



A Proposal for the Definition of Course Levels

LEVELS Task Force - SIUE

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PREAMBLE

Origins and Goals

The Levels Task Force was created in 2005 by the Curriculum Council of the SIUE Faculty Senate. This task force, comprising individuals from across the University, was charged with describing and defining “the distinctions between academic scholarship, dispositions, and intellectual growth and development at lower and upper levels of education” (original charge attached as an appendix). Essentially, our task was to define levels of scholarship as they pertain to 100-, 200-, 300-, 400-, and 500-level courses. While existing within the many Departments and Programs at a variety of cultural levels, such definitions have not been formalized for the University as a whole. Defining the distinctions between lower and upper level curricula may help to inform articulation and transfer agreements, guide discussion in the development of new courses and degree programs, encourage the process of re-evaluating curricula within Departments/Programs, and steer departmental/programmatic assessment activities. Broadly accepted definitions of scholarship at different course levels may also be productively communicated to new faculty with limited teaching experience, and elements of these definitions could be included in course syllabi to make a more general, cohesive set of expectations on the part of the instructor(s) more clear to students.

Desired Characteristics

In the document below, we propose a definition of course levels that seeks to incorporate three desired characteristics. First, we sought a series of definitions that would be universal (or at least nearly so) across the colleges, departments and programs of SIUE, and by extension, universal across institutions of higher education in the United States. Second, we desired definitions that would be relatively stable and continually

applicable in the face of changes in program offerings or program descriptions, graduation requirements, assessment benchmarks, and intellectual growth within disciplines. Finally, we developed definitions which do not rely on the notion of prerequisites. Defining a 300-level course as one which has 100-level and/or 200-level courses as prerequisites does nothing to define the 300-level course as an independent entity within higher education. (As an extension of such logic, we could simply define a 300-level course in college as one typically taken 12 years after a 2nd grade course, assuming continual enrollment in school.) By defining course levels independently of prerequisites, we feel that appropriate prerequisites then emerge from our definitions rather than contribute to them.

Models

We incorporated the views and approaches of several sources into our discussion of these definitions. We surveyed SIUE faculty as well as materials from other institutions to apply language to the many cultural perceptions of what constitutes course levels in higher education. Alexander Meiklejohn's The Experimental College (1932) provided a framework against which to define "lower division" courses at the 100- and 200-levels as satisfying general education requirements and as introducing students to a discipline and to independent learning; "upper division" courses at the 300- and 400-levels as creating the practitioners of current knowledge and methods of a specific discipline; and "graduate" courses at the 500-level or higher which develop the practitioners, creators and originators of knowledge within a discipline. We developed our definitions against the oft-cited and well established cognitive developmental hypotheses of Benjamin Bloom (A Taxonomy of Educational Objectives, 1956) and various modifications thereto (e.g., Anderson and Krathwohl: A Taxonomy for Learning, Teaching and Assessing: A Revision of Bloom's Taxonomy, 2001; and Hauenstein: A Conceptual Framework for Educational Objectives, 1988).

Caveats

- Our proposed characterizations are not meant to be prescriptive. We do not advocate that Departments and Programs should now insure that content within all their courses lines up with our definitions. Our definitions are also not meant to prescribe how individual instructors should teach their courses, nor to prescribe what kind or how much work load should exist within individual courses.
- We recognize that various disciplines may have long traditions with respect to activities and requirements of courses taught at certain levels, and that these traditions may play an important role in a student's progress through a degree program.
- Additionally, we recognize that course designations at some levels may be primarily logistical rather than intellectual or academic (e.g., a given 200-level course may not require much more than a typical 100-level course in an intellectual sense, but may be so designated because it is the second in a series of courses taken after a 100-level prerequisite).

- Our characterizations are not meant to shape course titles or course descriptions. A course may be considered “Introductory” at the 300- or 400-level simply because it is a generalized treatment of a relatively narrow topic within the discipline, but designed for upper-division students. Large intellectual and attitudinal differences exist between, for example, “Introduction to Philosophy” versus “Introduction to Symbolic Logic;” “Introduction to Physics” versus “Introduction to String Theory;” and “Introduction to Computing” versus “Introduction to Artificial Intelligence and Robotics.” We believe our definitions capture these differences without mandating or being affected by course title or course description.
- Finally, we acknowledge that some courses in some disciplines may simply defy the desired universality of our definitions; our hope, however, is that such exceptions themselves become informative with respect to understanding the maturation and intellectual development of students within such disciplines.

Conventions

Each of our definitions comprises three components: the Cognitive Domain, the Student Behavioral/Affective Domain, and Assumed/Expected Student Preparation. The cognitive domain describes elements of instruction typically included in a course at a particular level, and defines what instructors can reasonably expect of their students at that level. However, the success of teaching students at a particular intellectual level depends upon both the degree of incoming student preparation and the attitudes and motivations that students bring with them. Additionally, “successful” completion of a curriculum on the part of a student and from the point of view of a Department or Program is not defined solely by the knowledge of facts, figures, conventions, and techniques of a discipline; it is defined as well by the motivation of a student to understand and exhibit the cultural norms of best practices within that discipline. Thus, we feel that all three components of our definitions are necessary to sufficiently delineate levels of collegiate scholarship.

Prior to examining our definitions of course levels, the reader should be aware of three additional conventions which we make use of in this document. First, “convergent” responses or products are those provided and/or created by students which are assessed against “right” answers or known facts or techniques; these require use of remembering, recalling, combining, and applying as intellectual skills. “Divergent” responses or products, on the other hand, are those provided and/or created by students which reflect an ability to understand, generalize, and evaluate material learned in the classroom and which may not converge on “right” answers. Second, our use of the term “discipline” refers to an intellectual field at the Departmental/Programmatic level insofar as these are organized within the University. While the departmental organization of a discipline may vary among institutions, our hope is that our definitions of course levels within disciplines still hold. Finally, we assume that characteristics presented below under “Student Behavioral/Affective Domains” and “Assumed/Expected Student Preparation” are cumulative across course levels, and that they reflect the maturation of a student as a scholar and a life-long learner.

COURSE LEVEL CHARACTERISTICS

100 – Level

Cognitive Domain:

- Introduction to terms, concepts, techniques and ways of thinking/learning within discipline, typically in the context of a relatively broad survey of topics;
- Focus on incorporating and recalling basic information and understanding basic connections among facts and concepts;
- Focus of assessment/evaluation tools (e.g., examinations, writing assignments, homework projects, performances, in-class assignments, etc.) on convergent responses or products created in response to specific, directed demands by the instructor, where these products are generally re-creations of material presented during the course;
- Application of techniques for the sake of learning the technique itself and under the direction/supervision of the instructor (e.g., basic painting skills, basic outlining skills, basic laboratory skills, basic computer skills, etc.);
- Recognition and creation of meaningful categories of terms and concepts from material presented in the course.

Student Behavioral/Affective Domain:

- Willingness and self-discipline to independently schedule time for attending class, completing homework, studying and reviewing information;
- Ability to independently focus on and engage with course content in whatever form it might take (e.g., lectures, field trips, studio exercises, laboratories, etc.);
- Willingness and expectation to learn new material relating to factual knowledge, concepts and synthetic ideas, as well as to respectfully acknowledge viewpoints and ideas as presented by other students and faculty.

Assumed/Expected Student Preparation:

- Assumes no previous exposure to the specific subject matter;
- Basic ability to access information related to coursework through library resources, the Internet, instructors, etc.;
- Knowledge of grammatical convention and vocabulary to be able to compose a paper in response to specific, convergent requirements of an instructor;
- Reading comprehension skills sufficient to independently extract and summarize factual and at least some conceptual content from basic textbooks or other assigned readings in the discipline;
- Basic computational and mathematical skills, at least to the algebraic level wherein relationships among entities can be recognized and resolved;
- Ability to recognize fundamental cause-and-effect relationships between factors or elements specific to a discipline (e.g., that smoking may cause cancer, that economic strife may cause a war, that applied force may cause motion, that loyalty may cause dishonesty, etc.) upon illustration by an instructor or upon reading in course materials.

200 – Level

Cognitive Domain:

- Continued introduction to terms and concepts within the discipline, although typically within a more narrowly defined topic;
- Greater emphasis on understanding connections among terms and concepts;
- Inclusion of assessment/evaluation tools that place at least some emphasis on convergent responses or products not previously encountered in the course material (i.e., that form logical extensions of material presented but where these extensions/ combinations have not been encountered previously);
- Development of the ability to integrate terms and concepts from throughout the course, from other introductory material in the discipline, and/or from analytical and communication skills learned in other introductory courses so as to recognize relationships among terms and concepts perhaps not explicitly discussed by the instructor;
- Development of written and oral communication skills as especially those used within the discipline.

Student Behavioral/Affective Domain:

- Experience with independently scheduling time for class attendance, completing assigned work, and studying and reviewing material outside of class;
- Willingness to begin recognizing and developing an ability to provide responses and/or create products in response to convergent demands related to topics not specifically discussed previously in the course.

Assumed/Expected Student Preparation:

- Exposure to related topics, although perhaps not to the specifics of the subject matter;
- At least some familiarity with some of the basic terms and concepts within the discipline;
- Ability to independently retrieve basic information about terms and concepts related to the discipline which may be presented but not explicitly defined during the course.

300 – Level

Cognitive Domain:

- Development of specialized terms, concepts, techniques and approaches pertaining to a narrowly defined topic within the discipline; curriculum designed for a subset of majors with shared interests and goals;
- Inclusion of assessment/evaluation tools such as writing assignments, assigned projects and performances, etc. that require use of library and other outside sources of information to create convergent or divergent products involving minimal direction by the instructor and minimal reliance on material presented directly during the course;
- Application of basic techniques and approaches not for their own sake, but as part of more integrated, primarily convergent learning goals (e.g., painting to a certain

style, creating a certain compound in the laboratory, programming a computer for a certain task, etc.);

- Integration across multiple topics such that students come to recognize deeper, predictable patterns within the terms, concepts, techniques and approaches of a discipline;
- Development of ability to independently recognize relative values of different approaches within the discipline and to recognize potential biases, viewpoints, and/or intentions within the scholarship underlying the discipline.

Student Behavioral/Affective Domain:

- Willingness to create products with minimal input or direction from the instructor that may be based upon material not directly presented in the course and perhaps in the context of collaborative effort with student colleagues;
- Independent recognition of, and willingness to commit to, time required for completion of disparate, occasionally divergent tasks (e.g., short-term vs. long-term writing assignments, stages of an on-going project, etc.);
- Recognition of one's own factual and/or conceptual knowledge of a discipline and where it could be strengthened relative to the state of development of that discipline;
- Ability to recognize appropriateness of seeking assistance and input at a variety of levels (e.g., self-directed study and review vs. assistance from the instructor vs. collaborative input from student colleagues, etc.).

Assumed/Expected Student Preparation:

- In-depth familiarity with basic terms, concepts, techniques and approaches of the discipline;
- Facility with independent use of sources of information pertinent to the discipline (e.g., library collections, online databases, primary scholarship, faculty recommendations, etc.);
- Ability to independently develop written and oral papers and presentations in the style of the discipline;
- Ability to recognize which elements or factors are important in shaping cause-and-effect relationships within the discipline.

* Note that this characterization of 300-level courses may not apply to courses that serve special curricular functions outside of typical sequences (e.g., IS program), 300-level courses that serve as entry-level courses for some academic programs (e.g., School of Business), or 300-level courses that do not have specific, sequence-based pre-requisites. Such courses may be numbered at the 300-level because of expectations of certain student affective/maturational characteristics without carrying the cognitive demand of "typical" 300-level courses.

400 – Level

Cognitive Domain:

- Development and analysis of the most current terms, concepts, techniques and approaches shaping the discipline;
- Focus on inclusion of divergent, synthetic responses and/or products as assessment/evaluation tools that are produced with minimal input from the instructor;
- Application of techniques and approaches toward divergent assignments or projects that are potentially novel to the discipline, or that represent the most current approaches in the discipline;
- Increased focus on inclusion of primary scholarship in the discipline as material for students to analyze and critique constructively;
- Independent application of the standards of the discipline toward writing assignments, oral presentations, performances, etc.

Student Behavioral/Affective Domain:

- Willingness to commit time and energy toward solution of problems and/or creation of products with which the instructor may have limited direct experience and whose outcome the instructor may not be able to predict;
- Willingness to recognize and accept criticism and guidance as being constructive feedback from the instructor and from student colleagues.

Assumed/Expected Student Preparation:

- Ability to at least propose a problem to be solved or product to be created that is at least somewhat novel to the discipline;
- Independent recognition of technique or approach most appropriate to solving a particular problem or creating a specific product.

500 – Level

*We recognize that work at the graduate level incorporates much in the way of reading seminars, independent and Thesis research, and other forms of scholarship not limited to specific courses. Thus, our characteristics proposed here focus more on scholarship and features of academic maturation that we would particularly expect of graduate students.

Cognitive Domain:

- Relatively independent initiation of effort toward proposing and solving a novel problem, creating new scholarship, and/or producing a new intellectual product;
- Independent application of best practices of the discipline in solving a novel problem, creating new scholarship, and/or producing a new intellectual product;
- Increased focus on student becoming a practitioner of the discipline rather than primarily a learner of that discipline.

Student Behavioral/Affective Domain:

- Inherent interest in self-education and self-direction within the discipline;
- Willingness to accept responsibility for outcomes of self-directed research and creative activities.

Assumed/Expected Student Preparation:

- Facility with obtaining and understanding current primary literature/scholarly works and/or literature focused on practitioner/professionals within discipline;
- Ability to communicate effectively using accepted conventions of the discipline through oral, written, and/or performance modes.

* Note that as with some 300-level courses, some 500-level courses may not follow this characterization. Courses and activities focused toward non-thesis, certificate, or professional programs may be restricted to this level primarily because of the expectations of certain student affective/maturational characteristics typical of Bachelor degree holders, and may not focus on the scholarly activities typical of more specialized thesis degree programs.

APPENDIX

Original charge from Curriculum Council of the Faculty Senate:

UPPER AND LOWER LEVELS OF EDUCATION

Key questions emerging from discussions at SIUE, other institutions of higher education and national organizations such as the Higher Education Commission regarding distinctions between lower and higher education. Questions of interest include the following:

1. How do we distinguish between the knowledge bases for courses taught at different levels of higher education (Community Colleges, lower level undergraduate, upper level undergraduate and graduate levels)? If the same or similar textbooks are used, if the syllabi are essentially the same, what distinguishes a higher level course from one taught at a lower level?
2. Can we clearly define levels of scholarly dispositions that might allow us to differentiate gradients of scholarly maturity in such a manner as to inform the on-going discussion regarding distinctions between academic growth and development enacted at different levels of higher education?
3. Articulation agreements between lower level and higher level institutions have fostered a growing number of courses offered at community colleges and secondary schools that garner college credit transferable to four-year institutions. How can we be assured that the necessary academic rigor and scholarly growth are the same or comparable to what one might achieve within the culture and climate of a four year institution of higher learning, and perhaps, given the proliferation of college level courses offered at secondary schools, at a more advanced state of social and intellectual maturity?
4. If students' growth reflects continuing changes in behaviors reflected in maturing attitudes, values, and mores as they move upwards in their formal education; if students' personal and professional integrity is demonstrably different at each level of education when they engage in scholarly activities such as gathering, analyzing, and evaluating data and if they hold themselves to ever higher standards relating to the processes of doing so; if students' participation in collegial activities is incrementally more substantial and equal to their mentors and colleagues as they matriculate; if their participation in the creation of new knowledge becomes more integral to their personal and professional selves; if their sense of professionalism evolves from simply holding knowledge to becoming active critical consumers, and ultimately to creators and appliers of knowledge; and finally, if students' service to their profession, their institution and the larger community becomes more deeply understood and enacted, can we discern how these changes occur and at what levels of education we can expect students to manifest these changes?

Curriculum Council recommends to the Faculty Senate that it form a Task Force, including membership from the Graduate Council, whose charge will be to describe and define the distinctions between academic scholarship, dispositions and intellectual growth and development at lower and upper levels of education.

Final Report Approved Faculty Senate: March 6, 2008 for placement on Faculty Senate Website as a guide for school and college curricular discussions.