I. OVERVIEW

This document provides a draft of the Learning for Life (L4L) program, the program proposed by the Core Reform Task Force to replace Boise State’s current Core curriculum. As a sketch, many of the important details are to be determined; however, it is sufficiently complete and detailed to serve its intended purposes of deliberation and further development.

The L4L program emerges from a multi-year process orchestrated by the Core Reform Task Force, which included regular Task Force meetings, open fora for faculty and staff, targeted meetings with faculty and administrators, examination of various programs around the country, and consultations with experts in general education requirements in higher ed.¹

The Task Force’s goal was to develop a highly effective general education program, one that is demonstrably valuable to Boise State undergraduates, and one that addresses the shortcomings of the current Core curriculum that are identified in the Task Force’s 2009 Progress Report: lack of vision, inadequate coherence and oversight at the curricular level, and insufficient attention to outcomes and assessment at the course level. (See Section II of the Progress Report.)²

The balance of this document describes the details of the L4L program, but its distinguishing features and benefits are summarized in the table below.

<table>
<thead>
<tr>
<th>Feature</th>
<th>Benefit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Courses structured around a small number of specific, clearly-articulated learning outcomes</td>
<td>Inspires confidence that the goals of general education are being met; simpler and more clear for instructors and students</td>
</tr>
<tr>
<td>More inclusive learning outcomes: ethics, diversity and internationalization, teamwork and innovation</td>
<td>Fully integrates highly valuable and sought-after traits into the program; not tacked on as afterthoughts</td>
</tr>
<tr>
<td>Built-in assessment process for key learning outcomes</td>
<td>Fosters efficient program review for improvement and accreditation</td>
</tr>
<tr>
<td>Freshman seminar, learning communities, service learning, capstone experience</td>
<td>Increases student success and retention</td>
</tr>
</tbody>
</table>

¹ http://academics.boisestate.edu/provost/core-reform-task-force/
Connections between gen-ed program and majors | Yields a more coherent academic experience for students and instructors
---|---
Coordination with Student Affairs to develop a co-curricular “transcript”/portrait | Documents leadership and community service experiences for prospective employers

II. GUIDING PHILOSOPHY AND LEARNING OUTCOMES

**Catalog Statement:** Boise State’s L4L program is designed to provide a transformative experience for every student through sustained inquiry. As members of a community of learners actively addressing enduring questions and timely problems, students will develop intellectual and practical skills and will acquire integrated knowledge of human cultures and the natural world within a context of ethical behavior and global responsibility.

This guiding philosophy is realized in eleven University learning outcomes (ULO’s), which every Boise State graduate is expected to have met, regardless of major or baccalaureate degree.

<table>
<thead>
<tr>
<th>L4L Program University Learning Outcomes</th>
<th>Shorthand/Cluster</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Communicate effectively in writing, both as author and critical reader.</td>
<td>Writing</td>
</tr>
<tr>
<td>2. Communicate effectively in speech, both as speaker and listener.</td>
<td>Oral Communication</td>
</tr>
<tr>
<td>3. Engage in effective critical inquiry by defining problems, gathering and evaluating evidence, and determining the adequacy of argumentative discourse.</td>
<td>Critical Inquiry</td>
</tr>
<tr>
<td>4. As a team member, think creatively about complex problems in order to produce, evaluate, and implement innovative possible solutions.</td>
<td>Innovation &amp; Teamwork</td>
</tr>
<tr>
<td>5. Analyze ethical issues in personal, professional, and civic life and produce reasoned evaluations of competing value systems and ethical claims.</td>
<td>Ethics</td>
</tr>
<tr>
<td>6. Apply knowledge of cultural differences to matters of local, regional, national, and international importance, including political, economic, and environmental issues.</td>
<td>Diversity &amp; Internationalization</td>
</tr>
<tr>
<td>7. Apply knowledge and the methods of reasoning distinctive of mathematics, statistics, and other formal systems.</td>
<td>Mathematics</td>
</tr>
<tr>
<td>8. Apply knowledge and the methods of scientific inquiry to think critically about and solve theoretical and practical problems rooted in the natural and physical sciences.</td>
<td>Natural &amp; Physical Sciences</td>
</tr>
<tr>
<td>9. Apply knowledge and methods characteristic of the arts to explain and appreciate the significance of aesthetic products and creative processes.</td>
<td>Arts</td>
</tr>
<tr>
<td>10. Apply knowledge and the methods of inquiry characteristic of the humanities to address enduring questions about the human condition.</td>
<td>Humanities</td>
</tr>
<tr>
<td>11. Apply knowledge and the methods of inquiry characteristic of the social sciences to explain and evaluate human behavior and societies in their historical context.</td>
<td>Social Sciences</td>
</tr>
</tbody>
</table>

These were inspired by the AAC&U’s “LEAP” framework: http://www.aacu.org/leap/index.cfm
ULO’s 1-6 are skills- and competency-based outcomes that are developed throughout the academic career and in multiple courses and contexts.

ULO’s 7-11 are associated with disciplinary course clusters (e.g., “Arts”), representing perspectives to be encountered during a student’s academic career.

III. SUPPORT STRUCTURES FOR THE LEARNING OUTCOMES

The eleven learning outcomes are supported primarily by traditional coursework, but also by co-curricular activities. We discuss each of these in turn.

There are four types of courses that support the ULO’s: ENGL courses, Learning for Life (L4L) courses, Communication in the Discipline (CID) courses, and Disciplinary Lenses courses (DL). All but the first type are new course designations.

- ENGL 101 and 102 support ULO 1 (Writing).
- Each L4L course supports a combination of ULO’s 1-6 (Foundational Life Skills and Civic Competencies – the precise combinations are described below).
- CID courses are courses within the major at the 200-level or above that support ULO’s 1 and 2 (Writing and Oral Communication).
- Each DL course simultaneously supports one of ULO’s 7-11 and one of ULO’s 1-6.

All course types are organized around carefully-articulated, course-level learning outcomes with associated assessment rubrics designed to determine a student’s level of success in achieving the target outcome(s). (See Appendix A for a sample rubric from the AAC&U “VALUE” project.)

A. Communication Courses

1. **ENGL101 / ENGL102**

A foundation for university and lifelong writing. Many ENGL101/102 courses would be linked to L4L 100 in a learning community model.

2. **Communication in the Discipline (CID)**

A course in the major at the 200-level or above focused on written and oral communication as they are practiced within the discipline. The Boise State Curriculum Committee’s subcommittee on Communication (see Section V below) would develop criteria and approve courses in the major that could have the CID designation. These courses would be designed for students who have successfully completed ENGL 101/102 and provide them with the opportunity to build upon the foundation established therein.

B. **Learning for Life (L4L) Courses**

This sequence of three courses is designed to support ULO’s 1-6, the foundational life skills and civic competencies.

- **L4L 100**: a first-year seminar for freshman (L4L 301 for State Board core-certified transfer students)
- **L4L 200**: a sophomore course (L4L 302 for State Board core-certified transfer students)
- **L4L 400**: a senior capstone experience offered by the department or college

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4 Many, but not all. Students who place out of ENGL 101/102 will still need to take L4L 100.
1. **L4L 100/301: Asking Questions**
   - Three credit course required of all freshmen (L4L 100) and all new State Board core-certified transfer students (L4L 301) within the first 24 credits taken at Boise State; introduces students to the value of a liberal education and the role of the program in their undergraduate career
   - Supports ULO’s 3, 4, 5
   - Envisioned as large, one-credit lecture sections (~200 students) with small, two-credit discussion sections (~25 students) and web-based components linked to ENGL 101/102 sections
   - Lecture sections structured according to a “4x4x4” model: the semester is divided into four four-week parcels; faculty from four different disciplines cycle through a quartet of sections for four-member interdisciplinary team teaching
   - Discussion sections emphasize team problem-solving
   - Taught by L4L faculty (see Section VI below)
   - Would incorporate the First Year Read book and program in some way
   - Organized around overarching questions: What does it mean to be engaged in inquiry? How do different disciplines investigate similar issues? What are the ethical implications of inquiry?
   - Variable topics of inquiry proposed by faculty, such as global sustainability, the world economy, infinity, water, etc.  
   - Students introduced to course portfolios, which are used intentionally to track student progress with respect to the ULO’s being supported in L4L 100/301 and in L4L 200/302

2. **L4L 200/302: In Community**
   - Three credit course required of all first-time sophomores (L4L 200) and all State Board core-certified transfer students who have earned credit for L4L 301 (L4L 302) with 26-57 total credits earned.
   - Support ULO’s 1, 2, 6
   - Medium-sized classes (~40 students) typically in standard face-to-face format; hybrid option possible
   - Documentation of co-curricular activity is required of every student – service learning experience, engagement in student leadership, etc.
   - Courses developed by faculty to meet stated learning objectives, approved by curriculum committee.
   - Taught by L4L faculty (see Section VI below)
   - Portfolios from L4L 100/301 are expanded and enhanced

3. **L4L 400: Finding Answers, Crafting Solutions**
   - 1-3 credit course, taken in final 20 credits (minimum of 108 credits completed)
   - Course title will bear a departmentally-determined subtitle – for example, “L4L 400: Senior Thesis in Psychology”
   - Support ULO’s 1, 3, and 4 (focusing particularly on the innovation element in 4)
   - Capstone or culminating experience intended for students to apply discipline and multidisciplinary knowledge and foundational skills – this capstone could exist within a major or at the College level

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5 Other examples, drawn from UCLA’s freshman seminar clusters for the 2010 year include “Frontiers in Human Aging: Biomedical, Social and Policy Perspectives”; “Sex: from Biology to Gendered Society”; “America in the Sixties: Politics, Society and Culture 1954-1974”.

L4L Program 4
• Departments would be encouraged to take their current capstone courses and convert them to this format – team teaching and community-based projects would be highly desirable, where applicable
• Boise State Curriculum Committee (see Section V below) would review course assessment portfolios each year, showing student work measured against the learning outcomes; each course would submit materials each year, and assessment would focus on departmentally-defined outcomes (or those defined at the college level).

C. Disciplinary Lens (DL) Courses

The title “Disciplinary Lens” is intended to highlight the belief that different disciplines maintain distinctive methods and perspectives; a familiarity with multiple perspectives is necessary in order to approach having a complete “picture” of the human condition and the world that we inhabit.

These courses resemble the courses that populate the current Core curriculum in that their content and methodology are situated squarely within the discipline of the department offering the course. For example, we envision CHEM 101, COMM 101, HIST 101, MATH 124, PHYS 100, PHIL 101, SOC 101, and a host of other Core courses transitioning into one of the DL course clusters.

Despite the fundamental similarities between the DL portion of the L4L program and current Core courses, there also several important differences:

1. Every academic unit on campus is strongly encouraged to offer at least one DL section per semester.
2. Departments must design DL courses for broad appeal and academic value beyond their own majors, rather than as foundations courses for majors.
3. Like their L4L course counterparts, DL courses are designed to serve carefully-articulated disciplinary cluster rubrics (i.e., a rubric for one of ULO’s 7-11. See Appendix B for a sample rubric and course design plan for ULO 8.)
4. Additionally, each DL course must address one of the ULO’s 1-6 (e.g., a DLS-COMM 101 course would obviously serve ULO 2).
5. Over time, pairs or trios of DL courses will be conjoined to form learning communities.

Difference (1) acknowledges the potential relevance of every academic discipline to undergraduate education and is intended to correct the longstanding but mistaken expectation that only “liberal arts departments” can contribute to a liberal education.

Difference (2) is intended to address “gateway syndrome”, a condition affecting students taking a Core course outside of the area of their major when the course in question functions as a foundations course for its associated major. Such students rarely develop a lasting appreciation for the significance of the discipline and frequently express bewilderment in the fact that they are required to take such courses. Some instructors dilute the content to better serve non-majors, but this compromise rarely serves either majors or non-majors well. Ideally, DL courses should be conceived not as introductory courses, but rather as terminal courses, since it is likely that each DL course will be the only course in that particular discipline that is taken by many of the students.

Difference (3) is intended to ensure that the course in question does indeed expose the students to the concepts, bodies of knowledge, and methods that are distinctive of the discipline. It is also intended to facilitate meaningful and efficient assessment. (See Section V below.)
Difference (4) is intended to strengthen and deepen the skills and competencies embodied in ULO’s 1-6, which are by design outcomes “to be developed over time and in multiple contexts.”

Difference (5) is intended to capitalize on a highly effective pedagogical practice.

It is envisioned that courses within a particular cluster could come from any discipline, provided that the cluster’s learning outcomes are integrated into the course outcomes and the associated assessment rubric is demonstrably employed in evaluating coursework. For example, the L4L program will permit an appropriately designed course offered by Kinesiology to be a member of the DLN cluster (Natural Sciences), and a course offered by a Health Sciences department might well be a member of the DLS cluster (Social Sciences).

D. Co-Curricular Activities

In addition to traditional coursework, certain ULO’s will be supported by co-curricular activities. Familiar examples of such activities are service learning projects, internships, and credit for prior learning. Beyond these examples, however, many students participate in activities that are not credit-bearing, but which are nonetheless quite relevant to the larger goals embodied in the institution’s mission and, more specifically, to the intended outcomes of the L4L program.

To date, the University has had no means to assess or document such activities and (relatedly) little way of providing additional motivation for students to participate in them. The Division of Student Affairs has proposed creating co-curricular student “profiles” as a way of addressing this need. Co-curricular profiles are supplements to the official academic transcript, not a proper part of the transcript. The activities and experiences documented in such a profile could span a broad range of possibilities: participation in student government or other campus organization, attending lectures or taking part in other events on campus, engaging in community service, and so on. Student Affairs would coordinate with the L4L Program Office (see Section V below) to review and approve proposed elements of the co-curricular profile and to develop mechanism of assessment; Student Affairs would be charged with conducting the assessment and maintaining the profile.

IV. CORE VS. L4L CREDIT LOADS

The typical Core credit load compares to that of the L4L program as follows:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 102</td>
<td>3</td>
</tr>
<tr>
<td>Area I</td>
<td>12</td>
</tr>
<tr>
<td>Area II</td>
<td>12</td>
</tr>
<tr>
<td>Area III (incl. Math)</td>
<td>11-13</td>
</tr>
<tr>
<td>Total</td>
<td>41-43</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>L4L 100</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 101</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 102</td>
<td>3</td>
</tr>
<tr>
<td>Area I</td>
<td>12</td>
</tr>
<tr>
<td>Area II</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CID</td>
<td>3</td>
</tr>
<tr>
<td>DLM (Mathematics)</td>
<td>3-5</td>
</tr>
<tr>
<td>DLN (Nat. Sciences)</td>
<td>7</td>
</tr>
<tr>
<td>DLA (Arts)</td>
<td>3</td>
</tr>
<tr>
<td>DLH (Humanities)</td>
<td>3</td>
</tr>
<tr>
<td>DLS (Soc. Sciences)</td>
<td>6</td>
</tr>
<tr>
<td>L4L 400</td>
<td>1-3</td>
</tr>
<tr>
<td>Total</td>
<td>38-42</td>
</tr>
</tbody>
</table>

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6 This requirement will typically also meet a requirement within the major.
7 At least one of the two courses taken within the DLN cluster must have a laboratory component.
As these figures show, the credit load for the L4L program represents a slight reduction from the current Core curriculum, but it remains in compliance with the Idaho State Board of Education Governing Policies and Procedures, Section III, Subsection V (“Articulation and Associate Degree Policy”), which requires a minimum of 36 credits.

There are several noteworthy facts about the L4L credit load as it compares to the State Board requirements and the current Core:

- The Core curriculum requires the minimum number of credits in Mathematics and Natural Sciences required by the State Board but exceeds those requirements for Arts, Humanities, and Social Sciences by 12 credits. Consequently, the credit load borne by L4L courses and CID courses is counteracted by a reduced credit load for Arts, Humanities, and Social Sciences. (See Section VI below.)
- Some degree programs already include courses that would satisfy the CID requirement. For those that do not, it is likely that at least one required course within the major would be a candidate for modification to meet the requirement.
- Similarly, the L4L 400 requirement would probably be satisfied by existing courses in well over half of the fifty-odd baccalaureate degree programs offered (ignoring various emphases and sub-programs). Some modification of course structure or requirements would undoubtedly be necessary in some cases. Those programs with no capstone experience of any form would be required to create one that is consistent with the L4L guidelines.
- Academic departments will have the opportunity to apply to have a limited number of DL courses waived for students in their majors. Such waivers will be granted if the department can show department assessment results that indicate that students meet the university learning outcome(s) supported by the DL courses in question. For example, the department of Civil Engineering might apply for and be granted a waiver of DLN (Natural/Physical Sciences) and DLM (Mathematics) courses if assessment results can show that students are supported to meet ULO’s 7 and 8 through the course of their major study.
- Programs would remain free both to require specific courses within disciplinary clusters (e.g., History within DLS or Literature within DLH) and to impose additional requirements over the minimum requirements specified in the L4L program.

In these respects, while the credit load associated with the L4L program is not significantly smaller than that associated with the current Core, it loads those credits more efficiently. Thus, it should result in an overall reduction in the number of gen-ed-specific sections required for a student body of fixed size and should, on average, should expedite students’ academic careers.

V. ADMINISTRATION

The current Core curriculum at Boise State is fully distributed: Core courses are designed, delivered, and assessed (with the aid of the Core Curriculum Committee) by independent academic units with relatively little oversight. Many of the undesirable features of the current Core identified in the Task Force’s Progress Report can be traced to the distributed nature of the Core.

The L4L Program is a hybrid in terms of centralization: DL courses are owned by individual academic units, whereas L4L courses are developed and taught by L4L faculty with centralized
oversight and support. The goal of the Learning for Life Program administrative structure is to place faculty at the center of program development, approval, assessment and instruction while providing leadership, stature, incentive, and resources for collaboration and the successful implementation of the program.

In order to provide the ongoing oversight and leadership necessary for the success of the proposed program, the Core Reform Task Force recommends that the position of Learning for Life Program Director be created. The duties of the L4L Director would include:

- Cooperate with department chairs to recruit faculty to teach in the program (see Section VI below)
- Collaborate with the Center for Teaching and Learning to provide appropriate professional development to L4L program faculty
- Shepherd courses through the administrative approval process
- Oversee the assessment process and help to create clear standards and processes for assessment, recruit people to conduct the assessment and document the results.
- Coordinate with the faculty serving on the various committees
- Track and distribute funds to support faculty teaching in the L4L program inclusive of replacement costs and adjunct hiring
- Function as Department Chair for routine administrative student issues (reviewing academic adjustments, addressing concerns in a L4L course, etc.)
- Review student teaching evaluations of L4L courses
- Conduct annual performance reviews for L4L program faculty

The office for the L4L Program Director should be centrally located on campus, probably in the Administration building, since some staff support will be provided by the office of the Vice Provost for Undergraduate Studies. The Director will report to the Vice Provost and should meet regularly with the Deans Council to ensure support for the program.

With such oversight, some existing committee structures could be streamlined. As one possibility, the University Curriculum Committee and the Core Curriculum Committee could merge into one body called “Boise State Curriculum Committee”. This committee could have subcommittees for various functions and foci. The subcommittees might include: (1) L4L 100/301; (2) L4L 200/302, inclusive of approving courses, assessing outcomes and approving “significant community experiences”; (3) DL clusters to identify outcomes, approve cluster courses and assess outcomes of courses; (4) L4L 400 approval of program culminating experiences; (5) ULO’s assessment (with support of institutional research); and (6) overall curriculum approval (which currently falls to the University Curriculum Committee).

The L4L Director and program faculty should adopt continuous improvement as their fundamental, guiding principle. As a group, they must realize that the L4L program will require regular revision, and these changes should be made based on assessment results.

VI. STAFFING

L4L and DL courses incur different staffing needs. Given that L4L courses are proposed by faculty and administered centrally, and are central to a student’s education at Boise State, it is
crucial that the courses be taught by highly motivated and innovative faculty with a strong commitment to effective pedagogy.

- L4L 100 and 200 courses (301 and 302 for transfer students) will be taught by Learning for Life faculty, who are committed to achieving the ULO’s via the L4L Program and department curricula.
- L4L 400 and CID courses will be delivered at the unit level with oversight by the Learning for Life Director.
- Learning for Life faculty will be "recruited" from Boise State departments by the L4L Coordinator and will serve three-year terms (renewable) in the program while also holding joint appointments in their home department.
- Division of workload units devoted to teaching will be negotiated by the candidate faculty member, his or her Chair, and the L4L Director.
- Modification of faculty evaluation procedures (and in particular, tenure and promotion criteria) will be required.
- Adjunct faculty could also apply to be Learning for Life faculty and be selected on the basis of established criteria.
- Eligibility criteria will be established by L4L faculty committees to identify faculty with the necessary experiences, skill and motivations to teach L4L courses.
- Professional development programming offered by the CTL would be required of all first-time L4L faculty.
- Faculty in L4L would retain their normal salary, and replacement money would be transferred to the home department to defray the instructional expenses resulting from the faculty member’s reassignment and to compensate the department for their contribution to the program. (See Section VIII below.)
- L4L faculty would form a community of practitioners, attend course design and assessment workshops, and rotate on/off of helping with the assessment.
- It is highly desirable that L4L faculty represent a wide variety of disciplines.

Staffing of DL courses remains within departmental purview. In signing on to teach a DL course, an instructor thereby agrees to support and assess the specified ULO’s for the course in question. Noteworthy considerations:

- The reduction of total credits moving from Core to L4L would very likely reduce typical student FTE loads for some academic units.
- The requirement of L4L courses should further reduce student FTE loads for those units (though it’s likely that some of the department’s faculty will be hired to teach L4L courses).
- Since every academic unit on campus is encouraged to offer at least one DL course per semester, departments that have not historically contributed to the Core will contribute to the L4L program, both to enrich educational opportunities for students and to further integrate the department’s programs with the undergraduate curriculum.
- Those programs that decouple their DL courses from the major will be free to make their traditional lower-division courses (which formerly served as watered-down gateway courses) more rigorous, providing opportunities to streamline programs.

The “transfer” of 12 credits from Area I and Area II Core to L4L courses will have two important consequences: student demand for classes in the Arts, Humanities, and Social Sciences will decline, and the resulting increase in instructional capacity from those areas will be applied to L4L courses. The following represents one natural projection of shift in student demand from Core to L4L.
ENGL 101/102: no change – Core meets minimum State Board requirements
Mathematics: little change – Core meets minimum State Board requirements
Natural/Physical Sciences: little change – Core meets minimum State Board requirements
Arts & Humanities: 30% of current demand likely to be redirected to L4L courses
Social Sciences: 30% of current demand likely to be redirected to L4L courses

“Little” change (rather than none) is projected for Mathematics and the Natural/Physical Sciences on account of the fact that classes with a prefix other than MATH might be included in the DLM course cluster, and similar considerations apply to the DLN cluster.

In practical terms, departments currently contributing to Area I and Area II of the Core curriculum should expect to see a reduction in demand for seats filled in satisfaction of the “core course in third/any field” requirement specified in the catalog degree tables.

The lower-division L4L courses that take up the slack the Area I and Area II demand will surely include methods, content, and experiences that are included in traditional Arts and Humanities and Social Sciences classes, and so advocates for the importance of those disciplinary perspectives (as many of us are) should take particular interest in the development and delivery of L4L 100/301 and 200/302. None of these courses will focus exclusively on any particular discipline, however, since they are by design interdisciplinary.

VII. COURSE APPROVAL AND ASSESSMENT

Within the L4L program, assessment and course approval go hand-in-hand. By organizing a course around a set of meaningful course-level outcomes that are linked to an assessment rubric, an instructor simultaneously commends the value of the course for its intended purpose and also prepares the ground for efficient and effective assessment without the need for external “auditors” (e.g., the Core Curriculum Committee).

A. Course Approval

• For each of the skills- and competencies-based ULO’s (1-6) a committee of L4L faculty will be charged with designing an assessment rubric for their respective ULO’s. These rubrics will be approved by the relevant subcommittee of the Boise State Curriculum Committee.
• L4L courses are developed and proposed by faculty across departments and colleges, and approved by the subcommittee mentioned above.
• Ad hoc committees of disciplinary experts will be formed and charged with designing an assessment rubric for each of the ULO’s in 7-11, which will be reviewed and approved by the subcommittee mentioned above.
• Courses are admitted into the DL portion of the L4L program by applying to be included in one of the five disciplinary clusters, a process overseen by the Boise State Curriculum Committee in consultation with the L4L Coordinator.
• DL course approval should be conducted with a view to represent as many of ULO’s 1-6 as possible within each disciplinary cluster. When necessary, the committee may solicit proposals for DL courses that specifically serve an under-represented foundational or civic ULO.

L4L Program 10
B. Assessment

Poorly designed and poorly administered assessment has the potential to be tedious and of dubious value, especially when it is “tacked on” to courses after the fact and when the instruments and strategies used are unwieldy or of suspect quality. Yet it is absolutely crucial that we, as instructors and an institution, investigate and gather evidence about the extent to which our classes and degree programs are preparing students for life beyond campus, and then use that information to make changes and improvements. Therefore, it is imperative that manageable and meaningful assessment processes be employed throughout our general education program.

In order for the process to be manageable, it should be built into the course structure from the outset, rather than being layered on as an additional exercise. In order for the process to deliver meaningful results, it must be designed around carefully-crafted learning outcomes.

For each ULO, specific assessment rubrics will be used to determine to what degree the student satisfies the outcome in question. These rubrics will be provided to L4L and DL course developers and instructors, and their implementation should be integrated into the assessment of course activities. Results will facilitate not only grade assignments for individual students, but also course assessment. Instructors of both L4L and DL courses will submit materials each January and May for Fall and Spring courses, respectively. Assessment results would be compiled and analyzed each summer by committee under the supervision of the L4L Director. During the academic year, the Boise State Curriculum Committee would be involved in supporting the mechanics of course approval and assessment.

In the future, it would be highly desirable to move to a program in which each student maintains an undergraduate portfolio (perhaps in electronic form) that includes documents demonstrating their satisfaction of each learning outcome. From the student perspective, such portfolios could serve as valuable supplements to the traditional application materials provided to prospective employers. From the departmental perspective, they would function as a durable record of student achievement and facilitate more meaningful program assessment.

VIII. INSTRUCTIONAL RESOURCE REQUIREMENTS

Projected resource requirements for the L4L program are based on the current Core profile and a set of simplifying assumptions. The projections are inherently rough, and more so to whatever extent the simplifying assumptions differ from the conditions that obtain when the program is realized.

A. Current Core Semester Profile (figures from FA 2009)\(^8\)

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Core sections offered:</td>
<td>522</td>
</tr>
<tr>
<td>Total enrollment for all Core sections:</td>
<td>25,836</td>
</tr>
<tr>
<td>Mean enrollment for Core sections:</td>
<td>62</td>
</tr>
<tr>
<td>Total credit hours for all Core sections:</td>
<td>67,904</td>
</tr>
</tbody>
</table>

\(^8\) Figure are based on all on-campus Core offerings (including labs but excluding ENGL 101/102) scheduled between 7:40 a.m. Monday and 5:00 p.m. Friday, including lab sections – that is, on all non-Extended-Studies-funded Core sections.
Degree-seeking first-time, full-time admits: 2,194
Degree-seeking transfer students: 995

A260 funds for Core instruction: $1,467,000

B. Projected L4L Profile

Simplifying assumptions:
1. Any reduction in mean credits earned will be largely offset by increased retention
2. Current balance of Extended Studies/non-ES offerings will be preserved
3. Current balance of tenure-track / Special Lecturer / adjunct / G.A. instruction will be preserved
4. Mean enrollment for individual DL sections will approximate mean enrollment for current Core sections
5. For first several years of L4L implementation, departmental DL course offerings will approximate, but will not exceed, traditional Core offerings (except for those departments with no prior record of offering Core courses that opt in)
6. Participation in the L4L program will be incentivized by a revenue sharing program modeled after the one in place for summer courses offered by Extended Studies, whereby participating departments are rewarded on a per-seat basis.

Instructional costs per semester for the L4L program

<table>
<thead>
<tr>
<th>Course</th>
<th># Sections</th>
<th>Credits</th>
<th>Mean Enroll.</th>
<th>Credit hr.</th>
<th>Est. Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>L4L 100/301</td>
<td>16 lecture</td>
<td>1 cr.</td>
<td>200</td>
<td>3,200</td>
<td>$15,000</td>
</tr>
<tr>
<td></td>
<td>128 discussion</td>
<td>2 cr.</td>
<td>25</td>
<td>6,400</td>
<td>$233,000</td>
</tr>
<tr>
<td>L4L 200/302</td>
<td>60</td>
<td>3 cr.</td>
<td>40</td>
<td>7,200</td>
<td>$164,000</td>
</tr>
<tr>
<td>L4L 400</td>
<td>Variable</td>
<td>1-3 cr.</td>
<td>Variable</td>
<td>3,000</td>
<td>$0</td>
</tr>
<tr>
<td>CID Courses</td>
<td>Variable</td>
<td>3 cr. (typical)</td>
<td>Variable</td>
<td>4,500</td>
<td>$0</td>
</tr>
<tr>
<td>DL courses</td>
<td>243</td>
<td>3 cr. (typical)</td>
<td>60</td>
<td>43,650</td>
<td>$300,000</td>
</tr>
<tr>
<td><strong>Semester Total</strong></td>
<td></td>
<td></td>
<td><strong>67,950</strong></td>
<td><strong>$712,000</strong></td>
<td></td>
</tr>
</tbody>
</table>

**AY Total:** $1,424,000

---

9 Total FY10 A260 instructional funding from Vice Provost’s office less funding for ENGL 101/102.
10 Figures for L4L 100/301 based on FA09 degree-seeking new enrollees, both first-time and transfer; L4L 200/302 assumes 75% retention from first to second year; DL section numbers interpolated from all credit hour figures above to reach current Core credit hour production of ~ 68,000.
11 Credit hours for L4L 400 and CID based on averaged end of term graduation reports from SP09, SU09, and FA09; mean credit load for L4L 400 is assumed 2 cr. per course.
12 Figures do not include Regular Salaries funds for tenured or tenure-track faculty, Special Lecturers, or graduate assistants, since it is assumed (see simplifying assumption #3) that these groups will continue to deliver approximately 55% of the general education courses.
13 L4L 100/301, 200/302 funding calculated at $911/cr. hr. per section; DL funding figures calculated in same fashion, where multiplier is 45% of total number of sections (.45 x 243 = 109) to approximate current Core instruction by adjunct faculty.
14 By the 4x4x4 model described in Section III above, these 16 sections would be divided into four quartets of sections within each of which four L4L faculty lecturers would cycle throughout the semester, spending roughly four weeks in each section of the quartet.
Unsurprisingly, the instructional costs associated with the L4L program do not differ dramatically from the cost of delivering the current Core curriculum, since there is neither a significant reduction nor increase in instructional capacity proposed.

There are, however, anticipated expenses associated with course and faculty development, summer assessment activities, along with various others. The funds currently appropriated to the Center for Teaching and Learning for faculty development and the A260 funds for instructions will be incorporated into the L4L administrative structure. The relationship with the Provost's Office and the faculty will provide the blended support that maintains, supports, and cultivates faculty oversight of general education while providing the visibility warranted of a program that supports university level learning outcomes.

IX. IMPLEMENTATION

Because University policy allows students to graduate under any catalog within the last six academic years, a full transition to the L4L program will last approximately 6 years. The table below outlines one possible scenario for the transition that will also provide for students who do complete programs within 4 academic years to be accommodated within the new L4L program. It may be possible that a hybrid transitional program will be needed for transfer students who enroll at Boise State under the new program but would be on a schedule to graduate before all the program components have been implemented.

<table>
<thead>
<tr>
<th>Year</th>
<th>Planning</th>
<th>New Courses offered</th>
<th>Staffing Actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010-2011</td>
<td>L4L 100/301 course design &amp; approval; Core courses converted to DL courses(^{15}); degree program revision</td>
<td>None</td>
<td>Committee structures altered(^{16}); L4L Director and staff hired; begin hiring and training L4L faculty; training for DL instructors(^{17})</td>
</tr>
<tr>
<td>2011-2012</td>
<td>L4L 200/302 &amp; CID course design and approval(^{18}); track DL course demand and adjust offerings</td>
<td>L4L 100/301 DL courses</td>
<td>L4L offerings reduce Core demand at dept. level; displaced adjunct faculty reassigned to L4L sections; continued training for L4L and DL instructors; training for CID instructors</td>
</tr>
<tr>
<td>2012-2013</td>
<td>L4L 400 course design and approval; continued adjustment of DL offerings</td>
<td>L4L 200/302 CID courses</td>
<td>Additional instructor “migration” from dept. Core offerings to L4L courses</td>
</tr>
</tbody>
</table>

\(^{15}\) Departments might choose not to redesign all Core courses to meet the DL course designation; these courses would continue to meet the Core requirements for students graduating under old catalogs. Course design/conversion will be facilitated by the CTL.

\(^{16}\) Careful consideration must be given to how the committee structure will manage the transition period.

\(^{17}\) Instructor training will be facilitated by the CTL.

\(^{18}\) Staff in the First Year Writing Program will facilitate CID course design and instructor training.
<table>
<thead>
<tr>
<th>Year</th>
<th>Program</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013-2014</td>
<td>L4L 400</td>
<td>L4L “equilibrium” achieved</td>
</tr>
<tr>
<td>2014-2015</td>
<td></td>
<td>All components of L4L program in place</td>
</tr>
<tr>
<td>2015-2016</td>
<td></td>
<td>Same as previous year; phase-out year for courses with the “Core” designation</td>
</tr>
</tbody>
</table>
### Ethical Self Identity
- **4** Consistently:
  - Able to articulate one’s ethical beliefs and approach to ethical decisions
  - Able to explain the social influences on one’s ethical identity
  - Able to describe and analyze significant personal ethical decisions

- **3** Frequently:
  - Able to articulate one’s ethical beliefs and approach to ethical decisions
  - Able to explain the social influences on one’s ethical identity
  - Able to describe and analyze significant personal ethical decisions

- **2** Sometimes:
  - Able to articulate one’s ethical beliefs and approach to ethical decisions
  - Able to explain the social influences on one’s ethical identity
  - Able to describe and analyze significant personal ethical decisions

- **1** Rarely:
  - Able to articulate one’s ethical beliefs and approach to ethical decisions
  - Able to explain the social influences on one’s ethical identity
  - Able to describe and analyze significant personal ethical decisions

### Ethical Issue Recognition
- **4** Consistently:
  - Able to recognize ethical issues in personal, professional and civic life
  - Able to identify competing values in ethical dilemmas
  - Able to distinguish between factual and ethical claims

- **3** Frequently:
  - Able to recognize ethical issues in personal, professional and civic life
  - Able to identify competing values in ethical dilemmas
  - Able to distinguish between factual and ethical claims

- **2** Sometimes:
  - Able to recognize ethical issues in personal, professional and civic life
  - Able to identify competing values in ethical dilemmas
  - Able to distinguish between factual and ethical claims

- **1** Rarely:
  - Able to recognize ethical issues in personal, professional and civic life
  - Able to identify competing values in ethical dilemmas
  - Able to distinguish between factual and ethical claims

### Understanding Different Ethical Perspectives
- **4** Consistently:
  - Able to understand different ethical perspectives and ethical concepts
  - Able to identify stakeholders’ interests
  - Able to apply different ethical perspectives to specific ethical dilemmas

- **3** Frequently:
  - Able to understand different ethical perspectives and ethical concepts
  - Able to identify stakeholders’ interests
  - Able to apply different ethical perspectives to specific ethical dilemmas

- **2** Sometimes:
  - Able to understand different ethical perspectives and ethical concepts
  - Able to identify stakeholders’ interests
  - Able to apply different ethical perspectives to specific ethical dilemmas

- **1** Rarely:
  - Able to understand different ethical perspectives and ethical concepts
  - Able to identify stakeholders’ interests
  - Able to apply different ethical perspectives to specific ethical dilemmas

### Evaluation of Different Ethical Perspectives
- **4** Consistently:
  - Able to evaluate assumptions and implications of different ethical perspectives
  - Able to raise relevant critical questions
  - Able to defend a position with good reasoning and consideration of opposing views

- **3** Frequently:
  - Able to evaluate assumptions and implications of different ethical perspectives
  - Able to raise relevant critical questions
  - Able to defend a position with good reasoning and consideration of opposing views

- **2** Sometimes:
  - Able to evaluate assumptions and implications of different ethical perspectives
  - Able to raise relevant critical questions
  - Able to defend a position with good reasoning and consideration of opposing views

- **1** Rarely:
  - Able to evaluate assumptions and implications of different ethical perspectives
  - Able to raise relevant critical questions
  - Able to defend a position with good reasoning and consideration of opposing views

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This rubric is the first step in a rubric development process that will produce additional drafts, each responsive to the feedback received. Feedback deadline is February 15, 2009. The next draft of this rubric will be available in May 2009. For more information or to give feedback, please email Wende Morgaine at wendemmi@gmail.com. Thank you!
Natural and Physical Sciences (DLN Cluster) – DRAFT ASSESSMENT RUBRIC

In order to assess student learning in DLN cluster courses, a rubric of this type will be used.

<table>
<thead>
<tr>
<th>Course-level Learning</th>
<th>Below expectations</th>
<th>Developing</th>
<th>Exemplary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use of theories and models</td>
<td>Student does not have a grasp of theoretical concepts in the discipline.</td>
<td>Student can articulate how a theory “fits” existing data/phenomena, but has difficulty exploring the implications of the theory in new contexts</td>
<td>Student can draw from theoretical ideas to make predictions</td>
</tr>
<tr>
<td>Use of graphical or symbolic representations</td>
<td>Student is unable to construct or interpret the meaning of symbolic or graphical representations of phenomena. Student work is limited to memorized interpretations that lack understanding</td>
<td>Student can construct representations OR can interpret scientific meaning, for basic phenomena, especially those related to phenomena the student has already studied.</td>
<td>Student is able to use graphical, symbolic, and numerical methods to analyze, organize, and interpret natural phenomena. (Given new data, student can determine how to represent it, and given a new graph or model, student can interpret it)</td>
</tr>
<tr>
<td>Association and Causation</td>
<td>Student regularly confuses the difference between association and causation, and can not determine how to distinguish between the two.</td>
<td>Student has an understanding of the general difference between association and causation and can apply the understanding in some contexts.</td>
<td>Student can articulate the difference between association and causation, and can clearly identify the criteria needed to determine causation.</td>
</tr>
<tr>
<td>Experimental Design/Scientific Method</td>
<td>Student work lacks understanding of experimental design (e.g., control of variables, order of execution); student is unable to generate a reasonable hypothesis or to explain whether results supports or refutes the hypothesis</td>
<td>Student can generate obvious hypotheses, but may have difficulty entertaining alternative explanations. Student may design only the most obvious tests of a hypotheses.</td>
<td>Student is able to formulate original hypotheses, identify relevant variables of importance to a question, and design &amp; execute one or more experiments to test hypotheses.</td>
</tr>
<tr>
<td>Credibility and use of Scientific data</td>
<td>Student is unable to discriminate between different sources of information. Student fails to be able to identify misuse of scientific information.</td>
<td>Student displays basic understanding of differences in source credibility. Student confuses the appropriate use of scientific results.</td>
<td>Student is able to evaluate the credibility, use, and misuse of scientific information in scientific developments and public-policy issues.</td>
</tr>
<tr>
<td>Relationship between science and social/ethical issues</td>
<td>Student fails to see the social and ethical implications for scientific results.</td>
<td>Student can draw links between scientific results and larger social questions</td>
<td>Student is able to Illustrate the interdependence between developments in science and social and ethical issues.</td>
</tr>
</tbody>
</table>

---

1 The final assessment rubric to be used in the DLN cluster courses will be determined by a group of faculty representing those who will be teaching courses in this cluster.
COURSES IN THE NATURAL AND PHYSICAL SCIENCES CLUSTER (DLN) SUPPORT STUDENT DEVELOPMENT OF UNIVERSITY LEARNING OUTCOME #8:

Apply knowledge and the methods of scientific inquiry to think critically about and solve theoretical and practical problems rooted in the natural or physical sciences.

In order for a DLN course to support ULO 8, it will be specifically designed around the following course-level outcomes. Each course design will specify how the course level outcomes are assessed and supported with teaching and learning activities.

<table>
<thead>
<tr>
<th>After completion of an DLN cluster course, students will be able to...</th>
<th>This outcome will be assessed by the following means in the course:</th>
<th>The following teaching/learning activities will be used to support the student learning of this outcome in the course:</th>
</tr>
</thead>
<tbody>
<tr>
<td>use theories and models as unifying principles to understand natural phenomena and make predictions.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>describe the methods of inquiry that lead to scientific knowledge and be able to distinguish science from pseudoscience.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Illustrate the interdependence between developments in science and social and ethical issues</td>
<td></td>
<td></td>
</tr>
<tr>
<td>use graphical, symbolic, and numerical methods to analyze, organize, and interpret scientific phenomena</td>
<td></td>
<td></td>
</tr>
<tr>
<td>discriminate between association and causation, and identify the types of evidence used to establish causation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>formulate hypotheses, identify relevant variables, and design experiments to test hypotheses</td>
<td></td>
<td></td>
</tr>
<tr>
<td>evaluate the credibility, use, and misuse of scientific information in scientific developments and public-policy issues</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2 The precise course-level outcomes to be used in these DLN courses will be determined by a group of faculty representing those who will be teaching courses in this cluster. These are provided here as an example and are drawn from those used at James Madison University. ([http://www.jmu.edu/catalog/03/genedm/gehc/](http://www.jmu.edu/catalog/03/genedm/gehc/)).