

General Education

Working Group

**Indiana University–Purdue University
Indianapolis**

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Presented to the Executive Committee of the IUPUI Faculty Council by:

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Executive Summary

The General Education Working Group was convened in November 2010 in response to a request by the Executive Committee of the IUPUI Faculty Council to review general education at IUPUI, as framed by the Principles of Undergraduate Learning (PULs). This request was prompted by particular concerns that differences across academic units in terms of the level and flexibility of general education requirements (and determinations of how transfer credits may be distributed to fulfill degree requirements) may slow undergraduates' progress toward degree completion (see point one below). Another motive for initiating these discussions pertains to the significant increase in dual credit courses taken by high school students admitted to IUPUI. Although consideration of the complex set of factors that has led to the rapid rise in dual credit course completion is beyond the scope of this working group, the extent to which such credits could or should apply to general education course work was discussed at some length (see point two below). In addition, the 2012 accreditation visit has prompted much reflection on the degree to which the IUPUI "principled" approach will be viewed as successfully meeting our students' general education needs. This is especially pertinent in light of another request to the Working Group, namely to review documents Dr. Karen Hanson, provost at Indiana University Bloomington (IUB), presented to the IU Board of Trustees on September 30, 2010. IUB will use a "Common Ground" (<http://gened.iub.edu/>) as their general education core beginning in summer 2011.

These initiatives coincide with a nationwide trend in many states for legislative mandates to their respective public institutions to align general education requirements in ways that guarantee students seamless transfer of general education credits among those institutions. New Jersey City University has compiled a website (<http://web.njcu.edu/dept/cas/content/genstudiesread.asp>) that details approaches to general education across all fifty states. Although the degree of specificity and number of credit hours covered varies widely from state to state, Indiana remains unusual in not having any state mandated standards (<http://www.transferin.net/index.aspx>). We believe that it is important that the faculty of Indiana University–Purdue University Indianapolis control the curriculum of the institution, as we are best placed to understand the educational needs of our students. The Principles of Undergraduate Learning should allow us to generate our own, more flexible approach to managing a comprehensive approach to distributing general education transfer credits.

However, given our institutional priority of increasing timely graduation and the threat of legislative intervention, it is paramount that IUPUI create a broad, standard process of distributing transfer credits that is respectful of disciplinary cultures while allowing as much flexibility in utilizing transfer credits as possible. Currently transfer credits are distributed at admission according to existing statewide articulation agreements (<http://www.transferin.net/index.aspx>) or handled in a case-by-case fashion in the student's school or department. Although an exception process (executed by faculty members or professional advisors) must be retained, it is desirable to streamline the application of transfer credits in ways that significantly reduce the need for consideration of exceptions as this is both time consuming and susceptible to uneven application. For some programs (e.g., general education and business), flexibility is paramount—or using a metaphor preferred by our working group—the "buckets are wide and deep" (where "buckets" refer to the categories of requirements

stipulated, like “arts and humanities”). However, these schools often have specific requirements and prerequisites that lead to the major, and there is limited room for free electives. Other schools (School of Liberal Arts) have a very wide bucket for free electives (more than 30 credits), but retain relatively “narrow buckets” in some areas (writing, history, and speech). It is clear that significant variability exists across programs in terms of the specificity of the requirements that students must fulfill, and there has been little effort across the campus to review general education requirements and approaches to transfer credit distribution in light of the learning outcomes specified by the Principles of Undergraduate Learning (see Table 3 in Appendix B).

The need to reconsider our approach to the distribution of transfer credits across the campus is quite timely from a fiscal perspective. On the IUPUI campus, where academic units serve as “responsibility centers” in the Responsibility Center Management process, there has been little incentive to add flexibility to degree requirements. Indeed, the elimination of a strict requirement for a particular course could have dire financial implications for the generation of credit hour revenue necessary to support a particular program. However, proposed shifts in state appropriations to be more “(learning) outcomes oriented” could provide strong incentives for schools to build flexibility into degree programs in order to capture increased funding associated with improved numbers of completed undergraduate degrees and certificates.

Specific Recommendations

- The working group recommends that the university and IUPUI Faculty Council jointly commit for the 2011–2012 academic year to an effort to instill more flexibility in the distribution of transfer credits across IUPUI degree programs before this becomes legislatively mandated. The working group further recommends that this be done in such a way as to preserve the innovative nature of the Principles of Undergraduate Learning (PULs). To this end, we recommend that two ad hoc working groups be formed:
 - A general education task force comprised of faculty and appointed by the Faculty Council would undertake an in-depth appraisal of our general education curriculum as it relates to our Principles of Undergraduate Learning with the joint goals of assuring that school specific general education requirements truly reflect the competency-based philosophy of the PULs and in the process determining the means for generating greater flexibility in for both intra-campus and intercampus transfer credit distribution.
 - An ad hoc committee of administrators and staff under the leadership of the associate vice chancellor for undergraduate education composed of three University College advisors and the appropriate associate deans in the Schools of Engineering and Technology, Liberal Arts, Science, and Kelley School of Business as well as liaisons from IMIR and the Office of the Registrar, would oversee the creation of a website comparable to the Common Ground website in Bloomington. This ad hoc committee, in consultation with the work of the above mentioned general education task force, and with each of the schools, should clearly articulate the general education curriculum as well as course numbers, titles, credit hours, student learning outcomes

(SLOs), and Principles of Undergraduate Learning (PULs) for each course permitted in the general education curriculum. For example, Table 2 in Appendix B does this for the general education requirements at IUB and IUPUI.

- The working group recommends that a careful fiscal analysis of the costs and benefits associated with shifting to a more flexible, competency-based set of general education requirements be implemented as soon as possible. The results of this analysis are critically important for shaping strategic decision making regarding undergraduate curricula. This review might best be assigned to the second ad hoc committee.
- The working group recommends that the IUPUI administration should encourage the ongoing efforts to develop accreditation standards for dual credit programs and do more to highlight the success of direct college immersion programs such as SPAN or Advanced Placement courses, as AP examination data have been nationally standardized to articulate with undergraduate degree programs (i.e., students earning scores of 4 or 5 on AP exams can invariably receive some college credit that is distributed into undergraduate plans of study).
- The working group recommends that IUPUI partner with other institutions to help ensure quality in dual credit courses and to support efforts to impose a certification or accreditation process ensuring that instructors have sufficient training and content expertise to teach them. At present, the quality of instruction in dual credit courses cannot be guaranteed because student learning outcomes are not clearly defined and because there are no standardized assessments of what students have learned.

Working Group Review of Questions Relating to General Education at IUPUI and Options to Consider

- 1) **How can we improve the process by which students and advisors can understand and manage the transfer of course work among schools, campuses, and other institutions?**
 - IUPUI could encourage a legislatively mandated solution to force institutions to develop or adapt to a general education core. These mandates vary in terms of specificity (some setting a specific curriculum and others allowing the institutions to do so) and hours required (generally ranging between 30–45 credit hours). Legislatively mandated programs can simplify the process of cross-institutional cooperation, but this occurs at a price to faculty control of the curriculum of their respective institutions. There appear to be two common directions for such mandated cores:
 - Mandate the acceptance of associate degrees as completion of general education requirements. Some states (Arkansas, Florida, Ohio, and Texas) must accept completed general education cores from other institutions. This aims specifically at two-year institutions and completed associate degrees. In these cases, the four-year institutions must accept these general education cores, even if the specific courses differ. These programs encourage completion of the associate degrees at the community colleges and allow students to transfer general education courses as a block to any state four-year system. It is unclear how credits would transfer if an associate degree was not completed, although some states (Florida and Texas) have developed a statewide common numbering system for the general education core courses.
 - Mandate a common core of general education expectations that can be met in a variety of ways (course selection), and require all state two-year and four-year institutions to adopt this core and accept the completed cores from other institutions. Thus, Oklahoma mandates a 37 hour common core for all associate degrees and a 40 hour core (including the 37 hour core above) for baccalaureate degrees. Four-year institutions may require additional general education courses outside the core, but these must count toward the student's required total hours for the bachelor's degree. This approach would greatly simplify transfer issues both within and between campuses, but would be difficult to reconcile with professional programs that have fewer than 40 hours of general education in their degree programs (in order to meet their respective accreditation requirements).
 - The campus could voluntarily decide to increase flexibility of distributing transfer credits— or a “broadening of the buckets”—where possible, while respecting the individual cultures of our schools and programs. There are a number of approaches that could be considered to generate more flexibility:
 - IUPUI could develop expected learning outcomes for the PULs as they relate to existing general education requirements and then establish guidelines for determining whether or not a set of transfer courses met some baseline portion (e.g., 70%) of these

expected learning outcomes. Once established for a transfer course, these could be added to the core transfer library and thereby automatically brought in to other transfer students' degree programs. For example, if the expected learning outcome of the history sequence in the School of Liberal Arts is determined both to support PUL 2 (critical thinking) as well as to teach students to consider historical perspectives and to develop a broad understanding of the history of western civilization, a combination of a world philosophy course (critical thinking) and an American history course (historical perspectives) might be deemed to have met a sufficient portion of these requirements.

- Consideration could be given to allowing greater flexibility with increasing class standing or numbers of transfer credits. Thus, a first- or second-year student bringing in fewer than 30 credits might be expected to meet the specific IUPUI general education requirements that apply to first-time first-year students. However, students transferring 90 credits might be allowed to substitute previously completed courses for specific general education requirements more flexibly, based on the assumption they would have mostly completed general education requirements on their previous campus(es). In practice, many schools (e.g., business and engineering) have already adopted this latter approach, allowing advanced transfer students more discretion in applying previous course work to specific IUPUI requirements. Of course if a student decided to change to a very different degree program after transferring, it would likely still be necessary for the student to take certain general education courses as prerequisites to courses in the major (e.g., changing from a BA in Philosophy to a BS in Nursing would likely demand courses in science and math from outside the common core).
- IUPUI could adopt IUB's Common Ground approach to general education. Our working group engaged in a systematic analysis of how adopting IUB's Common Ground curriculum would impact the distribution of general education credits across degree programs at IUPUI (see Document 2 in Appendix A and Table 1 in Appendix B). The Common Ground articulates quite well with most undergraduate degree programs (see Table 2 in Appendix B), with the exception of degrees granted by professional schools that must maintain curricula that are approved by accrediting bodies (e.g., engineering). The problem is that in many cases these credits may not be distributed into specific programs of study. The distinction is a subtle one, but reflects the fact that credits will often transfer in from other institutions (remaining in an "undistributed elective" category), but will not actually count toward specific program requirements. Distributed credits transfer into students' degree program requirements. More problematic is the observation that the Common Ground approach remains at heart a cafeteria or distributional approach based on extensive course lists and lacking an underlying curricular coherency. The working group believes that this is a less robust approach to general education compared with IUPUI's PULs that articulate the framework for student learning outcomes (SLOs) in each of the courses—encompassing general education courses as well as those in the major (see point three below). Indeed, the PULs are more in keeping with recent initiatives by the American Association of Colleges and Universities (Liberal

Education and America's Promise or LEAP) and the Lumina Foundation (Degree Qualification Profiles).

- IUPUI could adopt the LEAP approach to the curriculum and accept transfer credits en masse from other LEAP institutions. A recent proposal introduced at the University Faculty Council (<http://www.indiana.edu/~ufc/docs/circulars/AY11/U4-2011.pdf>) would have designated Indiana University a LEAP institution (as curricula include core competencies or “essential learning outcomes” rather than specific course requirements). With the designation as a LEAP institution, IU would have committed to accepting the completed general education core of students transferring from any other LEAP institution. The proposal was tabled over the logistical and practical problems the proposal would pose for admissions and the registrars.
- IUPUI could adopt the recently proposed “Degree Qualifications Profile” from the Lumina Foundation (abbreviated now most often as Degree Profile, or DP; see the January 2011 special report publication: <http://www.luminafoundation.org/publications/>; see also Document 4 in Appendix A and Graph 1 in Appendix C). The DP initiative is very similar to, and dovetails well with, the LEAP initiative. A comparison of IUPUI's PULs, IUB's Common Ground, and LEAP's Essential Learning Outcomes illustrates those different, but related, approaches to learning objectives and learning outcomes (see Table 3 in Appendix B).

The LEAP initiative was primarily developed on traditional arts and sciences campuses and may create particular problems for professional programs that must meet accreditation standards. The Lumina Foundation approach is similar to the voluntary approach outlined above in that it proposes the establishments of learning outcomes and assessment rubrics to determine student progress. In theory, these outcomes could be used to assess a student's transfer work and the degree to which completed course work met institutional expectations. In practice, both approaches would require substantial rethinking of our general education program and the component courses.

2) How can we better prepare for the ever increasing numbers of dual credit programs that produce high school graduates with many college credits, but without proven college preparedness and experience?

The Lumina Foundation has suggested that programs that allow high school students to take college-level classes and earn college credit (or dual credit courses) may help middle- and low-achieving students to enter and achieve in college (see *Pathways to College Access and Success*: <http://www2.ed.gov/about/offices/list/ovae/pi/cclo/cbtrans/finalreport.pdf>). Increases in the number of students admitted with dual credits have prompted discussions across many campuses. A recent analysis (Foley, Purvis, Fitzgerald, & Williams, 2011) suggests that students who took 10 or more dual credit courses while in high school are at risk for academic failure in college.

There are a variety of different types of dual credit programs in addition to the widely known Advanced Placement (AP) options available in many high schools. These include full immersion options such as our SPAN program, online options such as offered by Indiana University High School, and the option of college credit for courses offered in the high schools by specially accredited high school teachers. Early indications of performance reports from entering students with dual credits suggest that full immersion programs such as SPAN and the modified SPAN program with the Crispus Attucks Medical Magnet students produce the best results, and dual credit programs taken with high school teachers in the high school produce the poorest results. Increasing numbers of high school students are taking AP courses, but the percentage of students achieving passing scores on the AP exams is not increasing. Moreover, there is not good evidence that AP courses are truly preparing students for college success.

Dual credit programs, particularly those that do not involve direct college course work on a college campus, have presented many challenges to IUPUI and to the students who have earned these credits. For example, students from the Ben Davis University (BDU) program often bring significant numbers (62 or more) of credits. Thus, these students are technically not true freshmen and, therefore, not automatically connected to college success programs such as the Summer Bridge Program, first-year seminars, themed learning communities, or intensive advising.

In addition, these students will have taken most or all of their general education requirements and will be expected to perform as juniors in upper-level courses in their majors. Further, because they will have completed all of their 100- and 200-level courses in high school, they will face an extremely challenging first college semester of 12 or more credits of upper-level math, science, or major course work without ever having set foot on a college campus before. These students are often unaware of the fact that, because their dual credit GPA does not transfer, their official IU or PU GPA will be based on their performance in these very challenging first-semester courses.

Finally, federal financial aid regulations require that all college course work, including that taken in high school, be counted against students' financial aid cap. Thus, many students who have earned their associate degrees in high school will have already exhausted a large percentage (up to 50%) of their financial aid eligibility. Although, as noted, not all dual credit options create these sorts of problems, University College recently adopted a policy that all BDU students will be treated as first-semester freshmen. The university may wish to follow suit and establish expectations and limitations on these programs as well.

3) How can we continue to ensure that our general education curriculum is preparing students to be productive and fulfilled participants in the global community?

IUPUI developed the [Principles of Undergraduate Education](#) in 1995 and these were adopted by the IUPUI Faculty Council (IFC) in 1997. The PULs were revised in 2005 and again approved by the IFC in 2007. In addition, the Schools of Liberal Arts and Science produced the CLAS (Council on Liberal Arts and Sciences) curriculum in 1999, based on the Principles of Undergraduate Learning, after two years of meetings and discussions by the joint curriculum committees of the two schools; this curriculum appeared in the IUPUI Campus Bulletin for the

2000 academic year. Thus, it has been more than 15 years since the last substantial review of our approach to general education and more than a decade since the adoption of shared general education programming between two of the largest undergraduate schools on campus. In the meantime, there has been growing national attention directed to issues related to general education with several publications calling into question the value of a college education (Arum & Roksa, 2011). In addition, there have been several initiatives launched to reinvigorate undergraduate education.

IUPUI's Principles of Undergraduate Learning, IUB's Common Ground, and AAC&U's LEAP Essential Learning Outcomes are three ways of stating general education learning goals and outcomes. When comparing the three models closely, it is evident that there is much agreement among them, but that they differ fundamentally in the ways in which they are framed. Beginning in 2011, general education at IUB encompasses two components—Common Ground and Shared Goals. Common Ground is based on the traditional approach of course (and credit) distribution among broad areas of discipline-focused study and inquiry: English composition, mathematical modeling, arts and humanities, social and historical sciences, and world languages and cultures. Common Ground therefore defined learning objectives for courses in those five areas first. Subsequently, faculty can examine courses offered in those areas and determine whether and how they meet the stated learning goals and also that they specify and assess critical student learning outcomes (SLOs). In contrast, the Shared Goals component of general education at IUB (intensive writing, information fluency, diversity in the United States, and enriching educational experiences) is tied to the students' degree programs and varies from school to school. Its approach can be characterized as learning goals that are not as course specific as for Common Ground and that selectively apply across the curriculum (the Shared Goals component is not included in this comparison).

By way of comparison with Common Ground, in the early 1990s and the first decade of the 21st century, IUPUI and the LEAP initiative of AAC&U, respectively, framed their general education goals on the basis of principles of learning, or what is essential for learning. By agreeing on and establishing learning outcomes in principle and essence first, IUPUI faculty have since worked on how the PULs (or LEAP Essential Learning Outcomes, which were modeled after the PULs and hence make for easy alignment between PULs and ELOs) can be applied—and assessed—in discipline- and level-specific ways across the undergraduate curriculum and experience. Identifying the most relevant PULs clearly for all courses and in all syllabi and showing how they are distributed in each undergraduate degree plan provides students with a high degree of transparency about what they are expected to understand, know, and be able to do. On the basis of clearly defined and assessed learning outcomes in particular courses, it is possible to envision students transferring more easily between and among institutions because they do not necessarily have to match curricula course for course, but can progress toward degree completion according to the learning they can demonstrate.

For IUPUI, it is not difficult to align its PULs with the ELOs of LEAP if the campus became a LEAP campus or Indiana a LEAP state (this is not to minimize the complex difficulties that admissions and the registrar will have to solve as a consequence of those decisions). The LEAP ELOs are also embedded in the learning objectives of Common Ground (in some instances articulated as learning outcomes), but at this point the alignment is more complicated because of

the differentiation of learning objectives and outcomes on the basis of areas of study and inquiry and not across the undergraduate curriculum. The potential of LEAP for transparency and accountability and also for streamlining several transfer issues may well serve as the prompt to the faculties of IUPUI and IUB to harmonize their respective frameworks with the goal of making it meaningful and applicable to other IU campuses and even other institutions of higher learning in the state.

Although there have not been large scale efforts to revise general education on the IUPUI campus for many years, ongoing activities (preparation for the 2012 reaccreditation visit) have served to create a better institutional framework for embedding the PULs in the IUPUI curriculum and to document and assess the student learning outcomes generated by this approach.

References

Arum, R., & Roksa, J. (2011). *Academically adrift: Limited learning on college campuses*. Chicago: University of Chicago Press.

Foley, C., Purvis, K., Fitzgerald, Y., & Williams, G. (2011, March 11). *Dual enrollment and the blurring of the high school and college curriculum*. Presentation at the Indiana College Access and Success Network Conference, Indianapolis, IN.

Appendix A: Documents

Document 1: IUPUI's Principles of Undergraduate Learning (PULs)

Core Communication and Quantitative Skills

Definition

The ability of students to express and interpret information, perform quantitative analysis, and use information resources and technology--the foundational skills necessary for all IUPUI students to succeed.

Outcomes

Core communication and quantitative skills are demonstrated by the student's ability to:

1. Express ideas and facts to others effectively in a variety of formats, particularly written, oral, and visual format.
2. Comprehend, interpret, and analyze ideas and facts.
3. Communicate effectively in a range of settings.
4. Identify and propose solutions for problems using quantitative tools and reasoning.
5. Make effective use of information resources and technology.

Critical Thinking

Definition

The ability of students to engage in a process of disciplined thinking that informs beliefs and actions. A student who demonstrates critical thinking applies the process of disciplined thinking by remaining open-minded, reconsidering previous beliefs and actions, and adjusting his or her thinking, beliefs and actions based on new information.

Outcomes

The process of critical thinking begins with the ability of students to remember and understand, but it is truly realized when the student demonstrates the ability to apply, analyze, evaluate, and create knowledge, procedures, processes, or products to discern bias, challenge assumptions, identify consequences, arrive at reasoned conclusions, generate and explore new questions, solve challenging and complex problems, and make informed decisions.

Integration and Application of Knowledge

Definition

The ability of students to use information and concepts from studies in multiple disciplines in their intellectual, professional, and community lives.

Outcomes

Integration and application of knowledge are demonstrated by the student's ability to:

1. Enhance their personal lives.
2. Meet professional standards and competencies.
3. Further the goals of society.
4. Work across traditional course and disciplinary boundaries.

Intellectual Depth, Breadth, and Adaptiveness

Definition

The ability of students to examine and organize disciplinary ways of knowing and to apply them to specific issues and problems.

Outcomes

Intellectual depth, breadth, and adaptiveness are demonstrated by the student's ability to:

1. Show substantial knowledge and understanding of at least one field of study.
2. Compare and contrast approaches to knowledge in different disciplines.
3. Modify one's approach to an issue or problem based on the contexts and requirements of particular situations.

Understanding Society and Culture

Definition

The ability of students to recognize their own cultural traditions and to understand and appreciate the diversity of the human experience.

Outcomes

Understanding society and culture is demonstrated by the student's ability to:

1. Compare and contrast the range of diversity and universality in human history, societies, and ways of life.
2. Analyze and understand the interconnectedness of global and local communities.
3. Operate with civility in a complex world.

Values and Ethics

Definition

The ability of students to make sound decisions with respect to individual conduct, citizenship, and aesthetics.

Outcomes

A sense of values and ethics is demonstrated by the student's ability to:

1. Make informed and principled choices and to foresee consequences of these choices.
2. Explore, understand, and cultivate an appreciation for beauty and art.
3. Understand ethical principles within diverse cultural, social, environmental and personal settings.

Document 2: IUB's Common Ground

Foundations

English Composition

*Learning Objectives**

Students proficient in English composition will demonstrate the ability to:

1. Employ strategies of pre-writing, drafting, and revising, taking into consideration rhetorical purpose, the knowledge and needs of different audiences, and the feedback of instructors and peers.
2. Engage in substantial revision of drafts, as distinguished from editing and proofreading;.
3. Read critically, summarize, apply, analyze, and synthesize information and concepts in written and visual sources as the basis for developing their own ideas and claims.
4. Engage in inquiry-driven research, making use of appropriate data repositories and indexes, and properly attributing and citing the language and ideas of others to avoid plagiarism.
5. Develop a focused thesis and link it to appropriate reasons and adequate evidence.
6. Use genre conventions and structure (e.g., introductions, paragraphing, transitions) in ways that serve the development and communication of information and ideas.
7. Edit such that choices in style, grammar, spelling, and punctuation contribute to the clear communication of information and ideas.

Mathematical Modeling

Mathematical modeling courses provide rigorous instruction in fundamental mathematical concepts and skills presented in the context of real-world applications. The modeling skills provide analytical methods for approaching problems students encounter in their future endeavors.

Learning Objectives

Students proficient in mathematical modeling should demonstrate the ability to:

1. Create mathematical models of empirical or theoretical phenomena in domains such as the physical, natural, or social science.
2. Create variables and other abstractions to solve college-level mathematical problems in conjunction with previously-learned fundamental mathematical skills such as algebra;.
3. Draw inferences from models using college-level mathematical techniques including problem solving, quantitative reasoning, and exploration using multiple representations such as equations, tables, and graphs.
4. Take an analytical approach to problems in their future endeavors.

A passing grade in an approved course is required to show proficiency in mathematical modeling under the General Education curriculum.

Breadth of Inquiry

Arts and Humanities

Learning Objectives

Courses in the Arts and Humanities area of Common Ground in General Education explore expressions and artifacts of human experience from past and present cultures throughout the

world. The 6 credit hours required in A&H introduce the student to a range of knowledge, analytical frameworks, and critical perspectives, and are intended to contribute to any or all of these learning outcomes:

1. Knowledge of origins, varieties, and meanings of the expressions and artifacts of human experience, including (a) original written texts in various literary forms, (b) works of visual art and design, (c) musical compositions, and (d) dramatic performance (live theater, dance, film, video, digital, etc.).
2. Knowledge of the cultural, intellectual, and historical contexts through which these expressions and artifacts are interpreted.
3. Knowledge of the modes of symbolic expression and aesthetic and/or literary conventions that are used in these expressions and artifacts.
4. Ability to develop arguments, ideas, and opinions about forms of human expression, grounded in rational analysis and in an understanding of and respect for the historical context of expressions and artifacts, and to express these ideas in written and/or oral form.
5. Ability to create or reinterpret artistic works, as performer or as critic, through the development of skills of performance or skills of analysis and criticism.
6. Ability to explain and assess the changing perspectives on the meanings of arts and humanities traditions, and to explore one's own identity within prior and current intellectual, aesthetic, and cultural frameworks.

Social and Historical Studies

Learning Objectives

Social and Historical studies courses help students gain knowledge of human cultures and the impact of historical events that shaped their development. The theoretical underpinnings and methodologies introduced will provide students with critical analytical skills. The courses are also expected to increase the social awareness of students through intercultural knowledge and the ability to reason ethically. Knowledge of specific historical and social situations will help students integrate an appreciation for diversity and inclusiveness into their approach to life-long learning. Students who successfully complete this requirement will improve their:

1. Knowledge of Human Cultures and Physical and Natural World
 - a. Human culture knowledge through understanding of history, social situations, and social institutions
2. Intellectual and Practical Skills
 - a. Critical and creative thinking
 - b. Inquiry and analysis
 - c. Quantitative and/or qualitative literacy through theory and methodology
3. Personal and Social Responsibility
 - a. Intercultural knowledge
 - b. Civic knowledge
 - c. Skills for life-long learning

Natural and Mathematical Sciences

Learning Objectives

Students who successfully complete courses in the Natural and Mathematical Sciences will:

1. Become familiar with scientific inquiry and the bases for technology.
2. Acquire tools to model and understand the physical and natural world.

3. Acquire skills in the collection and interpretation of data, critical thinking, and theoretically based inquiry.
4. Learn to solve problems.
5. Acquire analytical and/or quantitative skills allowing them become informed, active participants in society.

World Languages and Cultures

Indiana University has a long tradition of excellence and leadership in international and global studies. Most notably, that tradition is seen in the support that Herman B. Wells gave to the establishment of world-class departments and programs in that area, as well as the current emphasis across the entire university in giving students the tools to better understand, appreciate, and work in our ever-shrinking world. Specifically, the 6-credit-hour World Languages and Cultures requirement has the following goals, some or all of which may be met in the three possible ways described below: 1) to understand elements that distinguish cultures from one another and to be able to compare cultural perspectives; 2) to gain the linguistic tools to communicate in another language at the intermediate level; 3) to develop analytical skills appropriate to the study of international and intercultural relations; 4) to apply such understanding and skills by means of active participation and reflection in programs of study outside the United States.

This requirement strives to increase student knowledge of the variety of international societies and may deal to some extent with U.S. culture in its international connections. It need not focus on the present but may, instead, be a historical subject. The requirement seeks to expand student knowledge of world affairs, cultures, societies, and values; explore traditions grounded in different cultural paradigms; and provide a framework for understanding and appreciating the ideas and values of different cultures. These goals are intended to provide a foundation for basic understanding and knowledge, which will be further developed in more advanced studies; internationalization and globalization should infuse a student's experience at Indiana University.

Learning Objectives

The following foundational knowledge, skills, and attitudes represent the learning objectives for students satisfying the World Languages and Cultures Common Ground requirement:

Knowledge

1. Understands culture within a global and comparative context (that is, the student recognizes that his/her culture is one of many diverse cultures and that alternate perceptions and behaviors may be based in cultural differences).
2. Demonstrates knowledge of global issues, processes, trends, and systems (that is, economic and political interdependency among nations, environmental-cultural interaction, global governance bodies, and nongovernmental organizations).
3. Demonstrates knowledge of other cultures (including beliefs, values, perspectives, practices, and products).

Skills

1. Uses knowledge, diverse cultural frames of reference, and alternate perspectives to think critically and solve problems.
2. Communicates and connects with people in other language communities in a range of settings for a variety of purposes, developing skills in each of the four modalities: speaking (productive), listening (receptive), reading (receptive), and writing (productive).
3. Uses foreign language skills and/or knowledge of other cultures to extend access to information, experiences, and understanding.

Attitudes

1. Appreciates the language, art, religion, philosophy, and material culture of different cultures.
2. Accepts cultural differences and tolerates cultural ambiguity.
3. Demonstrates an ongoing willingness to seek out international or intercultural opportunities.

***Please note:** It seems that the various disciplines that contributed to the articulation of Common Ground understood their tasks somewhat differently, which is reflected in varying definitions and use of “learning objectives” and “learning outcomes.” This degree of variation makes it at times difficult to compare IUB’s Common Ground to the learning outcomes detailed in other competency-based programs and plans, including Lumina Foundation’s Degree Qualifications Profile, AAC&U’s LEAP initiative, and IUPUI’s PULs.

Document 3: Essential Learning Outcomes (LEAP)

Knowledge of Human Cultures and the Physical and Natural World

- Through study in the sciences and mathematics, social sciences, humanities, histories, languages, and the arts

Focused by engagement with big questions, both contemporary and enduring

Intellectual and Practical Skills, Including

- Inquiry and analysis
- Critical and creative thinking
- Written and oral communication
- Quantitative literacy
- Information literacy
- Teamwork and problem solving

Practiced extensively, across the curriculum, in the context of progressively more challenging problems, projects, and standards for performance

Personal and Social Responsibility, Including

- Civic knowledge and engagement—local and global
- Intercultural knowledge and competence
- Ethical reasoning and action
- Foundations and skills for lifelong learning

Anchored through active involvement with diverse communities and real-world challenges

Integrative and Applied Learning, Including

- Synthesis and advanced accomplishment across general and specialized studies

Demonstrated through the application of knowledge, skills, and responsibilities to new settings and complex problems

Document 4: Degree Qualifications Profile (DQP; also Degree Plan [DP])

(Lumina Foundation publication, 25 January 2011)

Specialized Knowledge

- Knowledge acquired in a specialized field of study.
- Describes the scope and principal features of the field of study, citing core theories and practices, and offers a similar explication of a related field.
- Illustrates the field's current terminology. Generates substantially error-free products exhibits, or performances in the field.
- Defines and explains the boundaries, divisions, styles and practices of the field.
- Defines and properly uses the principal terms in the field, both historical and contemporaneous.
- Demonstrates fluency in the use of tools, technologies and methods in the field.
- Evaluates, clarifies and frames a complex question or challenge using perspectives and scholarship from the student's major field and at least one other.
- Constructs a project related to a familiar but complex problem in the field of study by assembling, arranging and reformulating ideas, concepts, designs or techniques.
- Constructs a summative project, paper or practice-based performance that draws on current research, scholarship and/or techniques in the field.
- Elucidates the major theories, research methods and approaches to inquiry, and/or schools of practice in the field; articulates relevant sources; and illustrates their relationship to allied fields.
- Assesses the contributions of major figures and organizations in the field; describes its major methodologies and practices; and implements at least two such methodologies and practices through projects, papers, exhibits or performances.
- Articulates major challenges involved in practicing the field, elucidates its leading edges, and delineates its current limits with respect to theory, knowledge and practice.
- Initiates, assembles, arranges and reformulates ideas, concepts, designs and techniques in carrying out a project directed at a challenge in the field beyond conventional boundaries.

Broad, Integrative Knowledge

- Knowledge acquired in general education fields.
- Describes how existing knowledge or practice is advanced, tested and revised.
- Describes and examines perspectives on key debates within the field and in society.
- Illustrates core concepts of the field while executing analytical, practical or creative tasks.
- Selects and applies recognized methods in interpreting discipline-based problems.
- Assembles evidence relevant to problems, describes its significance, and uses it in analysis.
- Describes the ways in which at least two disciplines define, address and justify the importance of a contemporary challenge or problem.
- Identifies, categorizes and distinguishes among ideas, concepts, theories and practical approaches to problems.

- Frames a complex scientific, social, technological, economic or aesthetic challenge or problem from the perspectives and literature of at least two academic fields and proposes a “best approach” to the question or challenge using evidence from those fields.
- Produces, independently or collaboratively, an investigative, creative or practical work that draws on specific theories, tools and methods from at least two academic fields.
- Explains a problem in science, the arts, society, human services, economic life or technology from the perspective of at least two academic fields, explains how the methods of inquiry and research in those disciplines can be brought to bear, judges the likelihood that the combination of disciplinary perspectives and methods would contribute to the resolution of the challenge, and justifies the importance of the challenge in a social or global context.
- Articulates how the field has developed in relation to other major domains of inquiry or practice.
- Designs and executes an applied, investigative or creative work that draws on the perspectives and methods of other fields and assesses the resulting gains and difficulties.
- Articulates and defends the significance and implications of his or her specialized work in terms of challenges, trends and developments in a social or global context.

Intellectual Skills

- Identifies, categorizes and distinguishes among ideas, concepts, theories and practical approaches to problems. (Analytic inquiry)
- Identifies, categorizes and appropriately cites information for an academic project, paper or performance. (Use of information resources)
- Describes how cultural perspectives could affect interpretation of problems in the arts, politics or global relations. (Engaging diverse perspectives)
- Presents accurate calculations and symbolic operations and explains their use either in the field of study or in interpreting social or economic trends. (Quantitative fluency)
- Presents substantially error-free prose in both argumentative and narrative forms to general and specialized audiences. (Communication fluency)
- Differentiates and evaluates theories and approaches to complex standard and non- standard problems within his or her major field. (Analytic inquiry)
- Incorporates multiple information resources in different media or languages in projects, papers or performances, with appropriate citations; and evaluates the relative merits of competing resources with respect to clearly articulated standards. (Use of information resources)
- Constructs a cultural, political or technological alternate vision of either the natural or human world through a written project, laboratory report, exhibit, performance or community service design; defines the distinct patterns in this alternate vision; and explains how these patterns differ from current realities. (Engaging diverse perspectives)
- Translates verbal problems into mathematical algorithms, constructs valid arguments using the accepted symbolic system of mathematical reasoning, and constructs accurate calculations, estimates, risk analyses or quantitative evaluations of public information through presentations, papers or projects. (Quantitative fluency)
- Constructs sustained, coherent argument or presentation on technical issues or processes in more than one language and in more than one medium for general and specific audiences;

and works through collaboration to address a social, personal or ethical dilemma.
(Communication fluency)

- Disaggregates, adapts, reformulates and employs in an essay or project principal ideas, techniques or methods at the forefront of the field. (Analytic inquiry)
- Provides adequate evidence through papers, projects, notebooks, computer files or catalogues of expanding, assessing or refining either a recognized information resource or an information base within the field. (Use of information resources)
- Addresses in a project, paper or performance a core issue in the field from the perspective of a different point in time or a different culture, political order or technological context, and elucidates how the perspective contributes to results that depart from current norms, dominant cultural assumptions or technologies. (Engaging diverse perspectives)
- Not seeking a degree in a quantitative field employs and applies mathematical, logical or statistical tools to problems within the field in a project, paper or performance, while the student seeking a degree in a quantitative field articulates and undertakes multiple appropriate applications of quantitative methods, concepts and theories. (Quantitative fluency)
- Creates sustained, coherent explanations and reflections on the student's own work in two or more media or languages to both general and specialized audiences. (Communication fluency)

Applied Learning

- Describes in writing a case in which knowledge and skills acquired in academic settings are applied to a challenge in a non-academic setting; evaluates the learning gained; and analyzes a significant concept or method related to the course of study in light of learning from outside the classroom.
- Locates, gathers and organizes evidence on an assigned research topic addressing a course-related question or a question of practice in a work or community setting; offers and examines competing hypotheses in answering the question.
- Presents a project, paper, performance or other appropriate task linking knowledge and skills from work, community or research activities with knowledge acquired in academic disciplines; explains how elements were combined to shape meaning or findings; and shows the relationship to relevant scholarship.
- Formulates a question on a topic that addresses more than one academic discipline or practical setting, locates appropriate evidence that addresses the question, evaluates the evidence in relation to the problem's contexts, and articulates conclusions that follow logically from analysis.
- Completes a field-based assignment in the course of study that employs insights from others; evaluates a significant question in relation to concepts, methods or assumptions in at least one academic field; and explains the implications of learning outside the classroom.
- Creates a discrete project, paper, exhibit, performance or other appropriate task reflecting integration of knowledge acquired in practicum, work, community or research activities with knowledge and skills from at least two disciplines representing different segments of the curriculum (e.g., computer science and anthropology); documents the sources of the knowledge and skills reflected in the integration; articulates in writing how these elements influenced the resulting product; and assesses the significance of the work in light of major debates or developments in the primary field(s).

- Creates, designs and implements a performance or project in an out-of-class setting requiring application of advanced knowledge to a practical challenge; articulates insights gained from the field experience; assesses, with appropriate citations, selected approaches or scholarly debates applicable to the problem; articulates a reasoned judgment on selected issues in the field; and assesses standards for professional performance and continuing development with specific reference to the experience.

Civic Learning

- Describes his or her own civic and cultural background, including origins, development, assumptions and predispositions.
- Describes historical and contemporary positions on democratic values and practices, and presents his or her position on a related problem.
- Takes an active role in the community (work, service, co-curricular activities) and examines civic issues encountered and insights gained.
- Explains diverse perspectives on a contested issue and evaluates insights gained from different kinds of evidence reflecting scholarly and community perspectives.
- Develops and justifies a position on a public issue and relates this position to alternative views within the community or policy environment.
- Collaborates in developing and implementing an approach to a civic issue, evaluates the process and, where applicable, weighs the result.
- Assesses and develops a position on a significant public policy question in the student’s field, taking into account scholarly and community perspectives.

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Institution-Specific Areas

(Users of the Degree Profile matrix should use this column to list other areas of learning they wish to include.)

Associate

Specialized Knowledge

- Knowledge acquired in a specialized field of study.
- Describes the scope and principal features of the field of study, citing core theories and practices, and offers a similar explication of a related field.
- Illustrates the field’s current terminology. Generates substantially error-free products exhibits, or performances in the field.

Broad, Integrative Knowledge

- Knowledge acquired in general education fields.
- Describes how existing knowledge or practice is advanced, tested and revised.
- Describes and examines perspectives on key debates within the field and in society.
- Illustrates core concepts of the field while executing analytical, practical or creative tasks.
- Selects and applies recognized methods in interpreting discipline-based problems.
- Assembles evidence relevant to problems, describes its significance, and uses it in analysis.
- Describes the ways in which at least two disciplines define, address and justify the importance of a contemporary challenge or problem.

- Identifies, categorizes and distinguishes among ideas, concepts, theories and practical approaches to problems.

Intellectual Skills

- Identifies, categorizes and distinguishes among ideas, concepts, theories and practical approaches to problems. (Analytic inquiry)
- Identifies, categorizes and appropriately cites information for an academic project, paper or performance. (Use of information resources)
- Describes how cultural perspectives could affect interpretation of problems in the arts, politics or global relations. (Engaging diverse perspectives)
- Presents accurate calculations and symbolic operations and explains their use either in the field of study or in interpreting social or economic trends. (Quantitative fluency)
- Presents substantially error-free prose in both argumentative and narrative forms to general and specialized audiences. (Communication fluency)

Applied Learning

- Describes in writing a case in which knowledge and skills acquired in academic settings are applied to a challenge in a non-academic setting; evaluates the learning gained; and analyzes a significant concept or method related to the course of study in light of learning from outside the classroom.
- Locates, gathers and organizes evidence on an assigned research topic addressing a course-related question or a question of practice in a work or community setting; offers and examines competing hypotheses in answering the question.

Civic Learning

- Describes his or her own civic and cultural background, including origins, development, assumptions and predispositions.
- Describes historical and contemporary positions on democratic values and practices, and presents his or her position on a related problem.
- Takes an active role in the community (work, service, co-curricular activities) and examines civic issues encountered and insights gained.

Bachelor's

Specialized Knowledge

- Defines and explains the boundaries, divisions, styles and practices of the field.
- Defines and properly uses the principal terms in the field, both historical and contemporaneous.
- Demonstrates fluency in the use of tools, technologies and methods in the field.
- Evaluates, clarifies and frames a complex question or challenge using perspectives and scholarship from the student's major field and at least one other.
- Constructs a project related to a familiar but complex problem in the field of study by assembling, arranging and reformulating ideas, concepts, designs or techniques.
- Constructs a summative project, paper or practice-based performance that draws on current research, scholarship and/or techniques in the field.

Broad, Integrative Knowledge

- Frames a complex scientific, social, technological, economic or aesthetic challenge or problem from the perspectives and literature of at least two academic fields and proposes a “best approach” to the question or challenge using evidence from those fields.
- Produces, independently or collaboratively, an investigative, creative or practical work that draws on specific theories, tools and methods from at least two academic fields.
- Explains a problem in science, the arts, society, human services, economic life or technology from the perspective of at least two academic fields, explains how the methods of inquiry and research in those disciplines can be brought to bear, judges the likelihood that the combination of disciplinary perspectives and methods would contribute to the resolution of the challenge, and justifies the importance of the challenge in a social or global context.

Intellectual Skills

- Differentiates and evaluates theories and approaches to complex standard and non-standard problems within his or her major field. (Analytic inquiry)
- Incorporates multiple information resources in different media or languages in projects, papers or performances, with appropriate citations; and evaluates the relative merits of competing resources with respect to clearly articulated standards. (Use of information resources)
- Constructs a cultural, political or technological alternate vision of either the natural or human world through a written project, laboratory report, exhibit, performance or community service design; defines the distinct patterns in this alternate vision; and explains how these patterns differ from current realities. (Engaging diverse perspectives)
- Translates verbal problems into mathematical algorithms, constructs valid arguments using the accepted symbolic system of mathematical reasoning, and constructs accurate calculations, estimates, risk analyses or quantitative evaluations of public information through presentations, papers or projects. (Quantitative fluency)
- Constructs sustained, coherent argument or presentation on technical issues or processes in more than one language and in more than one medium for general and specific audiences; and works through collaboration to address a social, personal or ethical dilemma. (Communication fluency)

Applied Learning

- Presents a project, paper, performance or other appropriate task linking knowledge and skills from work, community or research activities with knowledge acquired in academic disciplines; explains how elements were combined to shape meaning or findings; and shows the relationship to relevant scholarship.
- Formulates a question on a topic that addresses more than one academic discipline or practical setting, locates appropriate evidence that addresses the question, evaluates the evidence in relation to the problem’s contexts, and articulates conclusions that follow logically from analysis.
- Completes a field-based assignment in the course of study that employs insights from others; evaluates a significant question in relation to concepts, methods or assumptions in at least one academic field; and explains the implications of learning outside the classroom.

Civic Learning

- Explains diverse perspectives on a contested issue and evaluates insights gained from different kinds of evidence reflecting scholarly and community perspectives.
- Develops and justifies a position on a public issue and relates this position to alternative views within the community or policy environment.
- Collaborates in developing and implementing an approach to a civic issue, evaluates the process and, where applicable, weighs the result.
- Institution-specific areas.
- (Users of the Degree Profile matrix should use this column to list other areas of learning they wish to include.)

Appendix B: Tables

Table 1: IU Bloomington: The Common Ground and Shared Goals

Common Ground (Required; up to 31 credit hours; see also Document 2 in Appendix A and Table 3 in Appendix B)

1. Foundations
 - a. [English Composition](#) (3 cr.)
 - b. [Mathematical Modeling](#) (3–4 cr.)
2. Breadth of Inquiry
 - a. [Arts and Humanities](#) (6 cr.)
 - b. [Social and Historical studies](#) (6 cr.)
 - c. [Natural and Mathematical Sciences](#) (5–6 cr.)
3. [World Languages and Cultures](#) (6 cr.)

Shared Goals (Recommended; varies by school)

Each degree program should be designed in such a way that students are provided opportunities to experience these additional aspects of an undergraduate education:

- [Intensive Writing](#)
- [Information Fluency](#)
- [Diversity in the United States](#)
- [Enriching Educational Experiences](#) (service learning, internship, capstone project, student teaching, independent research/creative activity program, an approved study abroad experience, honors thesis, show, recital, performance)

Table 2: Articulation of IUB’s Common Ground with IUPUI’s Undergraduate Degree Requirements

School	Transferring To IUPUI from IUB	Transferring to IUB from IUPUI
Business	30 hours of IUPUI course work should transfer to IUB Common Ground requirements and all areas would be met. (Depending on the program there might be additional general education hours). As a core school, transfer between IUPUI and IUB is readily accommodated.	30 hours of IUPUI course work should transfer to IUB Common Ground requirements and all areas would be met. (Depending on the program there might be additional general education hours). As a core school, transfer between IUPUI and IUB is readily accommodated.
Education	Secondary Education – English: Up to 27 credits from Common Ground should transfer from IUB; second writing course and EDUC courses would need to be added. (21 credits)	Secondary Education – English: - 30 credits would transfer to Common Ground; student may need Math course, M118 or higher.
	Secondary Education –Biology: Could need an additional 47-53cr depending on specific courses transferred in (e.g. level of math, language, science electives)	Secondary Education –Biology: 24 credits would transfer to Common Ground; student may need 1 social science and 1 humanities.
Engineering and Technology	Engineering majors: 13 credits(from English, Math, Sciences) and anywhere from 6-18 additional credits depending on student’s major and course selections(from Arts and Humanities, Social and Historical Studies, and World Languages and Cultures)	Engineering majors: 14 credits (from English, Math, Sciences, provided student took equivalents to MATH 16500, PHYS 15200, CHEM-C 105) and anywhere from 6-18 additional credits depending on student’s major and course selections (from Arts and Humanities, Social and Historical Studies, and World Languages and Cultures)
	Technology majors: 6 credits from English and Mathematical modeling for all Technology majors; 0-6 credits from Natural and Mathematical Sciences (depending upon major); 6-36 credits from Arts and Humanities, Social and Historical	Technology majors: 6 credits from English and Mathematical Modeling (depending on level of math course and desired Technology major); 0-6 credits from Natural and Mathematical Sciences(dependent on level and content of course and desired Technology major); 6-36 credits from Arts and Humanities, Social and Historical Studies, and World Languages and Cultures(dependent on course selections and desired Technology major)

School	Transferring To IUPUI from IUB	Transferring to IUB from IUPUI
Health and Rehabilitation Sciences	Could need an additional 45-50 credit hours as only 6 credits from Common Ground would clearly transfer.	18 credits would transfer to Common Ground and student would need 3 cr. Humanities, 3 cr Social & Historical studies; 6 cr language/cultural studies (some of these may come from general electives).
Informatics	Up to 30 credits from Common Ground should transfer from IUB; only Speech and a Stats course would be needed (6 cr)	At least 24 credits would transfer to Common Ground three credits would be needed in “arts and humanities” 3 in Social and Historical studies and possibly 6 in language and culture depending on courses student brought from IUPUI)
Journalism	Up to 30 credits from Common Ground should transfer from IUB; Speech, Stats, and various social science and Humanities credits would be needed (26 cr)	30 credits would transfer to Common Ground and distributions would be met.
Liberal Arts	30 credits would transfer but student would need 12-15 additional hours (reflecting fact that Liberal Arts has more than 50 hours of general education requirements)	30 hours of IUPUI course work should transfer to IUB Common Ground requirements and all areas would be met.
Nursing	School of Nursing - 30 credits would likely transfer (if student took courses judiciously) but student would need 15-18 additional hours (reflecting fact that Nursing has more than 44 hours of gen-ed requirements)	School of Nursing - 27 hours of IUPUI course work should transfer to IUB Common Ground requirements. Student would need to complete world languages and cultures requirement.
Physical Education, Tourism, and Convention Management	Exercise Science: 23-25 credits would transfer but student would need 28-30 additional hours	Exercise Science: 21-23 hours of IUPUI course work should transfer to IUB Common Ground requirements. Student would need to complete 3 additional credits in Mathematical Modeling 6 credits in World Culture/Study Abroad
	Fitness Studies: 16 credits would transfer but student would need 25-26 additional hours	Fitness Studies: 16 hours of IUPUI course work should transfer to IUB Common Ground requirements. Student would need to complete 3 additional credits in Mathematical Modeling, 3 credits in Arts/Humanities, 1-2 credits in Natural/Mathematical Sciences, and 6 credits in World Culture/Study Abroad.
	Health Education: 16 credits would transfer but student would need 9 additional hours	Health Education: 16 hours of IUPUI course work should transfer to IUB Common Ground requirements. Student would need to complete 3-4 additional credits in Mathematical Modeling, 6 credits in Arts/Humanities, 1-2 credits in

School	Transferring To IUPUI from IUB	Transferring to IUB from IUPUI
		Natural/Mathematical Sciences, and 3 credits in World Culture/Study Abroad.
	Sports Management: 19 credits would transfer but student would need 16 additional hours	Sports Management: 19 hours of IUPUI course work should transfer to IUB Common Ground requirements. Student would need to complete 3 credits in Arts/Humanities, 1-2 credits in Natural/Mathematical Sciences, and 6 credits in World Culture/Study Abroad.
	Tourism: 24 credits would transfer but student would need 19-29 additional hours (depending on major and whether student earns BA or BS degree)	Tourism: 24 hours of IUPUI course work should transfer to IUB Common Ground requirements. Student would need to complete world languages and cultures requirement.
Science	24 credits would transfer but student would need 19-29 additional hours (depending on major and whether student earns BA or BS degree)	24 hours of IUPUI course work should transfer to IUB Common Ground requirements. Student would need to complete world languages and cultures requirement.
Social Work	21-24 credits would transfer but student would need 18 additional hours (2 nd English Composition course plus 4 “supportive area courses”)	21-24 hours of IUPUI course work should transfer to IUB Common Ground requirements. Student would need to complete additional natural science/mathematical science course and world languages and culture requirement.
	BSJC Language Option: 15-21 credits would transfer if they student completed a language and depending on if they include a lab science. 18-24 credits left.	Criminal Justice –(Foreign Language Option) At least 24 credits would transfer to Common Ground six credits would be needed in “arts and humanities” depending on courses student brought from IUPUI)
	BSCJ Non Language Option: 21-24 credits would transfer, depending on their choices in science. 21-24 credits left.	BSCJ Non Language Option – at least 24 credits would transfer to Common Ground.
SPEA	BSPA Language Option: 9-21 credits would transfer, depending on specific elective choices and if they complete a language. 18-24 credits left.	BSPA Language Option – at least 21 credits would transfer to Common Ground.
	BSPA, Non Language Option: 12-24 credits would transfer depending on specific elective choices. 18-30 credits left.	Public Affairs, Non Language Option - (IUPUI transfer would need 6 credits in language/culture perhaps additional hours in humanities)

Table 3: Learning Outcomes in Comparison—PULs (IUPUI), Common Ground (IUB), and Essential Learning Outcomes (LEAP)

IUPUI's Principles of Undergraduate Learning (PULs)	IUB's Common Ground	Essential Learning Outcomes (AAC&U's LEAP)
<p>Core Communication and Quantitative Skills (PUL 1): The ability of students to express and interpret information, perform quantitative analysis, and use information resources and technology--the foundational skills necessary for all IUPUI students to succeed. Core communication and quantitative skills are demonstrated by the student's ability to: a. <u>express ideas and facts to others effectively in a variety of formats, particularly written, oral and visual formats</u>; b. <u>comprehend, interpret, and analyze ideas and facts</u>; c. <u>communicate effectively in a range of settings</u>; d. <u>identify and propose solutions for problems using quantitative tools and reasoning</u>; e. <u>make effective use of information resources and technology</u>.</p>	<p>Foundations: Students proficient in English composition will demonstrate the ability to 1. employ strategies of pre-writing, drafting, and revising; 2. engage in substantial revision of drafts; 3. <u>read critically, summarize, apply, analyze, and synthesize information and concepts</u>; 4. <u>engage in inquiry-driven research, making use of appropriate data repositories and indexes</u>; 5. develop a focused thesis and link it to appropriate reasons and adequate evidence; 6. use genre conventions and structure (e.g., introductions, paragraphing, transitions) in ways that serve the development and communication of information and ideas; 7. edit [for] clear communication of information and ideas. Students proficient in Mathematical Modeling should demonstrate the ability to 1. <u>create mathematical models of empirical or theoretical phenomena</u>; 2. create variables and other abstractions to solve college-level mathematical problems; 3. draw inferences from models using college-level mathematical techniques; 4. <u>take an analytical approach to problems in their future endeavors</u>.</p>	<p>Intellectual and Practical Skills, including</p> <ul style="list-style-type: none"> • Inquiry and analysis • Critical and creative thinking • <u>Written and oral communication</u> • <u>Quantitative literacy</u> • <u>Information literacy</u> • <u>Teamwork and problem solving</u> <p><i>Practiced extensively</i>, across the curriculum, in the context of progressively more challenging problems, projects, and standards for performance.</p>
<p>Critical Thinking (PUL 2): The ability of students to engage in a process of disciplined thinking that informs beliefs and actions. A student who demonstrates critical thinking applies the process of disciplined thinking by remaining open-minded, reconsidering previous beliefs and actions, and adjusting his or her thinking, beliefs and actions based on new information. The process of critical thinking begins with the ability of students to remember</p>	<p>Foundations: Students proficient in English composition will demonstrate the ability to 1. employ strategies of pre-writing, drafting, and revising; 2. engage in substantial revision of drafts; 3. <u>read critically, summarize, apply, analyze, and synthesize information and concepts</u>; 4. <u>engage in inquiry-driven research, making use of appropriate data repositories and indexes</u>; 5. <u>develop a focused thesis and link it to appropriate reasons and adequate evidence</u>;</p>	<p>Intellectual and Practical Skills, including</p> <ul style="list-style-type: none"> • <u>Inquiry and analysis</u> • <u>Critical and creative thinking</u> • Written and oral communication • Quantitative literacy • Information literacy • <u>Teamwork and problem solving</u> <p><i>Practiced extensively</i>, across the curriculum, in the context of progressively more challenging problems, projects, and standards for</p>

IUPUI's Principles of Undergraduate Learning (PULs)	IUB's Common Ground	Essential Learning Outcomes (AAC&U's LEAP)
<p>and understand, but it is truly realized when the student demonstrates the ability to a. <u>apply</u>, b. <u>analyze</u>, c. <u>evaluate</u>, and d. <u>create knowledge, procedures, processes, or products to discern bias, challenge assumptions, identify consequences, arrive at reasoned conclusions, generate and explore new questions, solve challenging and complex problems, and make informed decisions.</u></p>	<p>6. use genre conventions and structure (e.g., introductions, paragraphing, transitions) in ways that serve the development and communication of information and ideas; 7. edit {for} clear communication of information and ideas. Students proficient in Mathematical Modeling should demonstrate the ability to 1. <u>create mathematical models of empirical or theoretical phenomena</u>; 2. <u>create variables and other abstractions to solve college-level mathematical problems</u>; 3. <u>draw inferences from models using college-level mathematical techniques</u>; 4. <u>take an analytical approach to problems in their future endeavors.</u></p>	<p>performance.</p>
<p>Integration and Application of Knowledge (PUL 3): The ability of students to use information and concepts from studies in multiple disciplines in their intellectual, professional, and community lives. Integration and application of knowledge are demonstrated by the student's ability to a. <u>enhance their personal lives</u>; b. <u>meet professional standards and competencies</u>; c. <u>further the goals of society</u>; and d. <u>work across traditional course and disciplinary boundaries.</u></p>	<p>Breadth of Inquiry: Arts and Humanities: 1. <u>Knowledge of origins, varieties, and meanings of the expressions and artifacts of human experience</u>, including (a) original written texts in various literary forms, (b) works of visual art and design, (c) musical compositions, (d) dramatic performance (live theater, dance, film, video, digital, etc.). 2. <u>Knowledge of the cultural, intellectual, and historical contexts.</u> 3. <u>Knowledge of the modes of symbolic expression and aesthetic and/or literary conventions.</u> 4. <u>Ability to develop arguments, ideas, and opinions about forms of human expression.</u> 5. <u>Ability to create or reinterpret artistic works.</u> 6. <u>Ability to explain and assess the changing perspectives on the meanings of arts and humanities traditions, and to explore one's own identity.</u> Social and Historical Studies: 1. <u>Knowledge of Human Cultures and Physical and Natural World</u> a. Human culture knowledge through understanding of history, social situations, and social institutions 2. <u>Intellectual and Practical Skills</u> a. Critical and</p>	<p>Integrative and Applied Learning, including</p> <ul style="list-style-type: none"> • <u>Synthesis and advanced accomplishment across general and specialized studies.</u> <i>Demonstrated</i> through the application of knowledge, skills, and responsibilities to new settings and complex problems.

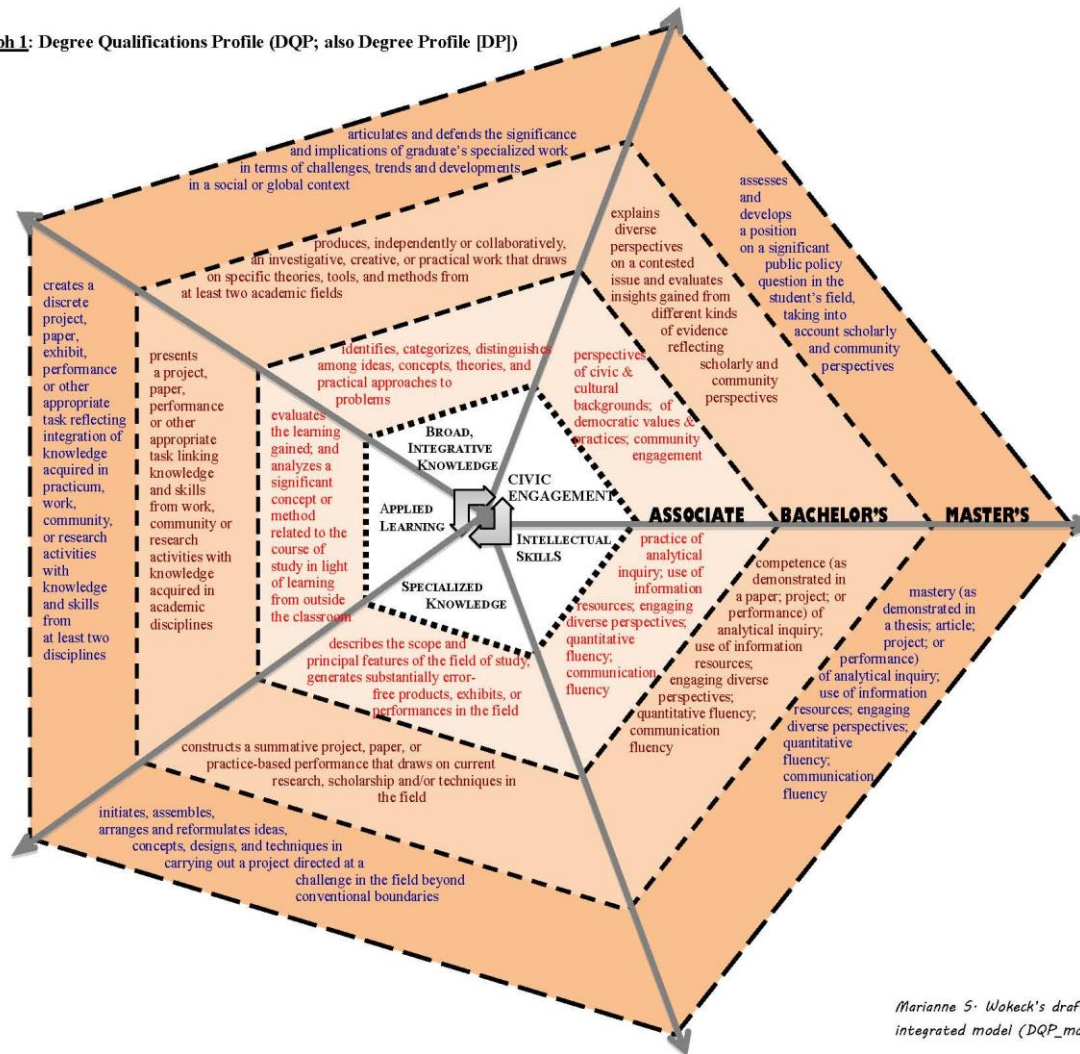
IUPUI's Principles of Undergraduate Learning (PULs)	IUB's Common Ground	Essential Learning Outcomes (AAC&U's LEAP)
	<p>creative thinking b. Inquiry and analysis c. Quantitative and/or qualitative literacy through theory and methodology. 3. <u>Personal and Social Responsibility</u> a. Intercultural knowledge b. Civic knowledge c. Skills for life-long learning. Students of Natural and Mathematical Sciences will 1. <u>become familiar with scientific inquiry and the bases for technology</u>; 2. <u>acquire tools to model and understand the physical and natural world</u>; 3. <u>acquire skills in the collection and interpretation of data, critical thinking, and theoretically based inquiry</u>; 4. <u>learn to solve problems</u>.</p>	
<p>Intellectual Depth, Breadth, and Adaptiveness (PUL 4): The ability of students to examine and organize disciplinary ways of knowing and to apply them to specific issues and problems. Intellectual depth, breadth, and adaptiveness are demonstrated by the student's ability to a. <u>show substantial knowledge and understanding of at least one field of study</u>; b. <u>compare and contrast approaches to knowledge in different disciplines</u>; c. <u>modify one's approach to an issue or problem based on the contexts and requirements of particular situations</u>.</p>	<p>Breadth of Inquiry: Arts and Humanities: 1. <u>Knowledge of origins, varieties, and meanings of the expressions and artifacts of human experience</u>, including (a) original written texts in various literary forms, (b) works of visual art and design, (c) musical compositions, (d) dramatic performance (live theater, dance, film, video, digital, etc.). 2. <u>Knowledge of the cultural, intellectual, and historical contexts</u>. 3. <u>Knowledge of the modes of symbolic expression and aesthetic and/or literary conventions</u>. 4. <u>Ability to develop arguments, ideas, and opinions about forms of human expression</u>. 5. <u>Ability to create or reinterpret artistic works</u>. 6. <u>Ability to explain and assess the changing perspectives on the meanings of arts and humanities traditions, and to explore one's own identity</u>. Social and Historical Studies: 1. <u>Knowledge of Human Cultures and Physical and Natural World</u> a. Human culture knowledge through understanding of history, social situations, and social institutions 2. <u>Intellectual and Practical Skills</u> a. Critical and creative thinking b. Inquiry and analysis c.</p>	<p>Integrative and Applied Learning, including</p> <ul style="list-style-type: none"> • <u>Synthesis and advanced accomplishment across general and specialized studies</u>. <i>Demonstrated</i> through the application of knowledge, skills, and responsibilities to new settings and complex problems.

IUPUI's Principles of Undergraduate Learning (PULs)	IUB's Common Ground	Essential Learning Outcomes (AAC&U's LEAP)
	<p>Quantitative and/or qualitative literacy through theory and methodology. 3. <u>Personal and Social Responsibility</u> a. Intercultural knowledge b. Civic knowledge c. Skills for life-long learning. Students of Natural and Mathematical Sciences will 1. <u>become familiar with scientific inquiry and the bases for technology</u>; 2. <u>acquire tools to model and understand the physical and natural world</u>; 3. <u>acquire skills in the collection and interpretation of data, critical thinking, and theoretically based inquiry</u>; 4. <u>learn to solve problems</u>.</p>	
<p>Understanding Society and Culture (PUL 5): The ability of students to recognize their own cultural traditions and to understand and appreciate the diversity of the human experience. Understanding society and culture is demonstrated by the student's ability to a. <u>compare and contrast the range of diversity and universality in human history, societies, and ways of life</u>; b. <u>analyze and understand the interconnectedness of global and local communities</u>; and c. <u>operate with civility in a complex world</u>.</p>	<p>World Languages and Cultures: Knowledge-- 1. <u>Understands culture within a global and comparative context</u> (that is, the student recognizes that his/her culture is one of many diverse cultures and that alternate perceptions and behaviors may be based in cultural differences). 2. <u>Demonstrates knowledge of global issues, processes, trends, and systems</u> (that is, economic and political interdependency among nations, environmental-cultural interaction, global governance bodies, and nongovernmental organizations). 3. <u>Demonstrates knowledge of other cultures</u> (including beliefs, values, perspectives, practices, and products). <i>Skills--</i>4. <u>Uses knowledge, diverse cultural frames of reference, and alternate perspectives to think critically and solve problems</u>. 5. <u>Communicates and connects with people in other language communities</u> in a range of settings for a variety of purposes, developing skills in each of the four modalities: speaking (productive), listening (receptive), reading (receptive), and writing (productive). 6. <u>Uses foreign language skills and/or knowledge of</u></p>	<p>Knowledge of Human Cultures and the Physical and Natural World • <u>Through study in the sciences and mathematics, social sciences, humanities, histories, languages, and the arts.</u> <i>Focused</i> by engagement with big questions, both contemporary and enduring.</p>

IUPUI's Principles of Undergraduate Learning (PULs)	IUB's Common Ground	Essential Learning Outcomes (AAC&U's LEAP)
	<p><u>other cultures</u> to extend access to information, experiences, and understanding.</p> <p><i>Attitudes</i>--7. <u>Appreciates the language, art, religion, philosophy, and material culture of different cultures.</u> 8. <u>Accepts cultural differences and tolerates cultural ambiguity.</u> 9. <u>Demonstrates an ongoing willingness to seek out international or intercultural opportunities.</u></p>	
<p>Values and Ethics (PUL 6): The ability of students to make sound decisions with respect to individual conduct, citizenship, and aesthetics. A sense of values and ethics is demonstrated by the student's ability to a. <u>make informed and principled choices and to foresee consequences of these choices;</u> b. <u>explore, understand, and cultivate an appreciation for beauty and art;</u> c. <u>understand ethical principles within diverse cultural, social, environmental and personal settings.</u></p>	<p>IUB's Common Ground (Foundations and Breadth of Inquiry) is course-based within the broad categories of English Composition; Mathematical Sciences; Arts and Humanities, Natural and Social Sciences; and World Languages and Cultures.</p> <p>Therefore the learning outcomes of "values and ethics" (IUPUI's PULs) and "personal and social responsibility" (LEAP's essential learning outcomes) are incorporated into the articulation of learning objective within those curricular categories. The particular Common Ground learning objectives that match "values and ethics" and "personal and social responsibilities are not culled in this space from the comprehensive statements above.</p>	<p>Personal and Social Responsibility, including</p> <ul style="list-style-type: none"> • <u>Civic knowledge and engagement</u>—local and global; • <u>Intercultural knowledge and competence;</u> • <u>Ethical reasoning and action;</u> • <u>Foundations and skills for lifelong learning.</u> <p><i>Anchored</i> through active involvement with diverse communities and real-world challenges.</p>

Appendix C: Graphs

Graph 1: Degree Qualifications Profile (DQP; also Degree Profile [DP])



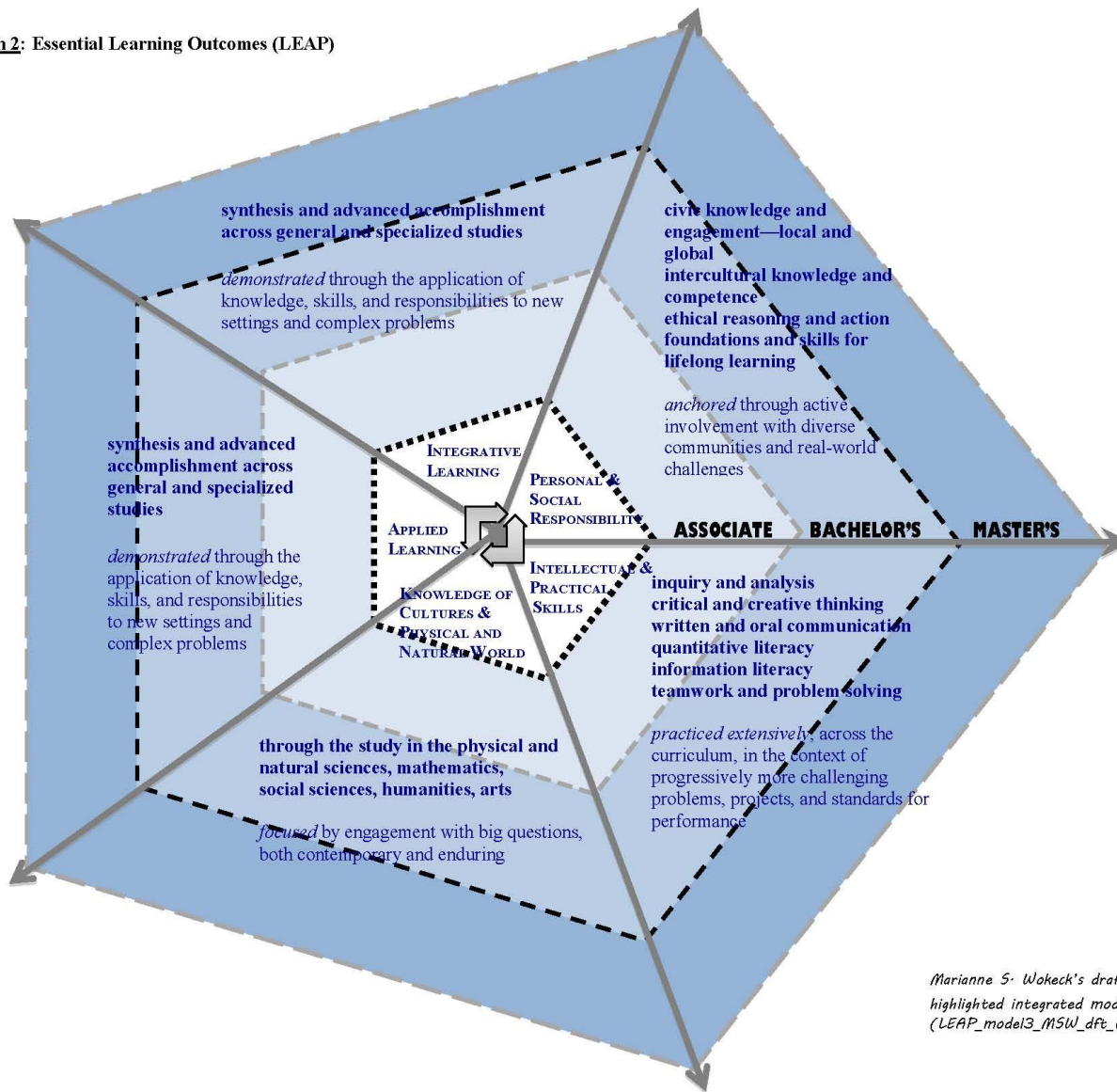
Degree Qualifications Profile (DQP)

Based on the Lumina Foundation publication *The Degree Qualifications Profile*

Refer to the DQP learning outcomes matrix in that publication for the complete listings of learning outcomes at each degree level (excerpted in a text document provided for your convenience).

Marianne S. Woheck's draft of a DQP-highlighted integrated model (DQP_model3_MSU_dft_Feb-2011)

Graph 2: Essential Learning Outcomes (LEAP)



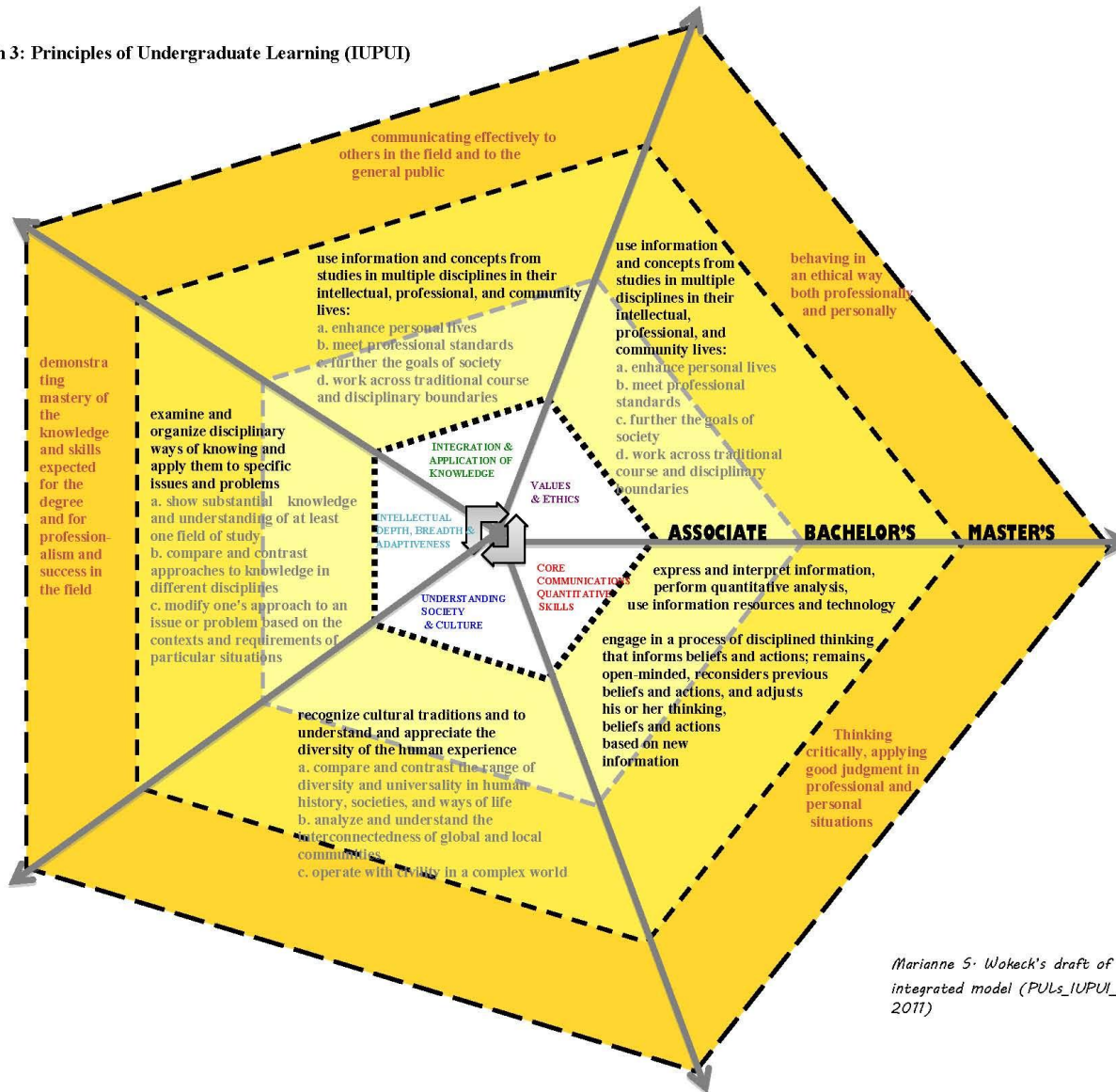
Liberal Education America's Promise (LEAP)

Essential Learning Outcomes

For a listing of the Essential Learning Outcomes, see also the text document.

Marianne S. Woheck's draft of a LEAP-highlighted integrated model (LEAP_model3_MSU_dft_Feb-2011)

Graph 3: Principles of Undergraduate Learning (IUPUI)



IUPUI's Principles of Undergraduate Learning (PULs)

IUPUI's Principles of Graduate and Professional Learning (PGPLs)

For a complete listing of the PULs and PGPLs, see the text document.

