

TO: Steering Committee of the University Senate  
FROM: University Senate Educational Policy Committee  
SUBJECT: Undergraduate Outcomes-Based Core Curriculum and Administration &  
Oversight Structure  
DISPOSITION: University Senate for Approval

The Educational Policy Committee hereby forwards to the University Senate the attached report and proposal about the proposed Outcomes-Based Curriculum and Administration & Oversight Structure. This report provides the background information and confirms there has been active faculty involvement in the discussion and planning for the creation and implementation of the core curriculum and oversight structure.

**Motion:** To approve the Purdue-West Lafayette (PWL) undergraduate curriculum framework with identified essential learning outcomes and guidelines for rubrics AND to appoint an Undergraduate Curriculum Council with the responsibility for the ongoing governance of the undergraduate outcomes-based curriculum, with rotating faculty representation from each College, the Krannert School of Management, and Libraries.

**Approving:**

Danita M. Brown  
James R. Daniel  
Frank J. Dooley  
Peggy A. Ertmer  
Joan R. Fulton  
Chong Gu  
Katherine Horton  
Christine A. Hrycyna  
Harold P. Kirkwood  
Robert A. Kubat  
Martin A. Lopez-de-Bertodano  
Craig Miller  
Lindsey Payne  
Teri Reed-Rhoads  
Glenn G. Sparks  
Matthew Swiontek  
A. Dale Whittaker

**Disapproving:**

Thomas H. Siegmund

**Absent:**

## Background for the PWL Undergraduate Outcomes-Based Curriculum

In January 2011, Joan Fulton, Chair of the University Senate, discussing changes at the state legislative level that affect academic issues, reported

One of the driving forces behind these changes stems from the need for the Indiana economy to change from its traditional manufacturing base and the ensuing need to increase the education level of Hoosiers. The issues of student access to higher education, transferability of credits across institutions, and flexibility for the students have been identified as important for student success (at the state level) in completing degrees in a timely manner. We are working to be proactive in this area, while at the same time emphasizing the quality of a Purdue degree and the need to not diminish that quality. In that light, we are moving forward with the implementation of a Core Curriculum at Purdue, as recommended by the committee that reported this past April. The Steering Committee, at its January meeting, voted to establish the Core Curriculum Committee to implement the core.<sup>1</sup>

That action was based on recommendations of the initial Core Curriculum Committee, which met during the academic year 2009-2010 and issued its report at the April 2010 University Senate Meeting.<sup>2</sup> The 2009-10 Core Curriculum Committee provided a draft list of core outcomes, a vision statement for the core, and the rationale for the core. This report provided the foundation for the work of the current Core Curriculum committee, and called for an outcomes-based core curriculum.

Our report concurs with the April 2010 finding that a key motivation for a core curriculum is to better prepare all PWL students for future employment success. Recent studies indicate employers are seeking employees able to use a broader set of skills beyond their discipline-specific abilities and necessary for success for the individual and employer (Georgetown University Center on Education and the Workforce, 2010; Hart Research Association, 2010).

Two additional factors bolster the call for a core curriculum, new accreditation requirements and legislative initiatives of the 2012 legislature. First, the Higher Learning Commission (a commission of the North Central Association of Colleges and Schools) recently updated accreditation requirements that mandate institutions maintain a minimum requirement for general education.

*“through a traditional practice of distributed curricula (15 semester credits for AAS degrees, 24 for AS or AA degrees, and 30 for bachelor’s degrees) or through integrated, embedded, interdisciplinary, or other accepted models that demonstrate a minimum requirement equivalent to the distributed model. Any variation is explained and justified” (HLC, Criteria Revision Initiative - Gamma Version - November 9, 2011, p. 11-12).*

Second, members of the 2012 Indiana General Assembly have introduced higher education initiatives focused on a general education and core curriculum. Indiana Senate Bill (SB) 0182 “requires state educational institutions to create a statewide transfer general education core to be implemented by May 15, 2013.”<sup>3</sup> SB 0182 passed the Senate by a 50-0 vote on January 31, 2012, and has moved to the House for further consideration.

In conclusion, new accreditation standards and legislative action are consistent with the recommendations of the University Senate Report 09-3. Thus, by developing and adopting an undergraduate outcomes-based curriculum, the Purdue-West Lafayette faculty will benefit its undergraduate students while concomitantly addressing the concerns of external entities.

## 1. Proposed PWL Undergraduate Outcomes-Based Curriculum

The core curriculum consists of two levels of outcomes, foundational and embedded (see Appendix A). All Purdue students are expected to meet the foundational learning outcomes from 25 to 30 credits hours of coursework that is portable across the campus. In contrast, the embedded learning outcomes are addressed within courses typically taught within a specific discipline or major. Faculty within each program area will be responsible for determining where and at what level embedded outcomes will be met within their programs. In addition, program area faculty will be solely responsible for assessing student learning on embedded outcomes within their courses.

Thus, the foundational learning outcomes can be viewed as the academic structure that assures a general education, while the embedded learning outcomes define the expectations of particular degrees or plans of study. In some cases, entering freshman will have met foundational levels (e.g., via credit by exam, Advanced Placement (AP) test scores, or CLEP tests). Some foundational courses may be part of a curriculum plan for a particular major.

Foundational and embedded learning outcomes differ in two key ways, 1) the areas of learning and 2) the depth of learning. Rubrics developed by the Association of American Colleges and Universities (AACU) are adapted for use at Purdue. The AACU rubrics indicate levels of knowledge and skill development increasing from “developing” (Level 1) to “emerging” (Level 2) to a “proficient” (Level 3) level (see Appendix B).

The foundational outcomes focus on a developing level of knowledge (Level 1) in five areas: 1) written communication, 2) information literacy, 3) oral communication, 4) science, technology, and mathematics, and 5) human cultures (Table 1). More than one learning outcome may be satisfied in an individual course if that course is approved by the Undergraduate Curriculum Council as fulfilling the requirements of each learning outcome rubric.

Higher levels learning (rubric levels 2 and 3) should be a focus for three outcomes at the embedded level: written communication, information literacy, and oral communication. For the remaining embedded outcomes, (creative thinking, critical thinking, ethical reasoning, global citizenship and social awareness, intercultural knowledge, leadership and teamwork, quantitative reasoning, and integrative learning), faculty within each academic unit will determine the appropriate level of knowledge (rubric levels 1-3) with which students will meet outcomes.

Table 1. Foundational and Embedded Outcomes

	How students might fulfill this requirement	Credits
<b>Foundational Learning Outcomes</b>		
1. Written Communication	<ul style="list-style-type: none"> <li>One course (e.g., ENGL 106 or 108)</li> </ul>	3 or 4
2. Information Literacy	<ul style="list-style-type: none"> <li>One course (e.g., GS 175)</li> </ul>	1
3. Oral Communications	<ul style="list-style-type: none"> <li>One course (e.g., COM 114)</li> </ul>	3
4. Science, Technology, and Mathematics	<ul style="list-style-type: none"> <li>Two courses TBD in science</li> <li>One course in Science, Technology, and Society</li> <li>College Algebra (e.g., MA 153)</li> </ul>	12-16
5. Human Cultures	<ul style="list-style-type: none"> <li>One course TBD in humanities</li> <li>One course TBD in behavioral/social sciences</li> </ul>	<u>6</u>
<b>Total</b>		<b>25-30</b>
Foundational outcomes are portable across all academic units. Specific courses may or may not fulfill all student degree requirements.		
<b>Embedded Learning Outcomes</b>		

<ol style="list-style-type: none"> <li>1. Creative Thinking</li> <li>2. Critical Thinking</li> <li>3. Ethical Reasoning</li> <li>4. Global Citizenship and Social Awareness</li> <li>5. Intercultural Knowledge</li> <li>6. Leadership and Teamwork</li> <li>7. Quantitative Reasoning</li> <li>8. Integrative Knowledge</li> <li>9. Written Communication(levels 2 and 3)</li> <li>10. Information Literacy (levels 2 and 3)</li> <li>11. Oral Communication (levels 2 and 3)</li> </ol>	<p>The learning outcome rubrics (adapted from the AACU Core Value Rubrics) should be used as a guideline (not literally) by programs as they determine at which level they are addressing embedded learning outcomes within their programs. Each program faculty defines the appropriate level of proficiency. Faculty within each program area will be responsible for determining where and at what level embedded outcomes will be met within their programs. In addition, program area faculty will be solely responsible for assessing student learning on embedded outcomes within their courses.</p>
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## 2. Undergraduate Curriculum Council: Administration and Oversight Structure

The Undergraduate Curriculum Council (UCC) is charged with the administration and oversight of the core curriculum. As a faculty-led structure, the UCC determines and oversees the operational guidelines associated with implementation elements of the core curriculum. The issues to be addressed by the UCC are limited to: the approval of foundational courses, establishment of guiding rules for meeting the foundational outcomes, regulating and monitoring approved courses that satisfy the foundational outcomes, review of the list of foundational and embedded outcomes, and resolution of issues related to transfer students satisfying foundational requirements. It is recommended that the UCC be established no later than the Spring 2012 semester. The University Senate shall define and limit the UCC's duties, responsibilities and powers, and hear appeals to the UCC decisions; the UCC shall be directly responsible to the Senate via the Educational Policy Committee. Four principles guide the working of the Undergraduate Curriculum Council.

- The curriculum is faculty-governed.
- Learning outcomes within the outcomes-based curriculum are designed to prepare students for continuous learning and expertise within disciplines. The PWL curriculum will be one that is outcomes-based.
- The curriculum maintains high academic standards within the disciplines.
- The goal of the curriculum is to design mechanisms to permit flexibility for both academic programs and students in meeting learning outcomes.

### Recommended Procedures:

- **Council Membership:** The membership of the Undergraduate Curriculum Council is comprised of one faculty representative from each College, the Krannert School of Management, and Libraries as voting members. In addition, non-voting members will be added to represent the University Senate, regional campuses, a member of the PWL Registrar's office, PWL Student Government, a head academic advisor, and a representative from the Provost's Office. Faculty members will serve a 3-year term. A faculty representative may serve no more than two consecutive terms before new faculty representatives are appointed. The faculty in each College/School will select its representative to the UCC.
- All decisions of the Undergraduate Council can be appealed (by any affected unit) directly to the University Senate.

- Substantial changes to the framework, outcomes, or procedures that are originated by the Undergraduate Curriculum Council require a majority vote of the UCC and subsequent approval by the University Senate. Substantial changes to the framework, outcomes, or procedures may also be made by action of the University Senate following the established bylaws for new proposals.
- **Learning Outcomes:** As the need arises for introducing new learning outcomes or eliminating those that are no longer relevant for PWL graduates, it will be the responsibility of this committee to identify and vet those through a regular (at least every 5 years) reevaluation process. The introduction or elimination of a learning outcome will equate to a substantial change to the framework and will require a majority vote of the Undergraduate Council and approval by the University Senate.
- **Foundational Courses:** Any course accepted for PWL's undergraduate outcomes-based curriculum (foundational level) must be approved by a majority vote of faculty members on this committee.
- All courses (or non-courses) used to fulfill PWL's undergraduate outcomes-based curriculum are limited to those or equivalencies approved by this committee.
- **Nominating Foundational Courses:** recommends using an adapted Registrar's Form 40 for nominating courses for meeting the foundational outcomes (specific content to be included in this document TBD).
  - Course nominations may be submitted by faculty in any College/School or program area on the PWL campus to the Undergraduate Curriculum Council
- Nominations must identify the course, course description, and foundational learning outcome(s) addressed within the course
- **Reviewing of Embedded Outcomes:** Reporting procedures shall be coordinated with accreditation approvals for programs whose national accreditation standards already align with the embedded outcomes and whose programs achieve national accreditation to avoid duplicative efforts. For example, reporting on assessment of embedded outcomes shall coincide with ABET, NCATE, AACSB and other accrediting agency visits. Also, the program area report provided to the accrediting agency shall be acceptable to the Undergraduate Curriculum Council for ongoing embedded learning outcomes alignment, if that program area deems that receiving the national outcomes based accreditation is part of that program area's determination of where and at what level the embedded outcomes are met. Embedded outcomes that do not align shall be reported to the UCC.
- **Change of Degree Objective (CODOs):**
  - Recommends that once a student meets an outcome (whether foundational or embedded), the student receives credit for meeting that outcome.
  - If a student CODOs to another program or college, the previously met foundational outcomes will still be considered to have been met for that student.

## References

- Casner-Lotto, J., Barrington, L. and Wright, M. (2006). "Are They Really Ready To Work? Employers' Perspectives on the Basic Knowledge and Applied Skills of New Entrants to the 21st Century U.S. Workforce." BED-06-Workforce.  
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423.<http://www.eric.ed.gov/PDFS/ED315423.pdf>.
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- Hart Research Association (2010). *Raising the Bar: Employers' Views on College Learning In The Wake of The Economic Downturn.*
- Higher Learning Commission (2011, Nov. 9). *Criteria Revision Initiative - Gamma Version.*
- Paul, R., & Elder, L. (2008). *The Miniature Guide to Critical Thinking Concepts and Tools,* Foundation for Critical Thinking Press.

## NOTES

- <sup>1</sup> See Report To The University Senate - Professor Joan R. Fulton,  
<http://www.purdue.edu/faculty/download.cfm?file=96310AAD-D7DD-B12C-377DCC1A36DCC1A0.pdf&name=minutes.pdf>.
- <sup>2</sup> See University Senate Report 09-3, Update From the Core Curriculum Committee.  
<http://www.purdue.edu/faculty/download.cfm?file=DFE6562E-DF67-80E5-26294E4DA865914E.pdf&name=minutes.pdf>.
- <sup>3</sup><http://www.in.gov/apps/lisa/session/billwatch/billinfo?year=2012&session=1&request=getBill&docno=0182&doctype=SB>.
- <sup>4</sup> Depending upon the outcome of SB 182, it may be necessary to expand this to 30 hours.