Minutes and Evaluation Report for
Audit & Review Face-to-Face Meeting
University of Wisconsin-Whitewater
Integrated Science and Business Majors and Minors, 2016-2017

Date: 12/21/2016

Time: 3:00-4:00

Place: Upham 222

Attended: Provost Susan Elrod; AVC Greg Cook; Deans John Chenoweth, David Travis; Program Coordinator and Contributors John Ejnik; Dennis Kopf, Dale Splinter, Stephanie Douglas; Audit & Review Team Chair Anthony Gulig; Audit & Review team members Eric Appleton, Ahmad Karim, Asmahan Sallah, Joan Cook.

1) Call to order (Gulig)

2) Introductions (Gulig)

3) Overview of review team evaluation (Gulig), program comments (Ejnik)
   Program Coordinator John Ejnik highlighted the value and strength of the program from students' standpoint. A significant strength on the program is from the comparative and competitive advantage the program provides for UW-Whitewater.

4) Discussion of Review Team's evaluation:

   a) <u>Resources</u>. Strategies for increasing collaboration between CoBE and CoL&S; Increasing recognition and inclusion of dispersed faculty contributing to the program—working w/ Deans.
      Discussion focused on:
      - how the program would benefit from a more coherent and focused marketing strategy.
      - the need for a more seamless interaction between the College of Letters and Science and the College of Business and Economics.
      - the need to identify and transition to a new program coordinator.

   b) <u>Curricular/SLO Mapping</u>. Gathering data on SLOs and mapping SLOs. What are some strategies that will accomplish this while providing assessment data?
      Discussion focused on:
      - collecting and using existing data from courses/programs already contributing to the constellation of courses central to the Integrated Science and Business program.

   c) <u>Review and diversify decision-making/planning strategies</u>.
      Discussion focused on:
      - the importance of the inter-college steering committee and that should continue to meet regularly and evaluate the means by which existing data can be used more effectively in the decision-making processes.

5) Recommended Actions: The evaluation report lists 4 recommended actions--also listed here.
   1. Continue the work on assessment. (a) Complete development of assessment tools/assignments and scoring rubrics; (b) Gather data on more SLOs; (c) Summarize the data gathered; (d) Track use of data and data-based changes (in class assignments, pedagogy, emphasis within classes, as well as in overall curriculum)
   2. Examine credits to degree to identify ways to reduce the average if possible.

    3. Develop a systematic and sustainable process for reviewing and making decisions based on data.
        Clearly explain the program's supervisory/administrative structure and put it into practice.
    4. Continue to work with the deans to obtain and maintain needed resources to support the program.

6) Recommended Result: *(Final) Continuation with minor concerns*
   - Please make use of the detailed comments in the evaluation report (below).
   - Six review team members considered the recommended result, with a majority indicating continuation with minor concerns. A Progress Report focusing only on the recommended actions identified above (3 in favor, 1 opposed) is required. The progress report is due to the College Deans (L&S, CoBE) by October 1, 2018, and to the Audit & Review Committee by November 1, 2018.
   - Next full self-study will be due in October, 2020.

7) Adjourn.

University of Wisconsin-Whitewater
Committee Form: Review of Audit & Review Self-Studies
Undergraduate Programs, 2016-2017
Majors/Minors and Standalone Minors

Date of Evaluation _____November 28, 2016_____Short Self Study (SS*)_____

Program_____Integrated Science and Business _____Major___X_____   Minor_____X____

Evaluations submitted by: Tony Gulig, Eric Appleton, Rashiqa Kamal, Ahmad Karim, Asmahan Sallah, and Joan Cook

Review meeting attended by:

I. Program Purpose & Overview: A. Centrality
1. The program contributes to the fulfillment of UW-Whitewater's core values, Mission, and Strategic Plan.

Sufficient Evidence	5
Some/Partial Evidence	1
No/Limited Evidence	0
Not Applicable (explain why in comments below)	0

2. The program supports general education, proficiency, and/or other programs at UW-W.

Sufficient Evidence	2
Some/Partial Evidence	2
No/Limited Evidence	1
Not Applicable (explain why in comments below)	1

3. The program has achieved or is appropriately working toward achievement of at least two goals of Inclusive Excellence.

Sufficient Evidence	2
Some/Partial Evidence	3
Not Applicable (explain why in comments below)	0
No/Limited Evidence	1

4. The program has been responsive to actions recommended from the previous Audit and Review Report; Progress Reports have been submitted, if relevant.

Sufficient Evidence	1
Some/Partial Evidence	4
Not Applicable (explain why in comments below)	1
No/Limited Evidence	0

Comments
1. The program is indeed unique, catering valuable service to the needs of a subset of UWW students.
2. I didn't understand the point of comparing this major to the PMBS and science majors in the response about supporting GenEd and other programs.
2. Program appears appropriately and narrowly focused on specific internal goals and SLOs.
3. In section 1, there was mentioned that 'non-traditional students in particular often find the major to be a good fit.' It would be good to hear a bit more about the range of non-traditional students as well as what particulars help make this program a good fit for them.

3. It seems that the program relies upon GenEd for most of its diversity/intercultural participation. I don't think this is in itself a bad thing, but while noting that students have the flexibility to personalize the program, and that there is encouragement to study abroad, there doesn't seem to be anything very specific within the program or the program's recruitment or outreach efforts. It is stated that SCIBUS 185 and 485 will continue to work toward more IE in the course content; some details on this work would be good.

4. A lot of work has been done to develop the assessment plan. What is the status of its implementation?

4. Are email meetings enough for the steering group? Have there been more F2F meetings as a result of the Assessment Institute participation?

4. The program has responded to parts of the previous A&R recommended actions, but did not submit their last required progress report. More progress has been made recently, but how will the program ensure that this momentum continues?

4. Why are there two action plans for 2016-17? They need to come up with a timeline to indicate which SLOs will be assessed when? It is better to focus on 2-3 SLOs at a time instead of measuring all at the same time.

4. If the Science Alliance meets only once a year, and there is no formalized advisory board within that group, I wonder how effective it is in providing concrete, actionable guidance to the program. More details/examples on this relationship would be useful. On the other hand, the Steering Group within the College seems a bit more hands on, though it's noted that 'when program related agenda needs to be addressed, the steering committee is emailed the agenda for review and comments.' Where does the agenda originate? If the Steering Committee is waiting for agenda, how proactive can it be in 'making decisions for the program, etc? Again, this may be a case of a few more details filling in the picture. I do note that the report notes in several other places that the steering committee did, or met, or reviewed . . . so perhaps they are much more active than this original statement would lead one to believe.

4. The mission statement (pages 10 and 11) is rather general and speaks to the mechanics more than the spirit. What is it about this program that makes it unique and desirable? In other words, why should a student pursue a career related to science and business? It's a fine first draft, but. . .

4. The resource needs are specific and detailed. Have these been proposed to the College yet? Has there been a response?

4. It looks like lots of good work was done to get the assessment process rolling.

Some GELOs (e.g. critical thinking) are not clearly articulated. The interdepartmental nature of the program might be partially responsible for the lack of such clarity. Maybe faculty members could deliberately map GELOs that overlap with those of its two constituent programs. I might have missed it, but a future vision statement is missing. I admire your achievement on the level of writing proficiency requirement. IE needs to be more aggressively pursued in the future.

I. Program Purpose & Overview: B. Program Mission, Goals, & Accomplishments

1. The program's mission statement reflects the nature and scope of the program.

Sufficient Evidence	5
Some/Partial Evidence	1
No/Limited Evidence	0
Not Applicable (explain why in comments below)	0

2. Goals and objectives were identified and undertaken to improve or advance the program.

Sufficient Evidence	5
Some/Partial Evidence	1
No/Limited Evidence	0
Not Applicable (explain why in comments below)	0

3. The program has a process for setting and assessing goals, and making decisions about changes to the program goals.

Sufficient Evidence	2
Some/Partial Evidence	3
No/Limited Evidence	1
Not Applicable (explain why in comments below)	0

4. The program is considering potential revisions to mission, goals, or objectives; the program has a "vision" for where it wants to be in the future and how to get there.

Sufficient Evidence	1
Some/Partial Evidence	3
No/Limited Evidence	1
Not Applicable (explain why in comments below)	1

5. The program, faculty/staff, and/or students have earned recognition or awards.

Sufficient Evidence	0
Some/Partial Evidence	1
No/Limited Evidence	3
Not Applicable (explain why in comments below)	2

6. The program has achieved or maintained program-level accreditation or has considered seeking it, where appropriate.

Sufficient Evidence	0
Some/Partial Evidence	0
No/Limited Evidence	3
Not Applicable (explain why in comments below)	3

Comments
1. (repeat from section one) The mission statement (pages 10 and 11) is rather general and speaks to the mechanics more than the spirit. What is it about this program that makes it unique and desirable? In other words, why should a student pursue a career related to science and business? It's a fine first draft, but. . .
1. "The vision is to maintain a curriculum that is relevant to changing knowledge and skills related to the major." Is this enough to sustain the program or to increase enrollment?
3. Earlier in the report, it sounded like the steering group really didn't meet in person but did their work via email. Here, it sounds like they meet twice a year. Please clarify. Given the stage of development of this major, the steering group may need to meet more than twice a year, particularly as they begin to have more data on student learning to review and discuss.
3. The response suggests that the steering committee conducts business only through e-mail. They should plan on meeting at least once annually face-to-face in order to go over the assessment data and set goals/objectives.
3. I'd like more detail on how goals are set and monitored. One problem the program has faced is not having a clear process, with clear identification of who is responsible for addressing which goals/tasks. How does the program manage assignment of responsibilities and ensure that yearly goals are both identified and accomplished?
4. It makes sense that the program wants to see what their data tell them before they make changes to mission, but the program should have a process for identifying annual goals. It's not clear what the program's vision is for the future (e.g., a 5 year strategic plan). Until now, the program has focused on getting things up and running, but it's time to take a broader and more long-term look.
4. The committee should at least have a vision of what they want the program to look like, which I did not find in the response

4. The program is waiting for data to determine steps for the future. Beyond possible curricular changes, how does the program think it will respond to 'changing knowledge and skills?' How will it gather this external data in order to be responsive to it -- or is this part of the role of the Science Alliance?
5. Not sure why this item is seen as not applicable.

II. Assessment: A. Curriculum

1. The program has a clearly articulated, efficient, and purposeful curriculum, including options or emphases within the program (if applicable).

Sufficient Evidence	3
Some/Partial Evidence	3
No/Limited Evidence	0
Not Applicable (explain why in comments below)	0

2. If program offers dual-listed courses, the expectations of graduate students differ from undergraduate students; otherwise NA

Sufficient Evidence	0
Some/Partial Evidence	0
No/Limited Evidence	0
Not Applicable (explain why in comments below)	6

3. Appropriate assessment data were used in making curricular revisions.

Sufficient Evidence	2
Some/Partial Evidence	1
No/Limited Evidence	2
Not Applicable (explain why in comments below)	1

4. The program provides opportunities for students to learn in ways that extend beyond the classroom, and discussed the extent to which students are involved in these activities and opportunities.

Sufficient Evidence	4
Some/Partial Evidence	1
No/Limited Evidence	0
Not Applicable (explain why in comments below)	0

5. Online courses are evaluated in ways that ensure effective delivery, continuous improvement, and student learning (if applicable)

Sufficient Evidence	0
Some/Partial Evidence	0
No/Limited Evidence	0
Not Applicable (explain why in comments below)	5

Comments
1. The response doesn't make it clear if the curriculum is efficient and purposeful.
2. The report states that there are no dual-listed courses offered.
3. There is little evidence of using assessment data in making decisions about curricular revisions. The report says SCIBUS 185 was added based on assessment data but does not explain what data or what the change was addressing. One clear use of data to inform changes is the use of data from internship evals as a basis for the change in science requirements.
3. Could not find this question answered. Questions answered NA are not applicable.

3. There may not be much usable data yet to inform changes. In future reports, I encourage the program to look carefully and in detail at their data on student learning, and report both changes to the curriculum but also to pedagogy, class emphases and activities, etc.

3. Besides the requirement "ISB major of completing one of the following minors of Biology, Chemistry, Environmental Studies, Geology, GIS, Physical Science or Physics", all other changes seem to driven by curricular changes, and not necessarily assessment data.

4. It seems there are ample opportunities for beyond the classroom work (are there other local organizations like The Water Council?), but the report does note "Again, only 25% of the ISB students take advantage of [undergraduate research]" and "Only 4 to 5 students have taken advantage of studying abroad in the past five years". If the program feels these are important lost opportunities, what can be done to foster a higher level of student participation?

4. Apart from the Water council for the Water emphasis, could you provide examples for the outside the classroom opportunities for students? The information provided does not include actual examples.

5. The report notes N/A -- I assume this means no on-line courses are offered.

II. Assessment: B. Assessment of Student Learning

1. The program has a clearly articulated learning outcomes for students, courses are "mapped" to these learning outcomes, and some outcomes received specific attention during the review period.

Sufficient Evidence	3
Some/Partial Evidence	2
No/Limited Evidence	1
Not Applicable (explain why in comments below)	0

2. Student learning outcomes are aligned with the LEAP Essential Learning Outcomes in a way that is reasonable and meaningful.

Sufficient Evidence	4
Some/Partial Evidence	2
No/Limited Evidence	0
Not Applicable (explain why in comments below)	0

3. The program has an appropriate assessment plan for measuring students' progress in attaining the outcomes.

Sufficient Evidence	0
Some/Partial Evidence	6
Not Applicable (explain why in comments below)	0
No/Limited Evidence	0

4. The program collected a variety of appropriate assessment data allowing judgments about the extent to which students are achieving learning outcomes.

Sufficient Evidence	0
Some/Partial Evidence	4
No/Limited Evidence	2
Not Applicable (explain why in comments below)	0

5. Program faculty consider assessment data in making changes to the curriculum, students' learning outcomes, and/or other aspects of the program.

Sufficient Evidence	2
Some/Partial Evidence	2
No/Limited Evidence	2
Not Applicable (explain why in comments below)	0

6. Results of assessment efforts have been shared with appropriate internal and external constituencies.

Sufficient Evidence	3
Some/Partial Evidence	1
No/Limited Evidence	2
Not Applicable (explain why in comments below)	0

Comments

1. MUCH improved over previous reports.
1. SLOs mapped to GENED or Science or Business courses cannot be assessed by the program, right? Are faculty teaching these courses are aware that these SLOs are mapped to their courses? Should the ISB SLOs be mapped to only SCIBUS 185, 485, and 493? Furthermore, there is no mention of what SLOs were measured under the review period.
1. It's not clear that a couple SLOs received specific attention during this review period. As the program moves forward, identify one or at most two each year to focus on in more detail.
1. I'm a bit confused by the 'significant' 'somewhat' and 'N/A' headings on the charts -- how do these headings related to 'introduced', 'developed', 'assessed"? All the 'significant' checks lead me to think that the SLO will play a significant part of the class content, but doesn't tell me how content of the courses build upon one another. I realize that some of the vagueness may be due to the variety of courses (core business courses, sciences courses), but I wonder if there is some way to be more specific in tracking SLOs through the curriculum.
3. Progress has been made in developing a plan. As the self-study notes, work is ongoing here. I encourage the program to continue working with the office of Academic Assessment to make sure their progress continues after the Assessment Institute obligations are completed.
3. Given the revisions to SLOs, it makes sense to review the existing internship surveys and revise as needed so the survey aligns with the program SLOs and other goals. The self-study notes they are considering this.
3. The program is making good use of the internship for assessing student skills, both from the student and the employer perspectives.
3. Working on it.
3. "Work is still ongoing to develop a comprehensive assessment plan." Currently, most assessment data appears to come from surveys and internship responses, and future plans include using senior projects. Are there any plans for embedded assessment before these major, final projects?
4. As noted earlier, the current data is primarily senior surveys and internship surveys. Again, embedded assessment earlier in the curriculum can help pinpoint effective places to address issues uncovered in the exit data.
4. Curious about the lack of UWW Alumni survey results -- are there too few graduates for a meaningful response, was there a lack of survey response, or is the program not on the UWW Alumni Association's radar?
4. In light of new SLOs, survey questions need to be reviewed.
4. Again, they're working on this. The program is moving toward using embedded assignments, but still needs to develop scoring rubrics that align with the SLOs and review the assignments to make sure they're asking students to demonstrate the knowledge and skills the program wants to assess. The pilot project scoring the senior projects was encouraging and is a good base to build on.
5. Hmm. It was noted on page four that the Steering Committee only worked via email -- not meetings, and that there was no formal Advisory Board (and the Science Alliance only met once a year. . .). There is a plan, and work is happening, so. . .
5. The plan refers to monthly meetings of the steering group to discuss assessment plans, progress, and data. Have these meetings been occurring? Please give a brief summary of what has been discussed and accomplished at the meetings.
6. This isn't happening yet. However, I see this as something to focus on in the future, after the assessment plan, tools, rubrics, and data collection have been put into place.

6. It's noted that the Advisory Board includes the two deans -- going once again back to page 4, does this mean that the deans are on the Science Alliance or on the steering committee? They're in the loop, which is important, but the hierarchy of advising bodies is becoming increasingly unclear to me. How/when will assessment information be disseminated to the program's instructors?

III. Student Recruitment, Enrollment, Retention, and Graduation: A. Trend Data

1-2. Five-year enrollment and graduation trends reflect program vitality and sustainability.

Sufficient Evidence	6
Some/Partial Evidence	0
No/Limited Evidence	0
Not Applicable (explain why in comments below)	0

3. [MAJORS ONLY] Credits-to-degree show that students can complete the degree in four years, or reasonably efficiently.

Sufficient Evidence	5
Some/Partial Evidence	1
No/Limited Evidence	0
Not Applicable (explain why in comments below)	0

4. Program has strategies to recruit and retain diverse students.

Sufficient Evidence	1
Some/Partial Evidence	5
No/Limited Evidence	0
Not Applicable (explain why in comments below)	0

5. [MAJORS ONLY] Composition of students approximates or exceeds the diversity of students at the University

Sufficient Evidence	2
Some/Partial Evidence	4
No/Limited Evidence	0
Not Applicable (explain why in comments below)	0

6. Students can enroll in appropriate courses and proceed without delaying graduation.

Sufficient Evidence	5
Some/Partial Evidence	1
Not Applicable (explain why in comments below)	0
No/Limited Evidence	0

7. Claim that the program is oversubscribed, undersubscribed, or at optimum level is justified or supported by examples or data.

Sufficient Evidence	5
Some/Partial Evidence	1
No/Limited Evidence	0
Not Applicable (explain why in comments below)	0

Comments
1. Enrollments are reasonably steady, especially given that the program doesn't seem to actively recruit.
2. "The program is sustainable at granting about 20 degrees per year"

1-2. The program is vital and growing, limited by resources in terms of SCIBUS 485. Consider increasing number of sections offered, may need more faculty.

1-2. A small program, but an important one, I think.

1-2. It's noted that it becomes difficult to schedule senior defenses for SCIBUS 485 within the scheduled course time if enrollment goes over ten. Does this become an impediment to the growth of the program (of course, that depends on whether the program/college see growth as desirable). What alternatives/options are possible? A second section? Adding lab time just for defenses? Scheduled defenses outside of regular class time?

3. Credits to degree still seems high (this was an issue in the previous A&R). The reason given is that many students switch to this major late in their UG career. I'd like to see some data to support this--can IRP or the Registrar provide data on when students change to this major, and then look at # of semesters in the major related to # of credits to degree? Regardless, this is an issue that the program needs to look at. It would be interesting to track changes in credits to degree pre and post SCIBUS 185 to see if that had an impact.

4. SCIBUS 185 seems to be the main recruiting tool for the program. How are the sciences and COBE alerting students to the existence of the program, or is entirely up to the program to alert potential students to its existence? How exactly is the program using the UWW webpages? It's been my impression that contact between the UWW recruiters and programs tends to be minimal; specifically, how are the recruiters working with the program to make sure that potential students know about this program?

4. How can diverse student population be attracted?

5. Program at present appears to be close to capacity and holding steady. "If enrollment increased beyond that, the amount of course release for the coordinator would need to increase, or an assistant coordinator would be necessary. Also, students may have trouble finding advisors for projects. If support for the program increases, the optimal number could go up to about 100 students."

6. Problems with higher than desired enrollments in SCIBUS 485?

There are issues with phrasing Question #6 (students' evaluation of internships). P.30 (58 of students agree or strongly agree that employer assignments were not at a professional level?) and top of p.31.

III. Student Recruitment, Enrollment, Retention, and Graduation: B. Demand for Graduates

1. [MAJORS ONLY] Placement information indicates that program graduates find employment or continue their education.

Sufficient Evidence	5
Some/Partial Evidence	0
No/Limited Evidence	0
Not Applicable (explain why in comments below)	1

2. Data suggests that employment opportunities for graduates of this program will remain strong.

Sufficient Evidence	4
Some/Partial Evidence	1
No/Limited Evidence	1
Not Applicable (explain why in comments below)	0

3. The program systematically tracks graduates of the program.

Sufficient Evidence	1
Some/Partial Evidence	1
No/Limited Evidence	4
Not Applicable (explain why in comments below)	0

Comments

  3. No systematic tracking of graduates. Something to look at after the more immediate issues of assessing SLOs and addressing credits to degree are addressed.

  3. It's a small program with limited instructor time/resources -- how can the college/university/alumni association help gather this data?

III. Student Recruitment, Enrollment, Retention, and Graduation: C. Comparative Advantage(s)

1. The program has unique features that distinguish it from competing programs--giving it a competitive edge

Sufficient Evidence	5
Some/Partial Evidence	1
No/Limited Evidence	0
Not Applicable (explain why in comments below)	0

Comments: [None]

IV. Resource Availability & Development: A. Faculty Characteristics

1-2. Information is provided about the composition of the department faculty & instructional academic staff (e.g., gender, ethnicity, expertise, academic rank, etc.)

Sufficient Evidence	2
Some/Partial Evidence	4
No/Limited Evidence	0
Not Applicable (explain why in comments below)	0

3-4. The program has identified staffing changes and anticipated areas of potential future need.

Sufficient Evidence	3
Some/Partial Evidence	3
No/Limited Evidence	0
Not Applicable (explain why in comments below)	0

Comments

  1. Are there others who supervise senior projects?

  IV.A.1-2. Given the structure of the program, it is not possible to identify all faculty and staff.

  1-2. "All the other courses in the ISBM come from several departments. . . . making it impractical to identify faculty and staff responsible for the curriculum beyond the ISBM specific courses."

  3-4. What are areas of future need? Seemed like there was an argument made for more release time earlier in the document.

  3-4. I think there should be at least another faculty member to help with the coordination of the program.

IV. Resource Availability & Development: B. Teaching & Learning Enhancement

1-2. Faculty & instructional academic staff are engaged in activities to enhance teaching and advising.

Sufficient Evidence	5
Some/Partial Evidence	1
Not Applicable (explain why in comments below)	0
No/Limited Evidence	0

Comments

For all the items related to faculty, I've marked "some/partial evidence" because I'd like to see other faculty who regularly supervise senior projects included.

IV. Resource Availability & Development: C. Research & other Scholarly/Creative Activities

1-2. Faculty (and staff, if relevant) are active in research and/or scholarly/creative activities.

Sufficient Evidence	3
Some/Partial Evidence	2
Not Applicable (explain why in comments below)	0
No/Limited Evidence	1

Comments

IV.C.2. Missing response

IV. Resource Availability & Development: D. External Funding

1-2. Faculty and staff (if relevant) pursue funding through grants, contract, and/or gifts.

Sufficient Evidence	3
Some/Partial Evidence	3
No/Limited Evidence	0
Not Applicable (explain why in comments below)	0

Comments

Please add more information about the connection between the grant and the goals of the program.

IV. Resource Availability & Development: E. Professional & Public Service

1-2. Faculty (and staff, if relevant) are active in professional and public service, beyond the department.

Sufficient Evidence	4
Some/Partial Evidence	2
No/Limited Evidence	0
Not Applicable (explain why in comments below)	0

Comments

Excellent activities.

IV. Resource Availability & Development: F. Resources for Students in the Program

1. The program has adequate personnel, student help, and service and supplies to serve its undergraduate students.

Sufficient Evidence	2
Some/Partial Evidence	2
No/Limited Evidence	1
Not Applicable (explain why in comments below)	1

Comments:

1. "As the number of majors has increased, however, there is a need for a budget to provide a small stipend to senior project mentors/advisors. Faculty advisors are currently not compensated in any way and can put a good deal of time and effort into working with ISB majors."

IV.F.1. With increasing demand, the program requires a service and supply budget to be sustainable

Stipend for senior project supervisors is a good idea, or some means of either giving them money or 'credit' for this work.

The program is unique and significant for the university as a whole, and I think it should be adequately supported.

IV. Resource Availability & Development: G. Facilities, Equipment, & Library Holdings
1. The program has adequate facilities, equipment, and technological resources to effectively serve its students.

Sufficient Evidence	5
Some/Partial Evidence	1
Not Applicable (explain why in comments below)	0
No/Limited Evidence	0

Comments

1. "A small number of students indicated that extending library hours would be helpful."

V. Conclusions and Recommendations from the Department or Program
1. Program strengths are discussed.

Sufficient Evidence	5
Some/Partial Evidence	1
No/Limited Evidence	0
Not Applicable (explain why in comments below)	0

2. Areas of improvement and continued progress are discussed.

Sufficient Evidence	5
Some/Partial Evidence	1
No/Limited Evidence	0
Not Applicable (explain why in comments below)	0

3. Recommendations and resources are discussed.

Sufficient Evidence	4
Some/Partial Evidence	2
No/Limited Evidence	0
Not Applicable (explain why in comments below)	0

4. Other comments by the program (not rated).

Yes	2
No	2

Comments

2. "Greater support is needed for the program coordinator. . . " A detailed breakdown for shared coordinators is offered on page 53.
3. Updating surveys, assessing curriculum, 'the steering committee should meet and discuss. . . ' a clearer distinction between the two degrees. in section two: "The program needs to develop and assessment plan."
4. The program has met with the deans to discuss added support. The deans have agreed to increase support.

VI. Reviewer Conclusions

1. Strengths of the Program

Interdisciplinary nature of the program offers students a unique and valuable experience

The professional potential it provides for students

This is a program that appears to be unique in the UWW System, and appears well positioned to address the increasing need for integration between science and technology worlds and business worlds.   The program has a strong hands-on attitude toward application of knowledge through internships and real-world opportunities.

Growing enrollment numbers.

Interdisciplinary approach.

2. Areas for Work or Improvement

Development of an assessment plan and implementation of plans suggested by data. Looking for more places to embed assessment tools earlier in the program rather than mostly in end-product surveys and interviews.

Clarification of curriculum mapping (when skills are developed, etc.)

More coordination with COBE

As assessment efforts move further along, further consideration of sustainability, growth, and overall vision for the program, and working with college/university to obtain the resources required for growth.

Creating a streamlined internship program. Use internal resources like UWW Career Center, and the external advisory board. Tracking graduates and keeping them involved even after graduation might help with this too.

The idea of co-coordinators might be helpful, especially given the fact that this report was late and not very well-written, read like a number of pieces just put together, not much thought seemed to have been put in there. The program needs individual/s who could put in more effort/ time.

If growth is desired, examining ...raised, both ...incoming students (should be more aggressively pursued or more carefully planned)

Working with college/university/alumni association to collect data on graduates.

3. Other comments/questions

I'd suggest a progress report addressing the recommended actions below in 2 years (due October 1, 2018).

Assessment. A more systematic process for reviewing and making decisions based on assessment data. Closer examination of credits to degree, with goal of reducing them.

A wonderful program and a true asset to UWW and its students.

Being a small program drawing resources from across two colleges, what safeguards are built in to ensure that the program continues and thrives when leadership changes?

Are there plans to offer more sections of SCIBUS 485 to limit enrollment per section?

4. Recommended Actions*

1. Continue the work on assessment. (a) Complete development of assessment tools/assignments and scoring rubrics; (b) Gather data on more SLOs; (c) Summarize the data gathered; (d) Track use of data and data-based changes (in class assignments, pedagogy, emphasis within classes, as well as in overall curriculum)
2. Examine credits to degree to identify ways to reduce the average if possible.
3. Develop a systematic and sustainable process for reviewing and making decisions based on data. Clearly explain the program supervisory/administrative structure and put it into practice.
4. Continue to work with the deans to obtain and maintain needed resources to support the program.

5. Recommended Result*

Insufficient Information in the self-study to make a determination; revise self-study & resubmit.	
Continuation without qualification	
Continuation with minor concerns	X
Continuation with major concerns in one or more of the four areas; submit annual progress report to the College Dean & Associate Vice Chancellor for Academic Affairs on progress addressing the major concerns	
Withhold recommendation for continuation, place on probation, and require another complete Audit & Review self-study within 1-3 years, at the Committee's discretion.	
Withhold recommendation for continuation, place on probation, recommend placing in receivership within the college, and require another complete Audit & Review self-study within 1-3 years at the Committee's discretion.	
Non-continuation of the program.	

* A Progress Report focusing only on the recommended actions identified above (3 in favor, 1 opposed) is due to the College Deans (L&S, CoBE) by October 1, 2018, and to the Audit & Review Committee by November 1, 2018.

Next full self-study will be due in November, 2020.

University of Wisconsin-Whitewater
Committee Form: Review of Audit & Review <u>Progress Report</u>
Undergraduate Programs, 2018-2019
Majors/Minors and Standalone Minors

Program Name: <u>   Integrated Science and Business   </u>

Date of Review Team Meeting: <u>   February 7, 2019   </u>

Date of Follow-Up Meeting: <u>April 19, 2019</u>   Time: <u>1:30-2:30 pm</u>   Location: <u>LT 1015</u>

Evaluations submitted by: Yeongmin Kim*, Yamin Ahmad, Asmahan Sallah, S.A. Welch, Joan Littlefield Cook

Review meeting attended by: Yeongmin Kim, Yamin Ahmad, SA Welch, Asmahan Salla, Joan Littlefield Cook

Recommendation #1

Continue the work on assessment. (a) Complete development of assessment tools/assignments and scoring rubrics; (b) Gather data on more SLOs; (c) Summarize the data gathered; (d) Track use of data and data-based changes (in class assignments, pedagogy, emphasis within classes, as well as in overall curriculum)

Recommendation #1 Overall Evaluation.

Good Progress	3
Making Progress	2
Little/No Progress	0

Comments related to recommendation #1

- The program made a good progress in developing rubrics
- Adding peer evaluation mechanism is an effective assessment tool and an effective teaching tool as well.
- It is quite good that the advisors addressed the responses.
- There has been good progress on assessment. SLOs have been articulated, with mapping of assessment tools and where the SLOs are introduced, developed and assessed. Some initial data has been collected, and has in part been summarized.
- Going ahead, it will be nice to see how the data here is driving the changes being made in the curriculum. Currently, the progress report just indicates what changes were made, but without telling us how the data informed those decisions to implement change. In general, More information would be helpful about the course surveys and the exit survey.
- More explanation of the ETS data is needed. What is program's plan to use the ETS data to improve the program curriculum?
- In Appendix A1, there are 3 to 5 assessment tools for each course, but in Appendix A2, only four tools are being used to measure SLOs. More explanation is needed about this difference.

Recommendation #2

Examine credits to degree to identify ways to reduce the average if possible

Recommendation #2 Overall Evaluation (please select your choice).

Good Progress	5
Making Progress	0
Little/No Progress	0

Comments related to recommendation #2
- Program makes a good use of steering committee in the decision
- It would have been nice to see some further insight into what the rationale was for dropping the specific courses that were dropped.

Recommendation #3

Develop a systematic and sustainable process for reviewing and making decisions based on data. Clearly explain the program supervisory/administrative structure and put it into practice.

Recommendation #3 Overall Evaluation (please select your choice).

Good Progress	3
Making Progress	2
Little/No Progress	0

Comments related to recommendation #3
- The program made good progress in collecting and using assessment data, incorporating the inputs from the coordinator meetings and steering committee meetings
- One aspect that could have been better highlighted is how the steering committee and program coordinators are systematically utilizing data.
- Provide examples of program changes based on the data.

Recommendation #4

Continue to work with the deans to obtain and maintain needed resources to support the program.

Recommendation #4 Overall Evaluation (please select your choice).

Good Progress	3
Making Progress	2
Little/No Progress	0

Comments related to recommendation #4
- It seems that the lack of a "home department" is of concern for a "social environment." The report mentions "assessment activities" but the review team are not sure of what that means and how it can create the social environment for the students.
- Is there any student organization, which can make the students feel more connected?
- What is the program's plan in general to address the concerns related to the "lack of home department"?

Recommendations for next review. Additional progress reports required?

Yes, Please List Due Dates (e.g. in 1 year, 2 years)?	2

No | 3

Next report should specifically address the following:
- Demonstrate how data is being utilized to make decisions on curriculum, particularly with the ETS data and the student survey data
- Continue to gather data on the SLOs, including cours embedded assessment data
- Develop specific action plans to create the social enviorment for the students.

Additional comments:
- The review team think that the program has put much thought into the assessment aspect of the recommendations...so kudos to you!
- The review team highly appreciate the work and effort put in the development of assessment for one of the most vital programs on campus.
- The program is doing a good job being inclusive of both colleges with an integrative focus on the subject.
- I think the need for support should be emphasized to the deans more.
- Course releases provide the time needed for conducting the administrative duties. I think, however, that more support and resources need to be put into securing (paid?) internships for students. I am adding this note because I think that Appendix L might be missing (Student Internship Evaluation).

** No further progress reports required. Next full Self-Study is due to the Dean of the College of Letters & Sciences and the Dean of the College of Business & Economics by October 1, 2020 and to the A&R Committee by November 1, 2020.

Audit and Review

Discussion of the Progress Report Submitted February 7, 2019 by

Integrated Science and Business

April 19, 2019
1:30-3:00 pm
Laurentide 1015

Attendance: Yeongmin Kim (Review Team Chair), Hephzibah Kumpaty (ISB-BS coordinator), Dennis Kopf (ISB-BBA coordinator), S.A. Welch, and Andrea Ednie.

We discussed the review team's comments related to the progress report submitted February 7, 2019 by the Integrated Science and Business (ISB) program.

The program made good progress in developing assessment tools and scoring rubrics. One of the questions from the review team is how the data gathered are used to make changes to the program. The program coordinators acknowledged the need to refine the process in which data are used to inform the program changes and shared that they will discuss this more in the fall semester. The coordinators also agreed that they will explain what the program has been doing and will do for this matter in the next self-study.

The coordinators shared more information on why they started to use the ETS data and what is their plan to use the data to improve the program. The ETS data serve one of the main outside measures to assess quantitative reasoning and critical thinking. The review team and the coordinators discussed ways to use the data, including comparing the program's score to other institutions or doing pre and post comparisons. We also discussed how the data can be used to improve course curriculum.

The review team asked about the rationale for dropping some of the courses from the curriculum. The coordinators explained that it was suggested by the previous review and it was mostly an administrative decision to streamline the curriculum.

The coordinators shared that they will explain more specifically how they share the outcome data with the steering committee and other constituents in the full self-study. Another suggestion from the review team was to address a concern for a "social environment" for students. Coordinators shared the need to create social spaces and opportunities for students and mentioned that conversation is ongoing including the development of an ISB Student Council. A few other ideas were discussed including putting the program name on the coordinators' office doors, creating a physical space for students, and using social media to make the program more visible online.

Finally, we discussed the potential benefits of having a team of program faculty attend the summer Assessment Institute, and also the development of a table to show how each of the outcome measures is aligning with SLOs.

 ** No further progress reports required. Next full Self-Study is due to the Dean of the College of Letters & Sciences and the Dean of the College of Business & Economics by October 1, 2020 and to the A&R Committee by November 1, 2020.