Martha McCaughey, eds. Routledge, (forthcoming).
- "Homestead Acts: Rhetoric and Property in the American West and on the World Wide Web." *Rhetoric Society Quarterly* 32.3. Summer 2002.
- "Champing at the Bits: Computers, Copyright, and the Composition Classroom." *Computers and Composition*. 1998.

**Bernadette Longo, Assistant Professor**

Ph.D. in Communication and Rhetoric, Rensselaer Polytechnic Institute

M.A. in English, California State University, Stanislaus

Recent Projects

- "Plain Talk from Rudolf Flesch: Making a Science of Writing." *Issues of Power, Status, and Legitimacy in Technical Communication: Evaluating the Social and Historical Process of Professionalization*. Eds. Teresa Kynell and Gerald Savage, forthcoming.
- "Growing Through Community: Opportunities for Ongoing Collaborators." Chapter in collection edited by Chris Benson and Scott Christian. *The Teachers Press*, 2002.
- *Spurious Coin: A History of Science, Management, and Technical Writing*. Albany: SUNY Press, 2000.
- "(Re)Constructing Arguments: Classical Rhetoric and Roman Engineering." *Journal of Technical Writing and Communication*. 29:4 (December 1999): 49-55.

**Earl E. McDowell, Professor**

Ph.D. in Speech Communication, University of Nebraska

M.A. in Speech Communication, West Virginia University

Recent Projects

- International aspects of technical communication
- *Interviewing Practices for Technical Writers*
- *Research in Scientific and Technical Communication*

**Victoria M. Mikelonis, Professor and Major Coordinator**

Ph.D. in Language & Literature, Indiana University of Pennsylvania

M.A. in Language & Literature, Indiana University of Pennsylvania

Recent Projects

- Sustainable agriculture and economic sustainability projects in Eastern Europe
- Development of multimedia modules for distance delivery
- "Procedures for Designing and Writing Training Materials," with Richard Ferguson and Diane Youngquist
- "The Role of Models in Technical Writing"

**Daniel J. Philippon, Assistant Professor**

Ph.D. in English, University of Virginia, Charlottesville

M.A. in English, University of Virginia, Charlottesville

Recent Projects

- *Representing "Nature:" American Nature Writers and the Growth of Environmental Organizations.* Athens: Georgia UP, forthcoming.
- "Gender, Genus, and Genre: Women, Science, and Nature Writing in Early America." *Such News of the Land: American Women Nature Writers.* Eds. Beth DeWolff and Thomas S. Edwards. Hanover, N.H.: New England UP, forthcoming.
- "The Bridge of Words: Encounters with Virginia's Natural Bridge." *Southern Cultures* 6.3 (Fall 2000): 36-46.
- *The Friendship of Nature: A New England Chronicle of Birds and Flowers.* Ed. Mabel Osgood Wright. Baltimore: Johns Hopkins UP, 1999.
- *The Height of Our Mountains: Nature Writing from Virginia's Blue Ridge Mountains and Shenandoah Valley.* Co-edited with Michael P. Branch. Baltimore: Johns Hopkins UP, 1998.
- "'Such Pictures and Poems, Inimitable': Nature and Language in Walt Whitman's Specimen Days." Chapter of *Reading the Earth: New Directions in Literature and Environment.* Boise: Idaho UP, 1998.
- "Poe in the Ragged Mountains: Environmental History and Romantic Aesthetics," *Southern Literary Journal*, 30.2 (Spring 1998): 1-16.

**Thomas M. Scanlan, Associate Professor**

Ph.D., American Studies, University of Minnesota

M.A., English Literature, Cornell University

Recent Projects

- The role and nature of the prairie in American life
- *Family, Drama, and American Dreams*
- "Mark Twain and 'Life on the Mississippi'"
- Development of multimedia modules for classroom use

**Billie J. Wahlstrom, Professor, Vice Provost for Distributed Education and Instructional Technology**

Ph.D., American Literature, University of Michigan  
M.A., English Literature, University of Michigan

Recent Projects

- *Perspectives on Human Communication*
- *The Women of Ravensbruck: Rhetoric, Technology, and Ethics in the Holocaust* (book project).
- *Technical Communication*. 2<sup>nd</sup> ed. Ed. Mary M. Lay, Billie Wahlstrom, Carolyn Rude, Cynthia Selfe, and Jack Selzer. Boston: Irwin/McGraw Hill, 2000.
- "Extreme Pedagogies: Teaching in Partnership, Teaching at a Distance." 2001.
- "Teaching and Learning Communities: Locating Literacy, Agency, and Authority in a Digital Domain." In *Computers and Technical Communication: Pedagogical and Programmatic Perspectives*. Ed. Stuart Selber. NY: Ablex, 1997:129-146.
- "Consulting Texts/Understanding Texts: Lessons from Antiquity and the Middle Ages." *Computers and Composition* 14 (1997): 311-328. With Chris Scruton.

**Arthur E. Walzer, Professor**

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

Recent Projects

- *George Campbell: Rhetoric in the Age of Enlightenment*. New York: SUNY UP, 2002.
- *Re-reading Aristotle's Rhetoric*. With Alan Gross.
- Editor, Series: Rhetoric in Modern Era (SUNY UP).
- "Aristotle's Rhetoric, Dialogism, and Contemporary Research in Composition." *Rhetoric Review* 16 (1997): 45-58.
- "The Challenger Disaster and the Revival of Rhetoric in Organizational Life." *Argumentation* 11 (1997): 75-93. With Alan Gross.
- "Rhetoric and Gender in Jane Austen's Persuasion." *College English* 57 (October 1995): 688-707.
- "Positivists, Postmodernists, Aristotelians, and the Challenger Disaster." *College English* 56 (April 1994): 420-33. With Alan Gross.

## **Department of Rhetoric Course Descriptions**

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For the most current listing of Rhetoric courses, please refer to the University of Minnesota course listing at <http://onestop2.umn.edu/courses/tc/designators.jsp>.

### **RHETORIC (RHET)**

#### ***College of Agricultural, Food and Environmental Sciences Rhetoric***

##### **RHET 1001 - Introduction to Scientific and Technical Communication**

(2.0 cr; A-F or Aud, fall, spring, every year)

Research origins/history. Defining technical communication in professional world. Focuses on audience, purpose, ethics, global communication, and collaboration. Journal articles, student/professional organizations, guest presentations, interviews. Career assessment inventories, in-class/electronic discussions, oral presentations, feasibility report.

##### **RHET 1101 - Writing to Inform, Convince, and Persuade**

(4.0 cr; =[ENG 1011, ENG 1011H, ENG 1012, ENG 1012H, ENG 1013, ENG 1013H, ENG 1014, ENG 1014H, ENG 1015, ENG 1016, GC 1422, GC 1423, GC 1424]; A-F or Aud, fall, spring, every year)

Writing effectively in an academic setting. Emphasizes analyzing/creating logical arguments. Standards of clarity, cohesion, and correctness.

##### **RHET 1152W - Writing on Issues of Science and Technology (C/PE, WI)**

(4.0 cr; Prereq-exemption from 1101 or equiv; A-F or Aud, fall, spring, every year)

Ethical, social, and political challenges created by science/technology. Analyzes persuasion strategies through which experts, political decision-makers, and citizens meet these challenges. Bioscience controversies such as cloning, organ transplantation. Controversies over pollution, ozone depletion.

##### **RHET 1223 - Oral Presentations in Professional Settings**

(3.0 cr; =[COMM 1101, COMM 1101H, GC 1461]; A-F or Aud, fall, spring, every year)

Techniques for analyzing an audience, determining a purpose, developing an argument, and delivering a presentation. Emphasizes using presentations, basic communication theories.

##### **RHET 1302 - Science, Religion, and the Search for Human Nature (OH)**

(3.0 cr; fall, spring, every year)

Relationship of religion and science as ways of explaining human nature and behavior. Focus on 19th century: impact of Darwin's theory and historical study of Biblical texts. Existentialism and political ecology as modern efforts that problematize "human nature."



**RHET 1311 - The Family in American Experience (CD, LIT)**

(3.0 cr; fall, spring, every year)

The American family as portrayed in fiction, poetry, drama, and autobiography. Introduction to literature both as artistic and as ideological construct. Analysis of the social critique of American family life.

**RHET 1315 - The Land in American Experience (CD, OH)**

(3.0 cr; fall, spring, every year)

Land in America as idea and as actual space. History of cultural values and the meanings land holds for us. Contrasting views of land, especially those of certain Native American peoples. Rise of the conservation movement and the urbanization of U.S. space.

**RHET 1381W - Rhetorical Fictions and 20th Century Conflicts: West Africa, Vietnam, and the Middle East (IP, LIT, WI)**

(4.0 cr; fall, spring, every year)

Analysis of selected 20th-century documentary novels. Nature of artistic truth in relation to historical truth. Cross-cultural comparisons of responses to impact of Anglo-American policies.

**RHET 1910W - Topics: Freshman Seminar (WI)**

(3.0 cr; Prereq-Fr; fall, every year)

Topics vary.

**Effective:** Fall 2005

**RHET 3101 - Functional Photography**

(3.0 cr; A-F or Aud, spring, every year)

Basic photographic communication. Emphasizes techniques of producing 35mm color transparencies for use in presentations/publications. Students provide their own camera/film.

**RHET 3102 - Digital Photography**

(2.0 - 3.0 cr [max 3.0 cr]; Prereq-Digital or conventional camera; A-F or Aud, spring, summer, every year)

Introduction to digital photography. Selecting/using a digital camera. Going digital with a film camera. Editing digital images. Printing/publishing digital images.

**RHET 3108W - Gender and the Rhetoric of Science and Technology (CD, WI)**

(4.0 cr; spring, every year)

How cultural gender roles are affected by science/technology. Influence of gender roles on scientific/technological thinking (e.g., communication strategies, language, image). Values/goals of past/present scientific/technological communities.

**RHET 3221W - Theories of Human Communication (C/PE, SSCI, WI)**

(4.0 cr; Prereq-1101 or 1152 or EngC 1011 or equiv; fall, spring, every year)

Through lecture, discussion, simulations, and small group work students become familiar with theories and practices of interpersonal, small group, organizational, and scientific, and technical communication.

**RHET 3257 - Scientific and Technical Presentations**

(3.0 cr; Prereq-1223 or #; fall, spring, summer, every year)

Oral presentation skills for scientific or technical topics. Visual communication, audience analysis, organizing a presentation, presenting complex material. Emphasizes use of computers.

**RHET 3266 - Group Process, Team Building, and Leadership (C/PE)**

(3.0 cr; Prereq-1223 or equiv or #; fall, spring, summer, every year)

Group processes, team building from perspective of managers/leaders. Communication techniques in small group decision making process. Theories of team/small-group communication. Case studies. Group project for each student.

**RHET 3270 - Special Topics**

(1.0 - 3.0 cr [max 3.0 cr]; fall, spring, summer, every year)

See Class Schedule.

**RHET 3291 - Independent Study**

(1.0 - 3.0 cr [max 3.0 cr]; Prereq-#, ?; fall, spring, summer, every year)

Supervised reading and research on topics not covered in regularly scheduled offerings. Intended primarily for upper division undergraduate students.

**RHET 3361 - Literature of Social Movements in the United States: 1950 to 2000 (C/PE, LIT)**

(3.0 cr; A-F or Aud, fall, spring, every year)

Analysis of literature (fictional, nonfictional) of social movements in the United States in last half of 20th century. Artistic truth in relation to historical truth. Roles/obligations of citizens to protest/change social structures.

**RHET 3371 - Technology, Self, and Society (C/PE, HP)**

(3.0 cr; Prereq-[Jr or sr]; fall, spring, every year)

Cultural history of American technology. Social values that technology represents in shifts from handicraft to mass production/consumption to modern transportation, communication, and bioengineering. Ethical issues involved in themes of power, work, identity, and our relation to nature. How technology conditions our way of thinking.

**RHET 3376W - Terrorism (C/PE, IP, WI)**

(3.0 cr; fall, spring, every year)

Terrorism is not only an ethical but an international problem. Different cultures have meant different historical trajectories for terrorism. To illustrate this, the course contrasts Algerian, Irish, and Arab terrorism.

**RHET 3381 - 20th-Century Culture (OH)**

(3.0 cr)

Culture represented in historical/political events and arts of the period. Emphasis on European and American painting with units on architecture, literature, film, and theater, as well as a consideration of philosophy and ethics in other disciplines.

**RHET 3382W - War (C/PE, OH, WI)**

(3.0 cr; fall, spring, every year)

Claim: If ethics (right/wrong) exist in war, then right/wrong exist everywhere. Students experience this claim through its expression in various arts/humanities media of history, memoir, philosophical meditation, and film.

**RHET 3383 - In Search of Nature (ENVT, OH)**

(3.0 cr; fall, spring, every year)

The human need for a relationship with nature and the ways we organize our environment to reflect this need. Various images such as the pastoral and wilderness are traced historically. Tensions between rural and urban views of nature.

**RHET 3384 - From Soil to Civilization: Agriculture and the Emergence of the Modern World (IP, SSCI)**

(3.0 cr; A-F or Aud)

Central importance of emergence of agriculture (i.e., domestication of plants/animals) in development of settled communities, cities, nations, and empires. How it happened, how we know. Differences among agricultural developments on different continents.

**RHET 3401 - Internet Communication: Tools and Issues**

(3.0 cr; Prereq-Internet access including e-mail, [Netscape 3.0 or higher or equiv]; fall, spring, summer, every year)

Current/developing tools/issues of internet-based communication. E-mail, e-commerce, social/cultural context of communication. Discussion topics vary, depending on current issues in existing or emerging technologies. Active online participation required.

**RHET 3441 - Essentials of Grammar, Punctuation, and Style**

(2.0 cr; S-N only, fall, spring, summer, every year)

Progressive online instruction, examples of concepts taught, immediate feedback, continual tracking of progress.

**RHET 3470 - Special Topics in Communication Skills**

(2.0 cr [max 6.0 cr])

Topics vary, see current Class Schedule.

**RHET 3562W - Technical and Professional Writing (WI)**

(4.0 cr; Prereq-[1101 or 1152W or EngC 1011 or equiv], [jr or sr]; A-F or Aud, fall, spring, summer, every year)

Written/oral communication in professional settings. Gathering information, analyzing audience, assessing conventional formats. Drafting, testing, revising documents. Oral presentation of final reports.

**RHET 3577W - Rhetoric, Technology, and the Internet (C/PE, WI)**

(3.0 cr; Prereq-[1101 or equiv], [3401 or equiv]; A-F or Aud, fall, spring, every year)

The Internet from a rhetorical perspective. How the Internet is changing language, power to persuade, scientific/technical knowledge, and legal issues such as copyright, privacy, and free speech. Emphasizes how scientific/technical information is conveyed on the Internet. Ethical issues specific to use of computers.

**RHET 3671 - Project Design and Development I**

(3.0 cr; Prereq-[3562, STC major] or #; A-F or Aud, fall, every year)

Rhetorical principles applied to visual presentation of information/data in print documents. Students create examples of visual communication and design selected technical publications. Principles of technical writing.

**RHET 3672 - Project Design and Development II**

(3.0 cr; Prereq-3671; A-F or Aud, spring, every year)

Students study, plan, research, design, and develop technical communication print documents, including documentation, brochures, and newsletters.

Introduction to workplace project processes. Emphasizes developing production-quality documents.

**RHET 3701W - Rhetorical Theory and Scientific and Technical Communication (WI)**

(4.0 cr; Prereq-[1101 or 1152W or EngC 1011 or equiv]; fall, spring)

Principles/history of rhetorical theory/criticism. Emphasizes classical theories, especially "Aristotle's Rhetoric." Apply Aristotelian concepts to examples of contemporary communication. Relationship of classical theory to scientific discourse, technical communication.

**RHET 4105W - Corporate Video for Technical Communicators (WI)**

(4.0 cr; Prereq-3562 or equiv or #; A-F or Aud, fall, spring, every year)

Introduction to products, professionals, and processes of corporate video. Students analyze corporate video; submit a proposal, treatment, and script; maintain a journal; complete an interactive unit on production; and conduct research on a video-related topic of their choice.

**RHET 4165 - Managerial and Organizational Communication, Planning, and Change**

(3.0 cr; Prereq-3266 or #; A-F or Aud, fall, spring, every year)

A study of organizational theory, communication processes, planning, and change with emphasis on action research in scientific and/or technical settings. Study of organization and management theory to develop organizational consultative skills.

**RHET 4196 - Internship in Scientific and Technical Communication**

(3.0 - 6.0 cr [max 6.0 cr]; Prereq-STC major, #; S-N or Aud, fall, spring, summer, every year)

Internships sites may include the University, industry, or government agencies. An internship proposal, progress report, internship journal (optional), and final report with a letter from the internship supervisor is required.

**RHET 4501 - Usability and Human Factors in Technical Communication**

(3.0 cr; Prereq-Sr or grad student or #; fall, spring, every year)

Principles/concepts of human factors/usability testing. Developing objectives, criteria, and measures. Conducting tests in lab, field, and virtual environments. Using software programs to analyze qualitative/quantitative data. Lab fee of \$36 required for use of the Usability Services Laboratory to conduct usability projects.

**RHET 4561 - Editing and Style for Technical Communicators**

(3.0 cr; Prereq-[3562, [STC major or grad student]] or #; fall, spring, every year)

Editorial process, levels of style, ethical considerations. Cohesion, clarity, coherence, organization, audience. Writer-editor relationship. Editor's marks. Copyright issues.

**RHET 4562 - Theory and Practice in International Business Communication**

(3.0 cr; Prereq-3562W or equiv; A-F or Aud, fall, every year)

Theories/practice in international/intercultural scientific, technical, and business communication. Cultural metaphors, research studies. Interviewing people from other cultures, including international business managers. Case studies.

**RHET 4573W - Writing Proposals and Grant Management (WI)**

(3.0 cr; Prereq-3562W; A-F or Aud, spring, summer, every year)

Research funding sources. Interpreting an RFP or program announcement. Letters of intent. Grant preparation following guidelines of an RFP or program announcement. Proposals for nonprofits or research/business proposals. Using Microsoft Project.

**RHET 4662W - Emerging Technologies in Scientific and Technical Communication (WI)**

(4.0 cr; Prereq-3562 or equiv; A-F or Aud, fall, spring, summer, every year)

Creating multimedia, hypertext, online help, and internet documents. Linear/nonlinear design, linking, reading/editing online. Principles of technical communication taught through projects: scripts, online support, mark-up language.

**RHET 5111 - Information Design: Theory and Practice I**

(3.0 cr; Prereq-Grad student or #; A-F or Aud, fall, spring, every year)

Audience analysis, media selection, message design through various theoretical perspectives, including cognitive/schema, social construction, feminist, intercultural theories. Usability testing, contextual inquiry as means to study effectiveness of messages.

**RHET 5112 - Information Design: Theory and Practice II**

(3.0 cr; Prereq-Grad student or #; A-F or Aud, spring)

Political, economic, social, and technical aspects of media selection and message design. Media analyses, scripts, budgets, treatments, project-design plans, interactive screens. Online design project.

**RHET 5196 - Internship in Scientific and Technical Communication**

(3.0 - 6.0 cr [max 6.0 cr]; Prereq-STC grad or #; S-N or Aud, fall, spring, summer, every year)

Internship sites may include the University, industry, or government agencies. An internship proposal, progress report, internship journal (optional), and final report with a letter from the internship supervisor are required.

**RHET 5258 - Information-Gathering Techniques in Scientific and Technical Communication**

(3.0 cr; A-F or Aud, fall, spring, every year)

Informational, employment-cycle, and problem-solving interviews. Emphasizes guides, schedules, questioning techniques, and communication theories. Descriptive statistics used to analyze data for various projects.

**RHET 5270 - Special Topics**

(1.0 - 3.0 cr [max 3.0 cr]; Prereq-[[STC or RSTC] [major or grad student]], #; A-F or Aud, fall, spring, summer, every year)

Topics specified in Class Schedule.

**RHET 5291 - Independent Study**

(1.0 - 3.0 cr [max 3.0 cr]; Prereq-#, ?; fall, spring, summer, every year)  
Supervised reading/research on advanced projects not covered in regularly scheduled offerings.

**RHET 5511 - Research in Scientific and Technical Communication**

(3.0 cr; A-F or Aud, spring, every year)

Experimental/survey research techniques for quantitative/qualitative methodologies in scientific/technical communication. Face-to-face, phone, focus group interviewing. Questionnaire development, contextual inquiry. Using rating, ranking, q-sort methods. Ethics, experimental bias, inferential statistical analysis.

**RHET 5531 - Scientific and Technical Communication Course Development and Pedagogy I**

(3.0 cr; Prereq-Grad; A-F or Aud, fall, every year)

Pedagogical philosophy/methodology in beginning writing, speaking, and technical communication class. Introduction to theories underlying teaching/tutoring with technology.

**RHET 5532 - Scientific and Technical Communication Course Development and Pedagogy II**

(3.0 cr; Prereq-5531 or #; A-F or Aud)

Pedagogical philosophy/methodology in advanced writing, technical communication, distance education courses. Introduction to theories of teaching in scientific/technical communicating/teaching with multimedia.

**RHET 5533 - Scientific and Technical Communication Course Development: Teaching Seminar**

(1.0 cr; Prereq-5531 or 5532; A-F or Aud)

Mentor with faculty, usually concurrently with student's first teaching assignment. Students shares observations, solves teaching problems in seminar setting. Issues facing new teachers, developing a philosophy of teaching. Focuses on evaluating work in classroom.

**RHET 5534 - Designing Technical Training for Intercultural Audiences**

(3.0 cr; A-F or Aud)

Select and research a training topic, write learning objectives and outcomes, set the conditions for learning, complete a comprehensive course outline, and one training module.

**RHET 5664 - Science Writing for Popular Audiences**

(3.0 cr; Prereq-Rhet 3562 or #; A-F or Aud, fall, every year)

How science is "translated" for popular audiences. Rhetorical theory used to critique popularized articles. Developing a heuristic for writing articles. Controversial issues surrounding movement from science as "science" to science as "popular."

**RHET 5775 - Major Figures in Rhetorical Tradition: Classical Period**

(3.0 cr; A-F only, fall)

Classical theories of rhetoric. Epistemological status of rhetoric. Ethical implications of persuasion. Emphasizes "Aristotle's Rhetoric" as founding document. Other figures (e.g., Plato, Isocrates, Cicero, Quintilian).

**RHET 5776 - Major Figures in Rhetorical Tradition: Modern Era**

(3.0 cr; A-F or Aud, spring)

Aristotelian rhetoric in modern era. Francis Bacon, scientific revolution. George Campbell, rise of human sciences. Kenneth Burke, semiotics in twentieth century. Perelman/Olbrechts-Tyteca, reconciliation with philosophy.

Extended problem-solving situation in business, government, or industry. Student acts as consultant to explore problem, identify possible solutions, introduce solution, apply it.