

LIFE SCIENCES COMMUNICATION, B.S.

The Department of Life Sciences Communication (LSC) is a world leader working at the intersection of science, media, and society. The LSC major teaches students how to understand the way we all make sense of increasingly complex scientific breakthroughs that we often know little about. This theoretical background allows them to learn to more effectively communicate about controversial science topics in areas such as the environment and natural resources, health, agriculture, and new science technologies like gene editing and artificial intelligence.

LSC allows students to pursue an individualized curriculum focusing on strategic communication, writing, marketing, visual communication, or digital media with an emphasis on the sciences. Key to the education that LSC students receive is a combination of theoretical grounding and state-of-the-art practical applications. Students receive instruction across multimedia platforms such as print, audio, video and web. They are taught how to target and create communications for both news and marketing. Most important, they learn how to plan strategically and implement the most effective communications for diverse audiences.

Our faculty study a broad range of science communication issues critical to the future of our state, nation, and global community. Examples include combating invasive species to preserve environmental integrity, how risk perceptions influence public opinion of controversial science topics, and how businesses, universities, and non-profits can better work with consumers and citizens to ensure that we use science to society's benefit. Our instructors are a mix of world-class researchers and real-world practitioners of regional or national profiles.

The interdisciplinary education that LSC graduates receive make them highly sought after by employers across both scientific and communication industries. Many go on to careers in science writing, digital media and marketing, public health, environmental advocacy, and research in industry, non-profits and the government. Others go on to graduate and professional schools in the health, biological, social and physical sciences.

Approximately 30% of our students choose to double major or pursue a certificate in areas such as genetics and genomics, dairy science, physics, environmental science, legal studies, global health and more, to complement what they learn in LSC.

HOW TO GET IN

To declare this major, students must be admitted to UW–Madison and the College of Agricultural and Life Sciences (CALs). For information about becoming a CALs first-year or transfer student, see Entering the College (<http://guide.wisc.edu/undergraduate/agricultural-life-sciences/#enteringthecollegertext>).

Students who attend Student Orientation, Advising, and Registration (SOAR) with the College of Agricultural and Life Sciences have the option to declare this major at SOAR. Students may otherwise declare after they have begun their undergraduate studies. For more information, contact the advisor listed under the Advising and Careers tab.

REQUIREMENTS

UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin–Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (<http://guide.wisc.edu/undergraduate/#requirementsforundergraduestudyttext>) section of the *Guide*.

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| General Education | <ul style="list-style-type: none"> • Breadth—Humanities/Literature/Arts: 6 credits • Breadth—Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits • Breadth—Social Studies: 3 credits • Communication Part A & Part B * • Ethnic Studies * • Quantitative Reasoning Part A & Part B * |
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* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.

COLLEGE OF AGRICULTURAL AND LIFE SCIENCES REQUIREMENTS

In addition to the University General Education Requirements, all undergraduate students in CALs must satisfy a set of college and major requirements. Courses may not double count within university requirements (General Education and Breadth) or within college requirements (First-Year Seminar, International Studies, Science, and Capstone), but courses counted toward university requirements may also be used to satisfy a college and/or a major requirement; similarly, courses counted toward college requirements may also be used to satisfy a university and/or a major requirement.

COLLEGE REQUIREMENTS FOR ALL CALS B.S. DEGREE PROGRAMS

Code	Title	Credits
	Quality of Work: Students must maintain a minimum cumulative grade point average of 2.000 to remain in good standing and be eligible for graduation.	
	Residency: Students must complete 30 degree credits in residence at UW–Madison after earning 86 credits toward their undergraduate degree.	
	First Year Seminar (http://guide.wisc.edu/undergraduate/agricultural-life-sciences/#requirementsstext)	1
	International Studies (http://guide.wisc.edu/undergraduate/agricultural-life-sciences/#requirementsstext)	3

Physical Science Fundamentals	4-5
CHEM 103 General Chemistry I	
or CHEM 108 Chemistry in Our World	
or CHEM 109 Advanced General Chemistry	
Biological Science	5
Additional Science (Biological, Physical, or Natural)	3
Science Breadth (Biological, Physical, Natural, or Social)	3
CALS Capstone Learning Experience: included in the requirements for each CALS major (see "Major Requirements") (http://guide.wisc.edu/undergraduate/agricultural-life-sciences/#requirements)	

MAJOR REQUIREMENTS

Courses may not double count within the major (unless specifically noted otherwise), but courses counted toward the major requirements may also be used to satisfy a university requirement and/or a college requirement. Students must have a minimum of 15 credits within the LSC major that do not double count with CALS or university "general education" requirements.

MATH AND STATISTICS FOUNDATION

LSC strongly recommends that all students complete MATH 112 Algebra or MATH 114 Algebra and Trigonometry to complete the university Quantitative Reasoning A requirement and either STAT 301 Introduction to Statistical Methods, STAT 371 Introductory Applied Statistics for the Life Sciences or SOC/C&E SOC 360 Statistics for Sociologists I which would complete the university Quantitative Reasoning B requirement.

REQUIRED COURSES

Code	Title	Credits
Foundation Course		
LSC 111	Science and Technology Newswriting	3
or LSC 212	Introduction to Scientific Communication	
Core		
LSC 250	Research Methods in the Communication Industry	3
LSC 251	Science, Media and Society	3
Select two of the following:		6
LSC 270	Marketing Communication for the Sciences	
LSC 314	Introduction to Digital Video Production	
LSC 320	Feature Writing	
LSC 332	Print and Electronic Media Design	
LSC 350	Visualizing Science and Technology	
LSC 360	Information Radio	
Concentration within the Major		
Select 6 credits from one of the following concentrations:		6
Communication Strategy		
Communication Skills and Technologies		
Capstone		
LSC 515	Social Marketing Campaigns in Science, Health and the Environment	3

or LSC 640	Case Studies in the Communication of Science and Technology	
Total Credits		24

CONCENTRATIONS WITHIN THE MAJOR COMMUNICATION STRATEGY

This concentration focuses on the skills and theory necessary to effectively communicate with audiences in the life sciences context, while satisfying the long terms strategic goals of an organization. The concentration includes courses in marketing, strategic and risk communication, and data analysis.

Code	Title	Credits
Select two of the following:		
LSC 432	Social Media for the Life Sciences	
LSC 435	Theory and Practice of Integrated Marketing Communication	
LSC 440	Contemporary Communication Technologies and Their Social Effects	
LSC/AMER IND 444	Native American Environmental Issues and the Media	
LSC/COM ARTS/JOURN 617	Health Communication in the Information Age	
LSC 625	Risk Communication	
LSC 660	Data Analysis in Communications Research	

COMMUNICATION SKILLS AND TECHNOLOGIES

This concentration focuses on the skills required to translate organized information into informative and persuasive messages for a variety of media, such as writing, documentary photography, social media, web design and video production.

Code	Title	Credits
Select two of the following:		
LSC 430	Communicating Science with Narrative	
LSC 432	Social Media for the Life Sciences	
LSC 450	Documentary Photography for the Sciences	
LSC 532	Web Design for the Sciences	
LSC 614	Advanced Video Production	

HONORS IN THE MAJOR

Admission to the Honors Program is not competitive provided students meet the required admission criteria.

Admission Criteria for New Freshmen:

- In the upper 10% of their high school graduating class
- ACT score of 28 or higher
- SAT score of at least 1240

Admission Criteria for Transfer and Continuing UW-Madison Students:

- UW-Madison cumulative GPA of at least 3.25

Highly motivated students can apply for admission to the program in the absence of these requirements by including a letter with their application addressed to the Honors Dean in 116 Agricultural Hall explaining why they should be in the program.

HOW TO APPLY

Apply to the program online (https://cals.wisc.edu/wp-content/uploads/2017/05/honorsapplication_form.pdf) or request an application in the Office of Academic Affairs, 116 Agricultural Hall. Applications are accepted at any time.

New freshmen with accepted applications will automatically be enrolled in Honors in Research. It is possible to switch to Honors in the Major in the student's first semester on campus after meeting with the advisor for that major by completing the application form and selecting Honors in the Major. Transfer and continuing students may apply directly to Honors in Research or Honors in the Major (after meeting with the major advisor).

HOW TO CANCEL PARTICIPATION

Students who are no longer interested in pursuing Honors should contact the CALS Honors Program Manager (see the contact box for CALS Honors Program (<http://guide.wisc.edu/undergraduate/agricultural-life-sciences/college-wide/college-agricultural-life-sciences-honors/>)). Students may cancel their participation at any time, and this will not be noted on the student's transcript.

HONORS IN THE MAJOR IN LIFE SCIENCES COMMUNICATION: REQUIREMENTS

Students may apply for admission to Honors in the Major in Life Sciences Communication (LSC) at any time but are strongly advised to apply before their junior year. Interested students are encouraged to meet with the LSC advisor with any questions about Honors in the Major in LSC.

- 24-28 credits of coursework, as outlined in the chart below.
- For the 15 credits of LSC coursework taken for honors credit:
 - Students must earn at least a 3.5 cumulative GPA in this coursework.
 - It is the student's responsibility to enroll in honors sections or to select honors optional in order for courses to count toward Honors in the Major.
 - Thesis and Independent Study credits do not count toward the required 15 credits of LSC honors coursework.
- Complete a senior honors thesis and present the thesis at the CALS Undergraduate Research Symposium or another public venue.

Code	Title	Credits
Required Coursework		
STAT 301 or STAT 371 or C&E SOC/ SOC 360	Introduction to Statistical Methods Introductory Applied Statistics for the Life Sciences Statistics for Sociologists I	3
LSC 289 or LSC 299 or LSC 699	Honors Independent Study Independent Study Special Problems	2
LSC 681 & LSC 682	Senior Honors Thesis and Senior Honors Thesis	4-8

15 credits of LSC coursework taken for Honors credit	15
Total Credits	24-28

UNIVERSITY DEGREE REQUIREMENTS

Total Degree To receive a bachelor's degree from UW–Madison, students must earn a minimum of 120 degree credits. The requirements for some programs may exceed 120 degree credits. Students should consult with their college or department advisor for information on specific credit requirements.

Residency Degree candidates are required to earn a minimum of 30 credits in residence at UW–Madison. "In residence" means on the UW–Madison campus with an undergraduate degree classification. "In residence" credit also includes UW–Madison courses offered in distance or online formats and credits earned in UW–Madison Study Abroad/Study Away programs.

Quality of Work Undergraduate students must maintain the minimum grade point average specified by the school, college, or academic program to remain in good academic standing. Students whose academic performance drops below these minimum thresholds will be placed on academic probation.

LEARNING OUTCOMES

1. Specialized knowledge in theoretical and applied communication of science and technology, along with an education broad enough to meet the challenges of changing careers and opportunities.
2. The ability to think critically and creatively: to synthesize, analyze, and integrate ideas for decision making and problem solving.
3. The ability to communicate effectively across media and a broad range of audiences.
4. A global perspective; an appreciation for the interdependencies among individuals and their workplaces, communities, environments, and world; and an understanding of the interrelationships between science and society.
5. The ability to work with others in small or large groups, to recognize civic and social responsibilities, and to appreciate the uses of public policy in a democracy.
6. A respect for truth, a tolerance for diverse views, and a strong sense of personal and professional ethics.

FOUR-YEAR PLAN

FOUR-YEAR PLAN

SAMPLE LIFE SCIENCES COMMUNICATION FOUR-YEAR PLAN

First Year			
Fall	Credits	Spring	Credits
LSC 100 ¹		3 LSC 111 or 212	3
MATH 112 or 114 ²		3 LSC 250	3
First Year Seminar		1 Chemistry	4-5
Humanities Elective		3 Ethnic Studies	3

Electives ³	4-5 Elective	3
	14-15	16-17
Second Year		
Fall	Credits	Spring
LSC 251	3 LSC Core Elective	3
STAT 301, 371, or CE SOC 360 ⁴	3 International Studies	3
Biological Science Elective	3 Science Breadth Elective	3
Humanities Elective	3 Electives	7
Elective	3	
	15	16
Third Year		
Fall	Credits	Spring
LSC Core Elective	3 LSC Concentration	3
Social Science Elective	3 Biological Science Elective	3
Electives	9 Electives	9
	15	15
Fourth Year		
Fall	Credits	Spring
LSC Concentration	3 LSC 515 or 640	3
Additional Science Elective	3 Electives	12
Electives	9	
	15	15
Total Credits 121-123		

¹ LSC 100 Science and Storytelling is not required for the major but is strongly encouraged for students who need to take a Comm A course.

² LSC recommends MATH 112 Algebra or MATH 114 Algebra and Trigonometry for students who need to complete the university Quantitative Reasoning A requirement.

³ Many LSC students choose to use elective spaces throughout their career to complete an additional major or certificate. Other students choose to take more LSC courses than the minimum required. Students should consult the advisor for more information and to create a personalized four-year plan based on their background, interests, and career goals.

⁴ LSC strongly recommends STAT 301 Introduction to Statistical Methods, STAT 371 Introductory Applied Statistics for the Life Sciences or C&E SOC/SOC 360 Statistics for Sociologists I to fulfill the university Quantitative Reasoning B requirement.

THREE-YEAR PLAN

This Sample Three-Year Plan is a tool to assist students and their advisor(s). Students should use it —along with their DARS report, the Degree Planner, and Course Search & Enroll tools— to make their own three-year plan based on their placement scores, credit for transferred courses and approved examinations, and individual interests.

Three-year plans may vary considerably from student to student, depending on their individual preparation and circumstances. Students interested in graduating in three years should meet with an advisor as

early as possible to discuss feasibility, appropriate course sequencing, post-graduation plans (careers, graduate school, etc.), and opportunities they might forgo in pursuit of a three-year graduation plan.

These three-year road maps below are designed to provide an example of how a student could complete their B.S. in Life Sciences Communication within three years. One plan assumes you are entering college with 29 credits from Advanced Placement, International Baccalaureate, or college transfer courses, including fulfilling UW-Madison's Quantitative Reasoning A requirement through credit or placement scores. The other plan assumes you are entering without bringing in outside credits. Your specific program of study could, and probably will, look different. You should customize the road map to fit your unique path at UW-Madison. Consult with your advisor about the best path for you.

SAMPLE THREE-YEAR PLAN #1¹

First Year					
Fall	Credits	Spring	Credits	Summer	Credits
LSC 100 (Comm A) ²	3	LSC 111 or 212 (Comm B)	3	Social Sciences Elective	3
First Year Seminar	1	LSC 250	3		
Humanities Elective	3	Chemistry	4-5		
Electives ³	6	Ethnic Studies	3		
	13		13-14		3
Second Year					
Fall	Credits	Spring	Credits		
LSC 251	3	LSC Core	3		
LSC Core	3	Biological Science Elective	3		
STAT 301, 371, or CE SOC 360 ⁴	3-4	Humanities Elective	3		
Additional Science Elective	3	Electives	6		
Electives	3				
	15-16		15		
Third Year					
Fall	Credits	Spring	Credits		
LSC Concentration	3	LSC Capstone	3		
International Studies	3	LSC Concentration	3		
Science Breadth Elective	3	Biological Science Elective	3		
Electives	6	Electives	6		
	15		15		
Total Credits 89-91					

¹ Plan #1 assumes that students are coming to UW-Madison with approximately 29 credits from AP/IB or college transfer credits and that the University Quantitative Reasoning A requirement is fulfilled through transfer credit or placement scores. Your plan may look different depending on the number of credits you bring in.

² LSC 100 Science and Storytelling is not required for the major but is strongly encouraged for students who need to take a Communication A course.

³ Many LSC students use their elective coursework to take additional LSC courses, to add one or more certificates, to add a double major, or to take other coursework to work to achieve their academic and career goals.

⁴ LSC recommends STAT 301 Introduction to Statistical Methods, STAT 371 Introductory Applied Statistics for the Life Sciences or C&E SOC/SOC 360 Statistics for Sociologists I to fulfill the university Quantitative Reasoning B requirement.

SAMPLE THREE-YEAR PLAN #2 ¹

First Year

Fall	Credits Spring	Credits Summer	Credits
LSC 100 ²	3 LSC 111 or 212 (Comm B)	3 LSC 251	3
MATH 112 or 114 ³	3 LSC 250	3 Electives	6
First Year Seminar	1 Chemistry	4-5	
Humanities Elective	3 Ethnic Studies	3	
Electives ⁴	4 Electives	3	
	14	16-17	9

Second Year

Fall	Credits Spring	Credits Summer	Credits
LSC Core	3 Biological Science Elective	3 LSC Core	3
STAT 301, 371, or CE SOC 360 ⁵	3-4 Social Sciences Elective	3 Science Breadth Elective	3
Additional Science Elective	3 Humanities Elective	3 Electives	3
Electives	7 Electives	7	
	16-17	16	9

Third Year

Fall	Credits Spring	Credits Summer	Credits
LSC Concentration	3 LSC Capstone	3 LSC Concentration	3
International Studies	3 Biological Science Elective	3 Electives	6
Electives	9-11 Electives	10	
	15-17	16	9

Total Credits 120-124

¹ Plan #2 assumes that you are coming to UW-Madison without credits from AP/IB or another college/university.

² LSC 100 Science and Storytelling is not required for the major but is strongly encouraged for students who need to take a Comm A course.

³ LSC recommends MATH 112 Algebra or MATH 114 Algebra and Trigonometry for students who need to complete the university Quantitative Reasoning A requirement.

⁴ Many LSC students use their elective coursework to take additional LSC courses, to add one or more certificates, to add a double major, or to take other coursework to work to achieve their academic and career goals.

⁵ LSC strongly recommends STAT 301 Introduction to Statistical Methods, STAT 371 Introductory Applied Statistics for the Life

Sciences or C&E SOC/SOC 360 Statistics for Sociologists I to fulfill the university Quantitative Reasoning B requirement.

ADVISING AND CAREERS

ADVISING

Current and prospective students should contact the advisor, Tera Holtz Wagner (tholtz@wisc.edu), with questions. Declared majors are required to meet with the advisor at least once per semester prior to registration.

CAREERS

The interdisciplinary education that LSC graduates receive make them highly sought after by employers across both scientific and communication industries. Many go on to careers in science writing, digital media and marketing, public health, environmental advocacy, and research in industry, non-profits and the government. Others go on to graduate and professional schools in the health, biological, social and physical sciences.

We encourage you to check out our website (<http://lsc.wisc.edu>) to view recent alumni features.

PEOPLE

PROFESSORS

Brossard (chair), Meiller, Scheufele (director of academic programs), Xenos

ASSOCIATE PROFESSORS

Shaw, Shepard

ASSISTANT PROFESSORS

Chen, Chinn, Li, Newman

FACULTY ASSOCIATES

Botham, Fisher, Stanley

LECTURERS

Nelson, Still

WISCONSIN EXPERIENCE

STUDYING ABROAD

LSC majors can find study abroad and internship abroad opportunities on the International Academic Programs (<https://www.studyabroad.wisc.edu/>) and International Internship Program (<http://internships.international.wisc.edu/>) websites. Travel opportunities range from one to two weeks to an entire academic year, and many students pursue volunteer, research or internship opportunities while abroad.

INTERNSHIPS

LSC notifies majors of abundant opportunities to apply for summer and academic year internships related to science communication. Students intern with marketing agencies, environmental and sustainability organizations, and healthcare and agricultural agencies. The Wisconsin

Technology Council and Farm Journal, Inc. actively offer internship opportunities to LSC seniors.

LSC CAPSTONES ARE SERVICE-LEARNING COURSES

All LSC seniors can select their final capstone course from either LSC 515 or LSC 640. LSC 515 Social Marketing Campaigns in Science, Health and the Environment partners with a real-life client to create a strategic marketing campaign for issues of social significance, such as environmental conservation. Students in LSC 640 Case Studies in the Communication of Science and Technology participate in internships throughout the semester that put their communication skillset into practice for science and technology organizations.