19 February 2018

TO: Sarah Mangelsdorf, Provost
    Bill Karpus, Dean of the Graduate School

FROM: Sarah Pfatteicher, Associate Dean for Academic Affairs, CALS

CC: Dominique Brossard, Chair, Department of Life Sciences Communication
    Jocelyn Milner, Director, Academic Planning and Institutional Research
    Sarah Kuba, Associate Academic Planner, APIR
    Kate VandenBosch, Dean, CALS
    Nikki Bollig, Assistant Dean for Academic Policies and Planning

RE: Program Review of Life Sciences Communication BS, MS, & Doctoral Minor

We are pleased to report that the College of Agricultural and Life Sciences has completed the first stages of the program review for the Life Sciences Communication bachelor’s and master’s of science degrees and doctoral minor (program code ALS 054). The self-study prepared by the program and the report of the review committee are attached to this memorandum, along with the departmental response to the review, which corrects several errors of fact in the review committee report. Readers may find it helpful to review the departmental response alongside the review committee report to obtain the most accurate reflection of the program. The assessment of our Academic Planning Council, by unanimous vote, is that the LSC programs are strong and should continue.

The CALS APC met on December 5th to hear from Prof. Beth Olson, who chaired the review committee, and again on January 16th to hear from Prof. Dominique Brossard, the chair of the Life Sciences Communication Department. The review was unanimously accepted by APC on January 16th as complete, with comments and recommendations to ensure the future strength and resilience of the program, as outlined below.

As noted by the review committee and echoed by the APC, the academic programs in LSC are strong and the department exhibited skill at recognizing their own strengths and weaknesses. The programs benefit from the collegiality of the faculty, impressive facilities, and strong alumni support, and are characterized by strong placement rates for graduates, a flexible undergraduate curriculum that facilitates use of LSC as a second major, and a commitment to fully fund master’s students.
The program review notes three particular areas to watch and improve in the LSC programs. First, the challenge of covering all the courses in the undergraduate curriculum with current faculty resources was noted. A faculty search is currently underway and is expected to provide some relief in this area. Second, the acceptance rate for minority applicants to the master’s degree is lower than the department would prefer. The department is exploring approaches to this challenge, and is encouraged to connect with resources in the college and on campus to continue to address this challenge. Third, undergraduate advising has had several staff turnovers in recent years. Students report the quality of the advising has remained strong despite the changes and that they welcome stability and consistency in this position. Given their current staffing for advising, this has likely already improved significantly.

In addition to these program-specific comments, the review noted the need for improvement in the Graduate Handbook, a suggestion that has been made to virtually all graduate programs undergoing review in recent years, and the department has indicated its plans to undertake this project.

We applaud the department’s interest in continuous improvement and their engagement in efforts to develop and enhance revenue streams, within the constraints that exist in human and financial resources.

We look forward to working with campus leadership, GFEC, and the UAPC on the next stage of this review.
Life Sciences Communication Department Review Summary and Recommendations

**Review Committee:** Laura Jull, Beth Olson (chair), Christa Olson (GFEC representative), Randy Stoecker.

**Background:** The Life Sciences Communication (LSC) program is located at Hiram Smith Hall on Observatory Dr. on the UW-Madison campus. There are currently 18 faculty in the department representing professional instructional staff and tenure-track faculty. The general stature and status of the department is very high. Cornell University has a comparable status to LSC.

LSC prepares students for careers as professional communicators in scientific and technical fields or for graduate school. Scientific areas of expertise include the environment and natural resources, health and nutrition, agriculture, new technologies such as biotechnology, and social sciences.

Graduates of the program are highly sought after by employers across scientific and communication industries. Key to the education that LSC students receive is a combination of theoretical grounding and state-of-the-art practical applications in rapidly changing media environments. Their instructors are a mix of world-class researchers and real-world practitioners of regional, national and international profiles.

The mission of LSC programs fits well within their home department. In 1908, LSC became the first department of what was then termed Agricultural Journalism in the world, and has retained its leadership position in science communication ever since. All case studies and examples used in teaching fall within CALS key strategic areas (health, food, bioenergy, climate change, community development). LSC undergraduate and graduate courses are central to the land grant mission of CALS and the University mission. They preparing professionals ready to join a cutting-edge workforce at the intersection of science, media and society.

**Review Process:** The committee was charged by CALS Senior Associate Dean Richard Straub to review the Academic Programs of Life Sciences Communications (LSC) as follows:

- Life Sciences Communication, BS (10-year review)
- Life Sciences Communication, MS (10-year review)
- Life Sciences Communication, Doctoral Minor (10-year review)

The committee received and reviewed the LSC self-study, as well as documents from the Graduate School which included data on admission, enrollment and other metrics for the LSC MS degree, demographics and a campus peer comparison for the MS, and data on use of the doctoral minors over the past 10 years. The committee also requested and received from LSC...
their new handbook for the MS degree and recent metrics on their undergraduate program assessment. The committee requested the 2007 self-study and review from CALS to better understand the response to that review included in the 2017 self-study.

The committee met on September 6 to review the materials, September 27th to finalize guiding questions for in-person discussions with LSC faculty, instructors, staff and graduate and undergraduate students, and October 11th to discuss and complete their report.

Schedule for In-Person Meeting with LSC

October 4, 2017
9:00 a.m.-4:00 p.m.
Room 225 Hiram Smith Hall

Review Committee: Beth Olson (chair), Randy Stoecker, Christa Olson, Laura Jull

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<th>Time</th>
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<tr>
<td>9:00-10:00 a.m.</td>
<td>LSC Faculty</td>
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<td>Dominique Brossard, Dietram Scheufele, Bret Shaw, Larry Meiller, Shiela Reaves, Neil Stenhouse</td>
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<td>10:00-11:00 a.m.</td>
<td>LSC Instructors</td>
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<td>Mike Flaherty, Gunther Nelson, Ron Seely, Don Stanley</td>
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<td>11:00-11:45 a.m.</td>
<td>LSC Student Services Coordinator, Tera Holtz</td>
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<td>11:45-12:00 p.m.</td>
<td>Break</td>
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<td>12:00-1:00 p.m.</td>
<td>LSC Undergrads</td>
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<td>1:00-1:45 p.m.</td>
<td>LSC MS Students</td>
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The review committee met with nine graduate students. Eight are currently enrolled in the MS and one had completed the MS and was enrolled in the joint doctorate in LSC / Mass Communication. Of the nine, six were following the thesis track, two the professional track, and one was undecided.

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<tr>
<td>1:45-2:30 p.m.</td>
<td>Meeting with LSC Director of Graduate Studies</td>
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<td>Dietram Scheufele (past), Bret Shaw (current)</td>
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<td>2:30-2:45 p.m.</td>
<td>Break</td>
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<td>2:45-3:30 p.m.</td>
<td>Meeting with LSC Director of Undergraduate Studies, Shiela Reaves</td>
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<tr>
<td>3:30-4:00 p.m.</td>
<td>Meeting &amp; Facility Tour with Chair, Dominique Brossard</td>
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Overall Summary and Recommendations

Areas of Strength

The department has a strong national and international reputation. The department talks about their visibility in relation to competing programs in places such as Cornell, as well as the professional prominence of their practice instructors in their respective fields.
The department is successful in placing its graduates at both the Bachelor's and Master's levels into professional employment and graduate school. The department also carefully tracks and maintains contact with their alumni. The successful placement of their graduates, and tracking them, also means they can bring them back to campus to talk to current students and provide network links to help their improvement prospects.

They have a mix of strong research and theory faculty and strong practice instructors. The department has developed a strategy of building a strong faculty in theory and research, and a strong cadre of practice instructors who continue their work in the field. This allows them to provide a balance of student education in theory and practice.

There is a strong sense of community. The small size of the department makes it easier for everyone to know each other. Undergrad and grad students felt like they recognized and knew each other, and knew the faculty and academic staff. Among the instructional staff, there is also a strong sense of collegiality, even between faculty and academic staff. Perhaps because both faculty and academic staff are prominent in their respective fields, there are strong relationships between them, and engagement of the academic staff in department decision-making.

The department's internal teaching facilities are strong, including professional studio rooms and classrooms that facilitate active learning. They also seem to have the visual and audio hardware that they require. The department uses a variety of specialized visual, audio, and other software that they seem satisfied with. They have achieved these resources through their own fundraising.

The department is able to fund all of its Master's students. Sometimes this involves a combination of funding with RA and PA positions. The RA funding also helps the department organize a grad student research group.

The undergraduate program has a lot of flexibility, allowing students to choose courses from other departments. The students very much appreciate this flexibility as it allows them to customize the major to meet their individual interests. But it does come with a flip side we will discuss below.

Areas of Concern

The department expresses that they have some difficulty covering all the courses in the undergraduate major with their current faculty resources. Students have mentioned that there are courses they would like to take but are not offered when they need them. The department is currently hiring and that may provide some relief.

The acceptance rate of minority applicants for the Master's degree is lower than the department would wish. The statistics on this issue are influenced by the small numbers involved, and the department's recruitment strategies that emphasize attracting minority applications. They are also working hard to explore ways they might support minority students whose educational records make difficult to admit.

Undergraduate advising was a challenge because of turnover among department staff. Some students report having had three different advisors over the course of their time in the major. But the students have only positive comments about the current undergraduate advisor.
While there is, from our perspective, a strong sense of community across the students and faculty in the department, the graduate students express a desire for a stronger sense of community. The department is already addressing this desire by organizing more social events and a research group.

The flexibility of the undergraduate curriculum, while highly valued by students for its support of individual interests (see areas of strength above), can also make it difficult for some undergraduates to develop a sense of community through their classes.

Recommendations

Our recommendations mainly support the department's self-recommendations.

The department sees strong growth potential for their PhD minor. They also see realizing at least some of this potential without requiring a lot of extra faculty resources.

Likewise, the department sees strong growth potential for their online offerings. This too may be possible without requiring a lot of extra resources.

The department is noticing an increase in the number of students who are double majoring with them, and is thinking about ways to support increasing the number of students who may choose LSC for their second major.

As social media communication expands in importance, the department is thinking about ways to further develop their curriculum to better serve students interested in the field.

The department is currently revising its graduate student handbook to include grievance and disciplinary policies.

The department is continuing to strategize ways to increase the diversity of their admitted Master's students. We applaud and encourage the department to continue exploring strategies, engaging with the available campus resources, collaborating in joint recruitment with other departments, and looking at how to further develop the climate to support diverse students.

The retirement of one faculty member and a new hire will provide the department with the opportunity to review its current course offerings. In the interim, they need to maximize lines of communication with the undergraduate advisor and with undergraduates to know what courses will most likely, and least likely, be offered in the next couple of years.

In times of austerity, everyone is short staffed. That is also true of LSC. The department explored, and then shelved, a strategy to have faculty do advising because the number of majors would completely overwhelm the faculty's availability. More faculty would also allow the department to offer more courses in-house, helping to build a greater sense of community among the undergraduates.

Graduate Education

Curriculum: Course offerings and faculty availability; strengths and gaps

At the graduate level, Life Sciences Communication (LSC) offers a Master of Science degree and a doctoral minor. This review did not include LSC's joint Ph.D. program in Mass Communication. The
Master's program is active, successful, and the LSC faculty are strongly committed to it. The doctoral minor had fallen into disuse but the program is invested in revitalizing it and has already begun doing so. They have a clear target audience for the doctoral minor and are seeing increasing enrollments.

The MS degree offers two tracks, one with a thesis (24 credits + thesis) and one without (30 credits). Students in the two tracks are treated equally in terms of funding, mentoring, and access to faculty. The faculty expressed strong support for both tracks and students indicated that both were valued and had sufficient courses and support. The size of the MS program has declined since 2008 due to intentional planning on LSC's part. The goals of that reduction were to provide full funding for all incoming students, improve the quality of the program overall, and allow better mentoring. Faculty feel that the program is now the right size and that the move to full funding, especially, has been beneficial for program climate. Knowing that demand for graduate opportunities in science communication continues to be high, the former Director of Graduate Studies identified creating an online Master's in science communication aimed at working professionals as a possible future direction for the LSC graduate program. At this time, however, the department does not have the FTE to pursue that idea.

The small size of the LSC faculty effects course availability within Life Sciences Communication, but the department has organized the Master's requirements to allow students to complete the degree using a combination of coursework inside and outside of LSC. The graduate students we met explained that they generally took one course each semester with an LSC faculty member and another 1-2 outside the department. Students in the professional track are able to take more courses with LSC faculty because they take more classes and are able to enroll in mixed undergraduate / graduate courses.

LSC faculty offer a reasonable range of graduate courses and a sufficient number of courses to allow for timely completion of Master's degree. The faculty are invested in mentoring Master's students and the students report that they receive excellent support. Program graduates are successful in finding relevant employment and gaining admission to doctoral programs. Any weaknesses in the program are related to the number of faculty available, but those weaknesses are consistently off-set by flexibility in coursework and proactive mentoring. At the time of the review, the new graduate handbook for the Master's degree did not include grievance and disciplinary policies, but the department was in the process of adding them.

The Doctoral Minor requires ten credits, including participation in the credit-bearing LSC Colloquium and either LSC 720 (Introduction to Communication Theory and Research), LSC 902 (Public Opinion of Life Science Issues), or LSC 860 (Science and Environment Communication). Students in the Doctoral Minor then choose an additional six credits from an array of fifteen approved electives. LSC has recently worked to raise the profile of the Minor among students in the bench sciences, promoting it as a useful, communication-focused counterpart to their scientific training. The LSC Student Services Coordinator estimates that there are currently 18 students working toward the Minor along with approximately 100 graduate students from other departments who have taken an LSC or LSC cross-listed course since fall 2016. The department is actively recruiting students to the Minor and has added a graduate attribute to some of the advanced professional skills courses offered by the department (e.g. LSC 532 Web Design for the Sciences, LSC 560 Scientific Writing, and LSC 432 Social Media for the Life Sciences) to ensure that graduate students can access that professional training.

_Graduate Students: Recruitment, funding, advising, expectations, learning goals and career opportunities_
Overview: LSC Master’s students were uniformly positive in their view of the program. They identified its collaborative spirit and top-notch faculty as particular strengths. Though they raised possible areas for improvement, those suggestions were offered as ways to make a strong program even stronger. The most consistently raised "weakness" was the program's flexibility, but students simultaneously described flexibility as a program strength. Because of the program's interdisciplinary nature and small faculty, Master’s students take many graduate courses outside of LSC. This dispersion allows graduate students to tailor their degrees to their specific interests. However, some find the range of options overwhelming even with the excellent mentorship they receive from LSC faculty. Students also noted that being spread across campus makes it difficult to form community. For most, teaching positions in the department were the main source of connections with colleagues. Others cited the Research Group as a productive community space, though not all Master’s students participate in the group.

Funding: LSC guarantees full funding (at 40%) for all Master’s students throughout their career and offers opportunities for additional support. Most Teaching Assistantships in LSC are in LSC 100 (which fulfills the Communications A requirement) but there are also Teaching Assistants in some upper-division undergraduate courses. The students felt the funding available to them was fair and that the processes for awarding Teaching Assistant and Project Assistant positions was transparent. Because available Teaching Assistant appointments are announced early in the process, students feel they have sufficient time to plan and apply. Students noted that availability for Project Assistant positions was less transparent but only because those positions depended on faculty receiving outside funding. They appreciated faculty commitment to identifying Teaching Assistant and Project Assistant positions that would be of particular use to students based on their career trajectory and then connecting them to those opportunities.

Mentoring: LSC has a robust and carefully designed mentoring and advising system for Master’s students. Incoming Master's students are assigned a temporary "Orientation" Advisor on admission. The program stresses that students can change advisors at any time but assign this first advisor to ensure access to program information. Orientation advisors are assigned based on student interest and with attention to faculty mentoring load. A few graduate students described some initial confusion about the "orientation" aspect of the advisor but said advisors were helpful in clarifying their role. Students clearly understood that they were free to change advisors as desired. Though a few students made passing comments about the challenge of having advisors on leave, all nine students expressed appreciation for and comfort with mentoring in the department.

Assessment: In addition to working with their advisors, LSC graduate students receive an annual formal assessment from the graduate committee. Each student submits a portfolio including a report form and CV listing professional and academic activities. The LSC graduate committee compiles these reports, reviews them, and provides students with written feedback each year. The current and former Directors of Graduate Studies noted that this process ensures that students stay on track and receive the support they need to be successful. Students felt that expectations, learning goals, and assessment mechanisms were clear across the program, highlighting the value of the annual progress reports.

Recruitment: While noting that they have maintained high-quality graduate student cohorts who have seen significant success after graduation, the current and former Directors of Graduate Study identified recruiting the best students from outside the University of Wisconsin as a persistent challenge. LSC often uses a "grow your own star" approach, encouraging their best undergraduate students to apply
for the Master's degree and using the Thesis Master's to support the joint doctoral program in Mass Communication. Because competitor programs are investing in recruitment, it is becoming increasingly difficult to attract strong students from outside of UW-Madison simply by being a top-ranked program. While both Directors of Graduate Study and other faculty expressed strong commitment to the Master's degree as a stand-alone master's program (rather than a direct path to the doctorate), they recognized that competitor programs recruit directly to the Ph.D, making them more desirable for some students.

The Master's program has had some difficulty recruiting, admitting, and enrolling graduate students who are members of targeted domestic minority groups. The ten-year average rate of admission for targeted domestic minority applicants is nearly thirty points lower than for white applicants. The committee recognized that a portion of that percentage difference could be attributable to the low numbers of applicants involved. The Directors of Graduate Study also indicated that in previous years LSC outreach programs had generated significant enthusiasm among students but those students hadn't always been prepared for graduate work. Even after an additional review by the admissions committee taking a holistic view of candidates' qualifications, a lower percentage of those applicants were ultimately admitted. Recent efforts at recruitment have been more targeted and the department is hopeful that they will show results. The newly hired Student Services Coordinator has experience with helping graduate programs increase diversity and has begun work on that front for LSC. In the last six months she has attended recruiting events focused on attracting under-represented minorities to graduate programs. Those events include SACNAS (the Society for the Advancement of Chicano and Native American Students), the Bioscience Preview Weekend (a diversity preview event where she represented the doctoral minor), and the UW-Madison Graduate School Fair focused on prospective graduate students from under-represented minority groups. In addition, because the graduate program frequently draws applicants from LSC's pool of undergraduate students, it seems plausible that the program's successful attention to increasing diversity at the undergraduate level could result in a more diverse pool of applicants well-prepared for the Master's.

**Undergraduate Education**

*Curriculum: Background, facilities, courses, capstone, internships strengths and gaps*

**Background Information:**

In 2012, the LSC department revamped its undergraduate major and added a vision statement for the major, based on suggestions from the 2007 LSC department review. The major was evaluated, streamlined and reorganized based on the vision statement and input from students, faculty, staff, and other stakeholders, including professionals in the industry. Courses were reorganized, learning outcomes were produced with the necessary assessment of these learning goals outlined, course titles and numbers were changed and organized into a systematic format. Redundant and obsolete courses were eliminated and new, required courses were created to meet content needs of the discipline and changing employment opportunities.

All faculty teach three courses a year. Undergraduate students feel the teaching staff are excellent in what they do and genuinely care about students’ progress and success. There is a nice balance between instructional faculty who are field based and those that are more academic based, both offering a
diverse skill set. Courses taught by professionals in the field bring in real-world experiences into the classroom. Many classes are project based, and may involve a community partner who subsequently uses the communication-an example of a real-world experience. Tenure-track academic faculty research is discussed in the classroom. Top notch lecturers, including former alumni, are often brought into classes for as a guest lecturer. LSC undergraduates are a major source of recruits for the LSC Master’s program.

Faculty and undergraduate students feel there are good lines of communication and a strong sense of community between them. The LSC program is better organized since the last departmental review in 2007 with a detailed protocol for undergraduate procedures. With a newly renovated, intimate building and smaller faculty size, students and faculty feel they enjoy a collegial, positive and welcoming environment. Social events with faculty and undergraduate students is well received, including the banquet for scholarship recipients where students meet the scholarship donors.

**Facilities:**

Teaching facilities within the building include one regular classroom, two computer labs, three radio labs, and a video editing lab (some of these facilities were made possible by alumni donations). The goal of the undergraduate population in LSC is to house 200-225 majors. Currently, there are 140 majors in the department, up from 40 in 2007. Enrollment has increased significantly for double majors whose first major is outside of LSC. However, the faculty feel this increased demand for current and new LSC courses is not sustainable as the amount of teaching FTE and teaching assistant support is inadequate to meet the demands of larger class sizes. New faculty hires would significantly help address this issue and keep the enrollment in the major high.

Teaching facilities inside the department are considered adequate for small enrollment courses (< 31), however, larger enrollment LSC courses must be taught outside of Hiram Smith Hall. Many faculty and students have stated the teaching facilities in external, larger classrooms on campus are inferior and inadequate in physical equipment (cameras, lights, video recorders) and software with no technical support available.

**Courses:**

LSC undergraduate courses focus on writing, editing, producing messages, planning, designing and evaluating effective communication programs. Students report on science, health, agriculture or the environment and internships are strongly recommended. There are many LSC courses listed in the course catalog (38 from 100-699 level), but several of them are no longer offered or offered infrequently. This was mentioned in the previous 2007 LSC departmental review and is addressed again in this review.

Students are required to take 24 credits in the major, up from a previous requirement of 18 credits, starting with an introductory science writing course (LSC 111 or 212, both 3 credits) before taking more advanced courses in the major. Following this foundation course, students are required to take 12 credits of core courses including LSC 250, LSC 251 (both 3 credits) and 6 credits from LSC 270, 314, 320, 332, 350, or 360. A capstone course, either LSC 515 or 640, both 3 credits, is required for the major. Students are then required to take 6 credits in one of two concentrations. The first concentration is Communication Strategy that focuses on skills and theory to effectively communicate with audiences in
life sciences, while satisfying the long-term strategic goals of an organization. This concentration includes courses in advertising, social marketing, and risk communication. The second concentration is Communication Skills and Technologies. It focuses on the skills required to translate organized information into informative and persuasive messages for a variety of media. This concentration includes courses in news writing, documentary photography, publications editing, web design, and video production.

Some undergraduate students voiced a desire for a required course that teaches AP style. This need has been addressed by the faculty with the development of a new course, LSC 430, Communicating Science with Narrative within the Communication Skills and Technologies concentration (though the course is not required). Some students expressed concern that many LSC courses are focused primarily on agriculture issues and would like to see more courses covering life sciences, health, environment and nanotechnology.

Communication Strategy concentration courses LSC 440, 444, 616, and 660 and Communication Skills and Technologies concentration courses LSC 450 and 505 are not offered or offered irregularly due to either lack of faculty to teach the course/retirements. However, these courses still appear on the LSC B.S. degree curriculum sheet. The undergraduate students who spoke to the review committee mentioned some frustration with course availability, noting especially a desire to take LSC 450, Documentary Photography for the Sciences. Since many students join the major late in their career and have limited time remaining at UW-Madison, they miss out on courses that are offered irregularly. LSC 617, Health Communication in the Information Age, is currently taught by the Journalism and Mass Communications program and is difficult for students to register as the course is offered irregularly. The review committee recommends that LSC review irregularly offered courses and determine whether they should be kept in the curriculum. There will be a new faculty hire soon who will be assigned to teach LSC 270 and 435.

Based on student interest, the LSC department is working to revive its honors program to allow undergraduates interested in research to work with a faculty advisor on a project leading to development of a research honors thesis.

**Capstone, Internships and Career Opportunities:**

The LSC faculty and advisors strongly encourage students to take an internship during their degree enrollment.

On average, 5-10 internship and job opportunity announcements are shared weekly with students from the Student Services Coordinator and the two instructors who work closely with employers to develop student internship opportunities.

Students may also elect to take a Capstone course, with two options available.

**Undergraduate Students: Orientation, recruitment, advising, learning goals and assessment**

**Orientation and recruitment of new students:**

There is an orientation for in-coming undergraduate students that includes a tour of the Hiram Smith building and classroom facilities, introductions of faculty and staff and advisors. Students are informed of all campus welcome events through email and on the department's social media platforms such as
Facebook, Twitter and Instagram. Other important departmental information is advertised heavily through social media, list-serves and emails.

Approximately 30% of new LSC majors come from students who take LSC 100, Science and Storytelling, a non-major course that fulfills the Communications A requirement. This course addresses sustainability and climate change issues, particularly important for professional track students. The Student Services Coordinator has implemented new strategies for attracting students to the LSC major. Her presence across campus to discuss the major and double majoring in LSC has received positive feedback. Various brochures, public service announcements and social media outreach resulted in increasing undergraduate LSC majors. Recent undergraduates and graduate students post on social media what they are doing now with their LSC careers in hopes of recruiting future LSC majors.

**Advising:**

The average time to degree for LSC undergraduate majors was 4.18 years for 2015-2016. This is within UW-Madison campus goals in terms of degree performance and completion rates. Of these undergraduate students in the major, 64% of LSC seniors planned to work full time in the industry following graduation and 29% were planning on going directly to graduate school, either at UW-Madison or at other institutions.

First year students can declare their major when they attend SOAR. For current students who want to declare LSC as their major, they need to meet with the Student Services Coordinator. Once a student achieves senior status (above 86 credits), they cannot declare a LSC major. LSC places advisor holds on all declared majors every semester prior to enrollment for the following semester until students meet with their advisor.

There was discussion about switching to a faculty advising model, however, there is not enough faculty in the department to advise the goal of 200 students. Faculty would need training on how to advise students and the necessary academic requirements, therefore, this faculty advising model is not being implemented in the near future. The high quality of student advising is provided by the Student Services Coordinator and Advisor, Tara Holtz, who advises 90% of the declared majors, with the remaining 10% advised by two faculty members, Shiela Reaves, Professor and Director of Undergraduate Studies, and Larry Meiller, Professor Emeritus and Senior Lecturer. The students who met with the review committee expressed some concern about turnover in the Advisor position but were pleased with the current Advisor. Faculty advisors help students with internships, jobs post-graduation and applying to graduate school. A performance review of the Student Services Coordinator is conducted annually with feedback from the faculty to ensure continued excellence in student advising.

For LSC undergraduates, a 4-year degree plan, list of courses on the curriculum sheet, and a fillable degree and course planning worksheet are available online. Further information about course availability and schedule would help students plan their major. Other information for undergraduates is available on the website but may benefit from more organization, perhaps in a similar format to the graduate handbook.

**Learning Goals and Assessment:**

The LSC major has established 6 undergraduate student learning goals: 1) Science Communication Theory and Practice, 2) Critical Thinking, 3) Media and Audience, 4) Global Science and Society, 5)
Teamwork, Policy and Democracy, and 6) Ethics and Diverse Views. Each year, the department will address two learning goals in specific courses.

In Spring 2017 semester, assessment of two learning goals was conducted in the department. Learning goal two, Critical Thinking, was evaluated in the final project, oral presentation of LSC’s two capstone courses, LSC 515 and 640 (only one is required). Learning goal four, Global Science and Society, was evaluated in a written assignment in LSC 251, Science, Media and Society, which is a required course for LSC majors. This assessment will be presented in Fall 2017 to the LSC Undergraduate Curriculum Committee and the LSC Executive Committee. Learning goals one, three, five and six will be addressed in the future in LSC courses, but we are not sure which courses will address these goals. Students feel some of the new learning goals/objectives are met in their current courses, while other courses, the learning goals/objectives are unclear. This could easily be addressed in the course syllabus and specific courses listed under each learning goal; similar to learning goals two and four above.
November 21, 2017

TO:    Nikki Bollig
       CALS Assistant Dean for Academic Programs and Policies
       116a Agricultural Hall

FR:    Dominique Brossard, Chair, Department of Life Sciences Communication

RE:    LSC Program Review Report

The LSC faculty and staff thank the review committee for their thorough review of our B.S., Masters and Ph.D. minor programs. After review of the LSC program review report, we have found the following errors of fact that need to be corrected.

1) On page 1, the report says that we have 18 faculty members. In reality, we have 7 tenure track faculty members, 2 faculty associates, 6 lecturers, and 3 affiliate tenure track faculty members.

2) On page 6, it is stated “LSC guarantees full funding (at 40%) for all Master’s students throughout their career and offers opportunities for additional support.” This is incorrect. We do need guarantee full funding. We strive to fund all the students (and do so on a regular basis), this is linked to available resources.

3) On page 7, it reads ‘All faculty teach three courses a year.’ This is technically correct, but is adjusted to each faculty percentage appointment (Bret Shaw teaches one course a year due to his 80% Extension appointment).

4) On page 8, it is stated, regarding courses, that “several of them are no longer offered.” This is incorrect, the course catalog has been updated and the only courses listed are the ones that will be offered in the future, even they are not right now.

5) On page 9, it is stated that “Some students expressed concern that many LSC courses are focused primarily on agriculture issues and would like to see more courses covering life sciences, health, environment and nanotechnology.” This is incorrect and was puzzling to the faculty, since no LSC course focuses primarily on agriculture issues. We would like to know what courses the students were referring to since it is unlikely they are LSC courses.

6) On page 10, the second paragraph refers to LSC 100 and states “This course addresses sustainability and climate change issues, particularly important for professional track students.” This is inaccurate. LSC 100 is a Comm A course for undergraduate students, no graduate student takes it.
It does not address climate change and sustainability particularly. An accurate description of the course is "LSC 100 addresses the importance of storytelling in explaining science and uses a text that explores race, gender and poverty issues in science in the bestselling book, "The Immortal Life of Henrietta Lacks" by Rebecca Skloot".

7) On page 10, fifth paragraph, LSC Student Services Coordinator, Tera Holtz’s first name is misspelled.

8) On page 11, the schedule of learning goal assessment for the undergraduate major is inaccurate. Corrections are inserted below in red.

a. In 2016-2017, assessment of two learning goals was conducted in the department. Learning goal two, Critical Thinking, was evaluated in the final project, oral presentation of LSC’s two capstone courses, LSC 515 and 640 (students are only required to take one capstone course). Learning goal four, Global Science and Society, was evaluated in a written assignment in LSC 251, Science, Media and Society, which is a required course for LSC majors. This assessment will be presented in Fall 2017 to the LSC Undergraduate Curriculum Committee and the LSC Executive Committee. In 2017-2018, learning goal one, Science Communication Theory and Practice and learning goal five, Teamwork, Policy, Democracy will be assessed in capstone courses LSC 515 and 640 (only one is required). In 2018-2019, learning goal three, Media and Audience and learning goal six, Ethics and Diverse Views, will be evaluated in capstone courses LSC 515 and 640 (only one is required). Students feel some of the new learning goals/objectives are met in their current courses, while other courses, the learning goals/objectives are unclear. This could easily be addressed in the course syllabus and specific courses listed under each learning goal; similar to learning goals two and four above.
Enrollment in Graduate School Programs

This visualization was created by the UW-Madison Graduate School Office of Academic Planning and Assessment. Questions should be directed to Peter Kinsley, peter.kinsley@wisc.edu.
Graduate Student Funding

This visualization was created by the UW-Madison Graduate School Office of Academic Planning and Assessment. Questions should be directed to Peter Kinsley, peter.kinsley@wisc.edu.
Graduate School Time to Degree: 2008-2017

- Select Degree Level:
  - Doctorate
  - Master's

- Select Student Category:
  - (All)

- Disciplinary Division:
  - All

- Academic Plan:
  - Life Sciences Communication MS

- Time to Degree:
  - One year or less: 8.5%
  - 1+ to 2 years: 39.0%
  - 2+ to 3 years: 33.9%
  - 3+ to 4 years: 8.5%
  - More than 4 years: 10.2%

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