

**Report to the Council on Academic Affairs
on the Status of the General Education Curriculum**

December 31, 2008

**Submitted by the
University-Level Advisory Committee for the General Education Curriculum**

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GENERAL EDUCATION CURRICULUM STATUS REPORT

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GENERAL EDUCATION CURRICULUM STATUS REPORT

Summary of Main Findings

The University-level Advisory Committee for the General Education Curriculum (ULAC-GEC) was established as a subcommittee of the Council on Academic Affairs (CAA) Spring 2008 to review and monitor the status of the GEC and make recommendations as appropriate. The main findings from the committee's review during 2008 are as follows:

- Colleges have distinct templates approved for delivering the GEC in up to nine distinct categories. Nonetheless, there is substantial overlap across colleges. The main distinctions are that: only the Colleges of the Arts and Sciences (ASC)/BA and the College of Food, Agricultural, and Environmental Sciences (FAES)/BS require the Capstone experience; and only ASC, the College of Pharmacy, and the International Business Administration major specialization in the College of Business require Foreign Language.
- There are over 900 courses in the GEC; if collapsed across prefixes and suffixes (e.g., Honors, 367.01, 367.02) there are between 600-700 courses. However, most students enroll in a smaller sub-set which becomes a functional core curriculum. Approximately 10% of the collapsed set of 600+ courses in the GEC accounts for 65% of all GEC enrollments; 33% of those courses account for 90% of all GEC enrollments.
- Approximately 92% of GEC courses are offered through ASC. The percentage of courses offered by non-ASC colleges increased from 3% in Autumn 2006 to almost 8% in Autumn 2008. In 2007/08, 52 course proposals were approved for a new GEC category status; 1 proposal was rejected; about 2/3 of the received GEC proposals were for new courses and 1/3 course change requests; 83% were from ASC; about a third were at the 100 level; and 6 courses had a GEC status withdrawn.
- Effective Autumn 2007, the GEC requirements for entering freshmen were reduced by five hours in the Breadth categories. The change is not necessarily expected to result in significant enrollment differences until these students graduate. However, the one area in which enrollment had a notable decline in 2007/08 was in the Arts and Humanities/Cultures and Ideas subcategory (-8%).
- Increasing numbers of students are entering OSU with EM/AP credit. About 70% of freshmen entered Autumn 2006 with some college credit from transfer, EM, or AP, about 90% of which is estimated to apply toward fulfilling specific GEC requirements. Beginning Autumn 2009, a change in state policy to accept AP scores of '3' or better for GEC credit, a lower score than is currently accepted in some programs, is projected to result in an additional 1600 students entering with AP credit. Over 800 additional students are expected to place out of English 110 with this change.
- Learning outcomes assessment is being conducted in the General Education (GE) program using multiple measures and several levels of analyses. Overall the findings suggest students are achieving GEC expected outcomes based on the following:

- On the National Survey of Student Engagement (NSSE), students' average responses as to whether their educational experiences contributed to their acquiring a broad general education were positive on the 2007 NSSE survey, improved between 2004 and 2007, and were not different from peer institutions.
- On the Collegiate Learning Assessment (CLA), a performance test being piloted to assess critical thinking, analytical reasoning, communication, and problem solving, students showed gains in performance at or above expected levels based on a sample of freshmen tested Autumn 2005 and seniors tested Spring 2006.
- Focus groups of faculty who teach within the GEC categories are planned, with those in Natural Science and Second-level Writing categories having already been conducted. Overall faculty concur that GEC outcomes are being met. Natural Science faculty note, however, that motivation for non-science students is a challenge. Second-level writing instructors note that many students are not prepared in basic writing skills when entering the course; also written communication is emphasized more than oral communication.
- Over the last four years, outcomes based reports have been requested for almost 90 large-enrollment GEC courses (annual enrollment > 1000) that span all GEC categories; 41 reports have been reviewed and feedback provided; another 20 reports are expected to be submitted and reviewed Winter quarter 2009, and an additional 20 from regional campuses are expected to be submitted by Winter 2010. Reports indicate outcomes are being achieved although areas for improvement can be identified.
- Exit surveys of ASC majors indicated students' responses about their learning in the GEC were generally positive but varied greatly depending on the category and question. Spring 2007 findings revealed that while only 44% of students agreed or strongly agreed that they achieved a broad education and developed general skills across several domains through the GEC, 73% indicated that their knowledge, skills, abilities, and personal development improved in integrating knowledge from different fields.
- Students' responses about their learning in many instances were influenced by their major/college. For example, students' perception of learning was higher for mathematical and quantitative skills if they were in the College of Mathematical and Physical Sciences (MPS) (94% agreed skills had improved) compared with ASC students overall (37% agreed skills had improved).
- Students' perception of their learning was highest for the survey item on 'critical thinking' (78.3%), and lowest for the 'mathematical and quantitative skills' item (37.4%). Just over half of students responding (51.7%) agreed or strongly agreed that the GEC helped prepare them for life-long learning.

Based on the information reviewed, the committee concluded that students are achieving GEC expected outcomes. Further, variations in requirements across colleges appear reasonable.

GENERAL EDUCATION CURRICULUM STATUS REPORT

December 31, 2008

Introduction Charge and Initial Activities

Following a recommendation from the Committee for the University-Wide Review of Undergraduate Education chaired by Professor Brian McHale, the Council on Academic Affairs (CAA) voted unanimously to establish a University-level Advisory Committee (ULAC) for the General Education Curriculum (GEC). The committee is charged to monitor the general education program and report annually to CAA. The full charge and committee composition are shown in Attachment 1. The committee was first convened Spring quarter 2008 and met six times during Spring and Autumn quarters 2008. As some of the information needed by the committee to fulfill its charge has not been previously gathered systematically nor tracked, new data collection and reporting requirements are being established. Particular attention is to be given to studies and reports that will help the committee monitor the impact of the reduction of five quarter-hours in the GEC breadth categories that became effective Autumn 2007. To date the committee has reviewed available data on course enrollments, alternative ways students can fulfill their GEC requirements, actions taken on course approvals/withdrawals, and learning outcomes information. The committee also heard presentations from college representatives, advising, enrollment management, and institutional research on various aspects of the GEC. A review of the above information revealed the following main observations about the GEC.

Program of General Education Category Distribution Model

The program of general education (GE) at The Ohio State University (OSU) is based on a distribution model in which all students are required to take course work in up to eight categories of study. The framework and categories of study are:

- *Skills*
 - Writing and Related Skills
 - Quantitative and Logical Skills
 - Foreign Language
- *Breadth*
 - Natural Science
 - Social Science
 - Arts and Humanities
- *Historical Study*
- *Diversity*
 - Social Diversity in the United States and International Issues
- *Capstone*
 - Issues of the Contemporary World

The minimum quarter hours to graduation was reduced from 191 to 181 effective Autumn 2007 and resulted in new General Education Curriculum (GEC) templates, approved by CAA in the five Colleges of the Arts and Sciences (Arts, Biological Sciences, Humanities, Mathematics and Physical Sciences, and Social and Behavioral Sciences), the four Health Science colleges (Dentistry, Medicine/School of Allied Medicine, Nursing, and Pharmacy), and the four Professional colleges (Business, Education and Human Ecology, Engineering, and Food Agriculture and Environmental Sciences) that offer undergraduate degrees. The GEC template was not changed for the College of Social Work.

Changes in the new templates resulted in somewhat greater variation in GEC requirements across the Arts and Sciences, Health Sciences, and Professional college clusters compared with previous requirements, along with somewhat greater student flexibility (e.g., elimination of sub-category requirements in some colleges). Even so, there is substantial overlap in GEC requirements across colleges with the following notable exceptions:

- Only the Colleges of the Arts and Sciences/BA and the College of Food, Agricultural, and Environmental Sciences/BS require the Capstone experience.
- Only the Colleges of the Arts and Sciences, the College of Pharmacy, and the International Business Administration major specialization in the College of Business require Foreign Language.

Course Enrollment Patterns

The program of GE is delivered through more than 600 courses that have been approved to be included in the formal GEC. If additional designations to a course number are counted, such as suffixes which may distinguish between GEC categories that a single course number fulfills (e.g., 367.02) or special designations such as Honors (H), the number of distinct GEC courses is approximately 914 per the ASC Curriculum and Assessment Office, Autumn 2008. As of Autumn 2008, approximately 92.2% of GEC courses are offered through ASC. The percentage of courses offered by non-ASC colleges increased from 3.1% in Autumn 2006 to 7.8 % in Autumn 2008.

Course enrollment patterns for the program have not been routinely monitored. A data base was created by the ASC Curriculum and Assessment Office in 2007/08 that now permits tracking of GEC enrollments. The data base can be sorted by enrollment, GEC category, department, and college. A review of overall enrollment for four academic years between 2004/05 and 2007/08 revealed relatively stable patterns recognizing that some variation is predicted based on overall institutional enrollment. Some long-term shifts are anticipated, however, both in overall enrollment and course-taking patterns following the change in requirements effective Autumn 2007, and as students are encouraged to consider a larger array of options such as clusters and upper level offerings.

Most students choose from a subset of approximately 40-60 courses to fulfill their GEC requirements, which in essence becomes the functional curriculum that students share in common. In 2007/08, the 62 largest enrollment courses, representing 10% of GEC courses collapsed across prefix/suffix distinctions (i.e., without decimal/Honors, etc., distinctions), accounted for approximately 65% of total enrollment (222,742) in all GEC

courses. The top third of large enrollment courses accounted for 90% of the enrollment. A small set of six introductory level courses enroll more than 5000 students per year (all campuses). These courses and their average annual enrollment over the last four years for all campuses are: English 110, with 8133 students; Psychology 100 with 7405 students; Economics 200 with 6081 students; Biology 101, with 5787 students; History 151 with 5689 students; and Sociology 101 with 5360 students.

To assess the initial impact of changes in GEC breadth requirements instituted Autumn 2007, percent changes in total enrollments between 2006/07 and 2007/08 were reviewed in the Arts and Humanities, Natural Sciences, and Social Sciences categories and sub-categories. The findings are displayed in Attachment 2. In Arts and Humanities, there was little change in annual enrollment; however, shifts were found at the sub-category level. In the Cultures and Ideas sub-category, annual enrollment declined by 8% from 9328 to 8600, while Literature sub-category enrollment increased by 3% and Visual and Performing Arts by 2%. In Natural Sciences, there was an overall 3% increase in both the Biological and Physical Science sub-categories. In Social Sciences, there was an overall annual enrollment increase of 4 %, with the largest increase in the Individual and Groups sub-category of 6% compared with 2% increases in both the Human and Natural Resources and Organization and Politics sub-categories.

Course selection is restricted in some colleges with highly structured major programs or programs with specialized accreditation. For example, students in the College of Nursing are required to take Psychology 100 and Sociology 101 to fulfill the Social Sciences requirement while students in the College of Business are required to take Economics 200 and 201 as part of this requirement.

Alternatives to the Formal Curriculum

In addition to Honors contracts, there are several avenues through which students can fulfill their GEC requirements in ways other than taking approved GEC courses at OSU campuses. These include:

- Transfer-in credit from other institutions (K-Credit)
- Credit by examination (EM)
- Credit by Advanced Placement (AP)
- Approved petitions and substitutions

Entering Credit

In recent years both the academic profile of NFQF and number of students entering OSU with EM/AP credit has increased. For Autumn 2006, approximately 70% of new first quarter freshmen (NFQF) entered with some college credit from transfer, EM, or AP. Based on Autumn 2006 information, about 90% of such credit is applied toward fulfilling specific GEC requirements.

Approximately 34% of NFQF entered with 1-14 hours of credit, 21% with 15-29 hours, 9% with 30-44 hours, and 7% with more than 45 hours. In numbers of students this translates to over 3000 NFQF entering OSU Autumn 2006 with up to 29 hours of EM or AP credit; almost 600 students entering with up to 29 hours of transfer credit, and of

those, approximately 300 students entering with both.

Effective Autumn 2009, the Ohio Board of Regents will require that a score of '3' or better on AP examination scale be accepted as credit to fulfill appropriate GEC requirements, a less rigorous score than the '4' or '5' which are currently required in several programs. Enrollments in several large enrollment courses are therefore predicted to decline. Applying the new AP standards to a cohort of students who entered as NFQF Autumn 2007 indicates that over 100 additional students will be given AP credit in Physics, over 300 students in U.S. History, over 400 students in U.S. Government and Politics, and over 800 students in English Literature and Composition D1 and D2 combined tests. A separate data group is being established to monitor these changes and information will be shared with the ULAC-GEC.

Petitions

In the five Colleges of the Arts and Sciences (ASC), somewhat fewer than 1000 petitions for course exceptions to the approved GEC are estimated to be submitted each year. Advisers provide careful counsel about petitions, thereby creating an informal prescreening process. Most petitions are approved but represent <1% of the total number of courses that are needed for all ASC students to fulfill their GEC requirements. Examples of the kinds and categories of petitions that are approved follow.

- The strength of a curricular substitution exceeds that of courses approved to meet the requirement ("honors" like petitions)
- A curricular substitution has satisfied the spirit of a requirement
- The number of courses a student has completed within a discipline, while not approved course work, is judged, in total, to satisfy the requirement
- A significant hardship would be imposed by holding the student to fulfilling the requirement with approved course work
- In cases of student error, or other unforeseen circumstances, requirements intended to be fulfilled in the course of fulfilling another requirement are forgiven when hardship can be demonstrated
- The student has good academic reasons for wanting to take or use a substitute course, to accomplish a worthy educational objective that would be substantially more difficult to attain were the student held to the approved means of completing the requirement.

Course Approvals and Withdrawals for GEC Status

Information on course approvals by GEC status has not been routinely tracked. Complete information could only be gathered for 2007-2008 so any generalizations should be made with caution. The findings reveal that the vast majority of GEC proposals are approved, and almost none are rejected, resulting in the continued expansion of the curriculum. A report from the ASC Office of Curriculum and Assessment indicated that during 2007-2008:

- 62 GEC proposals were reviewed, of which 41 (66%) were for new courses and 21 (34%) were change in status requests
- 52 proposals (84%) were approved; 1 (2%) rejected for a change in status,

- and the remaining proposals were pending
- 6 additional proposals were to withdraw GEC status (in one course the withdrawal was for only one of two GEC categories)
- 17 (33%) of proposals approved were for courses at the 100-level, with the remaining proposals distributed almost equally across the 200, 300, and 400 levels
- 83% of proposals approved were from ASC
- Courses were approved in all of the GEC categories except Quantitative and Logical Skills; the category in which the largest number of GEC courses were approved in 2007-2008 was Natural Science

General Education Learning Outcomes Assessment

Students are expected to achieve basic skills, competencies, and breadth of knowledge through coursework in the GEC. Assessment of these stated expected outcomes provides a critical indication as to whether students are learning what is intended in the GE program of study.

The expected learning goals and outcomes for each of the GE categories and sub-categories were revised in 2008 by an ASC task force convened to develop guidelines for new GE course proposals. The new statements were approved by the ASC Committee on Curriculum and Instruction (CCI) June 2008 and are displayed in Attachment 3.

The outcomes assessment plan for the GE program incorporates course, category, and program levels of analyses based on a variety of direct and indirect measures as illustrated below:

General Education Assessment

Levels of Analyses	Types of Evidence
Overall Program (General abilities; e.g., communication)	CLA (direct; value added) NSSE (indirect)
Categories (e.g., Writing) (Category-specific learning goals) http://artsandsciences.osu.edu/currofc/resources.cfm	ASC Student Exit Survey Across courses (direct and indirect) Faculty focus groups
Courses within categories (Category goals contextualized by course goals)	Direct and indirect methods (e.g., embedded testing & surveys)

Program-level

Information from the National Survey of Student Engagement (NSSE) is being used, and

the Collegiate Learning Assessment (CLA) test is being piloted, to evaluate student learning in the GE program overall.

NSSE. NSSE is a nationally administered survey designed to gather information about student engagement in activities associated with learning, such as the number of papers a student writes that are more than 5 pages in length, or the number of hours per week a student spends outside of class studying. Review of NSSE information from samples of freshman and seniors who responded to the Spring 2007 survey revealed that:

- Responses by students were positive overall as to whether their educational experiences contributed to their acquiring a broad general education and other related skills. Students' average responses were typically over 3.0 on a 4-point scale on general education items.
- Overall responses on general education items improved between 2004 and 2007 in both the freshmen and senior samples, with the magnitude of improvement greater for freshmen.
- Student responses were not significantly different compared with responses of students from a comparison group of Association of American Universities Data Exchange (AAUDE) peer institutions.
- However, students reported having fewer capstone experiences compared with the AAUDE group.

CLA. The CLA is a 90-minute authentic writing test designed to assess institutional value added to student gains in communication, make- and break- an argument critical thinking, problem solving, and analytical reasoning. These abilities represent expected outcomes incorporated across GEC categories.

- Review of findings from a cross-section of freshmen and seniors who took the CLA Autumn 2005 and Spring 2006 respectively revealed gains in student performance that were "above expected" levels after controlling for entering ability.
- Students who took the CLA both Autumn 2005 as freshmen, and again as rising juniors Spring 2007, showed gains in learning "at expected" levels.

Overall, NSSE and CLA findings provide evidence that the educational mission of the GE program is being fulfilled. The information is analyzed in more detail to identify areas of strengths and weaknesses for continuing improvements.

Category-level

The committee reviewed available category-level outcomes information that is being collected by the ASC CCI Assessment Initiatives Subcommittee. The information includes student perception of their learning in the GEC obtained from ASC graduating senior exit surveys, and from faculty focus group reports in the Natural Science and Second-level Writing categories.

ASC graduating senior exit surveys. Based on ASC exit surveys, students' perceptions about their learning in the GEC were generally positive but also highly variable depending on the category and specific question posed.

- On the Spring 2007 ASC Exit Survey for example (see Attachment 4), 43.5% of students agreed or strongly agreed that they achieved a broad education and developed general skills across several domains through the GEC. If asked whether their knowledge, skills, abilities, and personal development improved in 'integrating knowledge from different fields,' however, 72.8% agreed or strongly agreed, and this was consistent regardless of major/college.
- Questions probing student development of abilities associated with different categories of the GEC tended to be related to students' major/college. For example, on two questions related to the Quantitative and Logical Skills category, student's perception of their learning was much greater for those in the College of Mathematical and Physical Sciences (MPS). Of students who responded from MPS, 93.7% and 91.6% agreed or strongly agreed that their knowledge, skills, abilities, and personal development improved in 'mathematical and quantitative skills' and 'logical and analytic reasoning' respectively since beginning their education at Ohio State, compared with only 37.4 % and 68.2% of all students on the same question.
- Students' perception of their learning was greatest for the survey item on 'critical thinking' (78.3%), and lowest for the 'mathematical and quantitative skills' item (37.4%). Just over half of students responding (51.7%) agreed or strongly agreed that the GEC helped prepare them for life-long learning.

Natural Science faculty focus group report. The faculty who participated in the focus group included representatives from seven departments, five colleges, a regional campus, and both the biological and physical sciences. A facilitator probed faculty opinions about student learning with respect to GEC Natural Science expected outcomes, and student responses to ASC exit surveys on natural science items.

- Faculty reported they covered all GEC learning outcomes but were not necessarily assessing them routinely. Faculty perceived student motivation to be problem for students who were not majoring in the natural sciences and therefore students' opinion about learning would be expected to vary depending on their major. However, they believed the Natural Science category outcomes were being achieved in their courses. Faculty also thought the stated outcomes were appropriate and did not need to be revised.
- The question of what constitutes a Natural Science sequence was raised given courses from different departments can be used to fulfill a sequence without one serving as a prerequisite for another. A follow-up meeting was convened of faculty who teach courses that are part of a Natural Science sequence but are offered in different departments. In the follow-up meeting, faculty requested that a central site be established for posting syllabi to facilitate better articulation between courses. The request has been implemented by the ASC Curriculum and Assessment Office.
- Faculty appreciated the opportunity to discuss general education in the natural sciences and held the perception that all GEC instructors might not be aware of the

specific expected outcomes. They recommended that prior to the start of each quarter, faculty scheduled to teach GEC courses be sent reminders that their courses are part of the GEC along with the specific GEC learning goals associated with the courses. ASC Curriculum and Assessment Office has implemented this request.

Second-level (367) Writing faculty focus group report. The faculty who participated in the focus group represented eleven departments, six colleges, and a regional campus. A facilitator probed faculty opinions about student learning with respect to GEC Second-level Writing expected outcomes, and student responses to ASC exit surveys on items related to the Writing and Related Skills category.

- Faculty reported all GEC Writing and Related Skills expected outcomes were addressed in their courses even though they might not be formally assessing them. However in most courses, oral communication comprised significantly less of the coverage/work than written communication. The faculty concurred that the expected outcomes were appropriate and did not to be revised. Further, the group agreed that their attention to the expected outcomes was and would be increased because of their participation in the focus group.
- With respect to student achievement of writing and related skills, many faculty stated that students were not prepared in basic writing skills prior to the second-level course and discussed reasons why this might be the case. When probed about student responses to the exit survey, the faculty thought that students would not perceive the value of the GEC at the time of graduation.
- Faculty made note of the heavy work-load in grading multiple drafts of papers and thought smaller class sizes would help. Many were also interested in exploring common rubrics that might be used to help assess written communication. The ASC Curriculum and Assessment Office set up a meeting of interested faculty along with staff from the Center for the Study and Teaching of Writing to develop an optional grading rubric. Work on developing rubric templates is in progress.

Course-level

The ASC CCI Assessment Initiatives Subcommittee implemented an outcomes-based course review process in 2005 to monitor whether GEC approved courses are functioning as intended. The rolling-review plan has focused on large enrollment GEC courses and was extended to the regional campuses Autumn 2008. The review process requires that all GEC course syllabi include GE expected outcomes for the category or categories the courses have been approved to fulfill, along with a statement as to how a particular course helps students achieve category-specific expected outcomes. Course-level learning outcomes information will be rolled into category-level reports as appropriate.

In the outcomes based review process, lead instructors for sets of approximately 10-20 courses are contacted, assessment requirements are explained, and both group training and individual consultations are provided. Instructors are given approximately one-year to develop a plan, gather outcomes information, and submit a 2-4 page report of their findings. Courses with annual enrollments > 1000 are expected to provide a brief

update every five years. The formal requests for reports and submission of them go through the appropriate department chair and are copied to the relevant college dean.

- Over the last four years, reports have been requested for almost 90 courses that span all categories of the GEC; 41 reports have been reviewed and feedback provided; another 20 reports are expected to be submitted and reviewed Winter quarter 2009, and an additional 20 from regional campuses are expected to be submitted by Winter 2010.
- Reports to date suggest students are achieving course-level expected outcomes, and that the review process itself has heightened awareness of the goals of the GEC for both faculty and students.
- Changes in content or delivery have been made in some courses as a result of the assessment process to improve learning.

Conclusions

Based on the information reviewed to date, the committee determined that major changes in the GEC are not warranted at this time.

- Overall learning outcomes suggest students are achieving what is intended in this program of study. Students' average responses as to whether their educational experiences contributed to their acquiring a broad general education were positive on the 2007 NSSE survey, improved between 2004 and 2007, and were not different from peer institutions. On the CLA, a test designed to assess critical thinking, analytical reasoning, communication, and problem solving, students show gains in performance at or above expected levels after controlling for the entering ability of students. Information from focus groups of faculty teaching within a category and course-level outcomes reports from the ASC CCI Assessment Initiatives Subcommittee reveal similar conclusions.
- The variation that exists in GEC requirements across colleges appears reasonable given distinctions in degree requirements for B.A., B.S. and tagged degree programs.

No significant problems were found. The committee recognizes there are areas for improvement and raise several items described below for continued review and deliberation. *However, the committee foremost recognizes that a decision to convert to semesters will necessarily influence their work over the next year.*

- NSSE findings indicate students at Ohio State perceive that they have fewer capstone experiences than students at similar type institutions. Capstone experiences are designed to help students integrate their learning and hone essential skills the general education program helps develop. The committee believes that further exploration is warranted as to how capstone experiences are provided at the institution and whether additional integrative opportunities should be recommended.

- The committee notes that there is continued increase in the number of courses being offered to meet GEC status at all course levels. Even so, a smaller subset of available courses offered account for the majority of the overall GEC enrollment. The committee thus wants to understand better the reasons for the growth. A potential calendar conversion would provide an opportunity to consider further the costs/benefits associated with an ever growing curriculum.
- The attributes of an educated person are referred to in the Model Curriculum but learning goals for the general education program as a whole have not been articulated. Faculty and student committees have developed category-level general education learning goals; however not all students take course work in all categories. The committee will consider the merits of developing essential skills and learning goals all graduates of The Ohio State University should achieve. Having a set of program-level learning goals may facilitate a more integrated view of the program, as well as make more transparent the broad intentions of this educational program.
- The committee determined that overall enrollment patterns provide a reasonable method to evaluate the potential impact of graduation requirements instituted in Autumn 2007, particularly in the GEC breadth requirements. The committee recognizes that students may take courses in the GEC for reasons other than meeting GEC requirements and will continue to investigate alternative means to study the impact of recent changes.
- The committee expresses concern that many faculty and students do not understand the centrality of general education to the student experience and the importance of the program in helping students achieve essential general skills. Furthermore, there is room for improvement in overall student perceptions of their learning with respect to the overarching goals of the GEC.

Next Steps

As a next step in fulfilling its charge, the committee will examine GEC advising. A focus group with GEC advisors who represent various colleges is planned to learn more about both concerns and good practices that should be encouraged.

The committee will review annually GEC course enrollment and course approval/withdrawal patterns, and continue to foster regular data reporting methods that are needed to facilitate their work. Examples follow:

- GEC annual enrollments, sorted by overall enrollment, GEC category, and college will be provided annually to the committee by ASC technical and curriculum support staff; percentage change from year to year will be calculated, and changes >10% for courses with annual enrollments >1000 will be identified for closer review.
- Summary statistics of actions taken on GE course proposals, sorted by course level, GEC category, and college will be provided annually by ASC Office of Curriculum and Assessment.
- Staff from the Office of the Registrar will help determine, in consultation with

the ULAC-GEC, possible studies they can conduct on GEC course taking patterns using the Degree Audit Reporting System (DARS) for a cohort of students.

- Consideration will be given to conducting student focus groups regarding course-taking patterns.

Review of outcomes assessment at the program level will continue. The committee will encourage the ASC CCI Assessment Initiatives Subcommittee to continue with category-level outcomes assessment, and seek course-level outcomes assessment summary reports from the same subcommittee.

Finally, the committee will continue to scan the local and national environment on general education issues, especially in the context of discussions regarding calendar conversion.

Attachment 1

Committee Charge

**University-Level Advisory Committee
for the
General Education Curriculum**

The University Senate's Council on Academic Affairs establishes a University-Level Advisory Committee on the General Education Curriculum (GEC).

Membership: (11 voting members and 2 non-voting ex officio members)

- The Committee will be chaired by the Chair of the Colleges of the Arts and Sciences Committee on Curriculum and Instruction (ASC CCI) subcommittee on GEC assessment.
- 4 arts and sciences faculty members from the ASC CCI subcommittee on GEC assessment.
- 4 faculty members from other colleges with undergraduate programs, selected on a rotational basis from among those colleges
- 2 undergraduate students: one from the Colleges of the Arts and Sciences and one from the other colleges with undergraduate programs.
- 1 professional adviser from the Colleges of the Arts and Sciences (ex officio)
- the Vice Provost for Academic Programs (ex officio).

Charge:

The Committee will:

- provide an annual report to the Council, at the end of each Winter Quarter, on the status of the General Education Curriculum: analyze and summarize annual trends in GEC courses; monitor and evaluate student-selected courses in the Breadth categories; review actions taken on GEC course submission/approval; study the use of exceptions and substitutions in the GEC; and identify and monitor advising issues related to the GEC.
- advise the Council on proposals to revise the General Education Curriculum: monitor the national dialogue/literature on general education; review specific college proposals to revise the GEC; and assess the efficacy of GEC learning outcomes with respect to GEC category goals and objectives, and identify whether and how they need to be changed;
- share information with related committees.

The Council on Academic Affairs will evaluate the effectiveness of the Committee on an annual basis.

2/6/08

Attachment 2

GEC Annual Enrollment in Breadth Areas 2005-2008

GEC Category	GEC Sub Category	2004-2005 enrollment	2005-2006 enrollment	% change	2006-2007 enrollment	% change	2007-2008 enrollment	% change
Arts & Humanities	A/H CULT/IDEA	9245	8993	-3%	9328	4%	8600	-8%
	A/H LIT	12941	13328	3%	13257	-1%	13641	3%
	A/H VPA	14772	15083	2%	16084	6%	16379	2%
		36958	37404	1%	38669	3%	38620	0%
Natural Sciences	NAT SCI-BIO	21158	21587	2%	21869	1%	22516	3%
	NAT SCI-PHYS	27984	28174	1%	29643	5%	30709	3%
		49142	49761	1%	51512	3%	53225	3%

Social Sciences	SOC SCI-HNER	11372	11415	0%	11004	-4%	11216	2%
	SOC SCI-IND/GRP	18959	18109	-4%	18819	4%	20083	6%
	SOC SCI- ORG/POL	15854	14964	-6%	14655	-2%	14974	2%
		46185	44488	-4%	44478	0%	46273	4%
Annual NFQF		6197	6093		6336		6321	

Attachment 3

GEC Expected Learning Outcomes

**COLLEGES OF THE ARTS AND SCIENCES (ASC)
GENERAL EDUCATION PROGRAM
EXPECTED LEARNING OUTCOMES**

In the Program of General Education, students will take coursework in several areas of study to achieve basic skills, competencies, and breadth of knowledge expected of an Arts and Sciences college-educated graduate. Learning outcomes students should achieve through coursework in various categories of the General Education Curriculum (GEC) are listed below.

All GEC course syllabi must include the GEC category or categories the course has been approved to fulfill and the associated expected outcomes. Outcome statements can be contextualized by specific course content but must be identified as those meeting general education outcomes.

1. SKILLS**A. Writing and Related Skills**

Writing and Related Skills coursework develops students' skills in written communication and expression, reading, critical thinking, and oral expression.

1. Students apply basic skills in expository writing.
2. Students demonstrate critical thinking through written and oral expression.
3. Students retrieve and use written information analytically and effectively.

First Writing Course

- Students learn the conventions and challenges of academic discourse.
- Students are able to read critically and analytically.

Second Writing Course

- Through critical analysis, discussion, and writing, students extend their ability to read carefully and express ideas effectively.
- Students further develop basic skills in expository writing and oral expression.
- Students further develop skills in effective communication and in accessing and using information analytically.

Third Writing Course

- Students apply writing skills to the major.
- Students develop skills, in the oral articulation of ideas, in synthesizing ideas, and in the critical and analytical reading of demanding texts.

B. Quantitative and Logical Skills

Courses in Quantitative and Logical Skills develop students' quantitative literacy and logical reasoning, including the ability to identify valid arguments, use mathematical models, and draw conclusions and critically evaluate results based on data.

1. **Basic Computational Skills:** Students demonstrate computational skills and familiarity with algebra and geometry, and apply these skills to practical problems.
2. **Mathematical and Logical Analysis:** Students comprehend mathematical concepts and methods adequate to construct valid arguments, understand inductive and deductive reasoning, and increase their general problem solving skills.
3. **Data Analysis:** Students understand basic concepts of statistics and probability, comprehend methods needed to analyze and critically evaluate statistical arguments, and recognize the importance of statistical ideas.

C. Foreign Language

Foreign Language coursework cultivates students' skills in communication across ethnic, cultural, ideological, and national boundaries, and helps students develop an understanding of other cultures and patterns of thought.

1. Students demonstrate basic communicative skills (e.g. speaking, listening, reading, and/or writing) in a language other than their native language.
2. Students learn about the cultural contexts and manifestations of the peoples who speak the language that they are studying.
3. Students recognize and understand differences and similarities between the cultures and communities of the language that they are studying and their own.

2. BREADTH

A. Natural Science

Natural Science coursework fosters students' understanding of the principles, theories, and methods of modern science, the relationship between science and technology, the implications of scientific discoveries and the potential of science and technology to address problems of the contemporary world.

1. Students understand the basic facts, principles, theories and methods of modern science.
2. Students learn key events in the history of science.
3. Students provide examples of the inter-dependence of scientific and technological developments.
4. Students discuss social and philosophical implications of scientific discoveries and understand the potential of science and technology to address problems of the contemporary world.

B. Social Science

Social science develop students' understanding of the systematic study of human behavior and cognition; of the structure of human societies, cultures, and institutions; and of the processes by which individuals, groups, and societies interact, communicate, and use human, natural, and economic resources.

1. Students understand the theories and methods of social scientific inquiry as they are applied to the studies of individuals, groups, organizations, and societies.
2. Students understand the behavior of individuals, differences and similarities in the contexts of human existence (e.g., psychological, social, cultural, economic, geographic, and political), and the processes by which groups, organizations, and societies function.
3. Students develop abilities to comprehend and assess individual and social values, and recognize their importance in social problem solving and policy making.

Individuals and Groups

- Students understand the theories and methods of social scientific inquiry as they are applied to the study of individuals and groups.
- Students understand the behavior of individuals, differences and similarities in social and cultural contexts of human existence, and the processes by which groups function.
- Students develop abilities to comprehend and assess individual and group values, and recognize their importance in social problem solving and policy making.

Organizations and Polities expected learning outcomes

- Students understand the theories and methods of social scientific inquiry as they are applied to the study of organizations and polities.
- Students understand the formation and durability of political, economic, and social organizing principles and their differences and similarities across contexts.
- Students develop abilities to comprehend and assess the nature and values of organizations and polities and their importance in social problem solving and policy making.

Human, Natural, and Economic Resources expected learning outcomes

- Students understand the theories and methods of scientific inquiry as they are applied to the study of the use and distribution of human, natural, and economic resources and decisions and policies concerning such resources.
- Students understand the political, economic, and social trade-offs reflected in individual decisions and societal policymaking and enforcement and their similarities and differences across contexts.
- Students develop abilities to comprehend and assess the physical, social, economic, and political sustainability of individual and societal decisions with respect to resource use.

C. Arts and Humanities

Students evaluate significant writing and works of art. Such studies develop capacities for aesthetic and historical response and judgment; interpretation and evaluation; critical listening, reading, seeing, thinking, and writing; and experiencing the arts and reflecting on that experience.

1. Students develop abilities to be informed observers or active participants in the visual, spatial, performing, spoken, or literary arts.
2. Students describe and interpret creative work, and/or movements in the arts and literature.
3. Students explain how works of art and writings explore the human condition.

Literature Learning expected learning outcomes

- Students learn to analyze, appreciate, and interpret significant literary works.
- Through reading, discussing, and writing about literature, students learn to understand and evaluate the personal and social values of their own and other cultures.

Visual and Performing Arts expected learning outcomes

- Students develop abilities to analyze, appreciate, and interpret significant works of art.
- Students develop abilities to be an informed observer or an active participant in a discipline within the visual, spatial, and performing arts.

Cultures and Ideas expected learning outcomes

- Students develop abilities to analyze, appreciate, and interpret major forms of human thought and expression.
- Students develop abilities to understand how ideas influence the character of human beliefs, the perception of reality, and the norms which guide human behavior.

3. HISTORICAL STUDY

History courses develop students' knowledge of how past events influence today's society and help them understand how humans view themselves.

1. Students acquire a perspective on history and an understanding of the factors that shape human activity.
2. Students display knowledge about the origins and nature of contemporary issues and develop a foundation for future comparative understanding.

3. Students think, speak, and write critically about primary and secondary historical sources by examining diverse interpretations of past events and ideas in their historical contexts.

4. DIVERSITY

A. Social Diversity in the United States

Courses in social diversity foster students' understanding of the pluralistic nature of institutions, society, and culture in the United States.

1. Students describe the roles of such categories as race, gender, class, ethnicity and religion in the pluralistic institutions and cultures of the United States.
2. Students recognize the role of social diversity in shaping their own attitudes and values regarding appreciation, tolerance, and equality of others.

B. International Issues (Non-Western of Global and Western non-United States)

International Issues courses help students become educated, productive, and principled citizens of their nation and an increasingly globalized world.

1. Students exhibit an understanding of some combination of political, economic, cultural, physical, social, and philosophical differences in or among the world's nations, peoples and cultures outside the United States.
2. Students are able to describe, analyze and critically evaluated the roles of categories such as race, gender, class, ethnicity, national origin and religion as they relate to international/global institutions, issues, cultures and citizenship.
3. Students recognize the role of national and international diversity in shaping their own attitudes and values as global citizens

5. CAPSTONE

Issues of the Contemporary World

By drawing upon multiple disciplines, Issues of the Contemporary World coursework provides a capstone experience that helps students attain and enrich their experiences of the increasingly global nature of the contemporary world.

1. Students synthesize and apply knowledge from diverse disciplines to contemporary issues.
2. Students demonstrate an understanding of the relationships between information derived from different disciplines by interacting with students from different majors.
3. Students write about or conduct research on the contemporary world.

Attachment 4

Responses to GEC Items on ASC Senior Exit Survey Spring 2007

Spring 2007 ASC Exit Survey- Results by College

Percentages within each box represent the proportion of students answering the top two categories (typically "great extent/strongly agree", and "to some extent/agree")							
11 To what extent have your knowledge, skills, abilities, and personal development improved in the following areas since you began your education at Ohio State?							
	OVERALL	ART	ASC	BIO	HUM	MPS	SBS
11a Written communication	72.7	69.0	76.0	62.9	78.0	56.8	75.1
11b Oral expression	70.3	72.2	73.2	70.0	69.7	52.6	72.0
11c Foreign language	49.0	26.2	63.9	43.8	59.8	33.7	49.0
11d Mathematical & quantitative skills	37.4	21.8	29.9	55.7	25.7	93.7	34.5
11e Logical & analytic reasoning	68.2	54.4	63.9	77.4	64.1	91.6	68.0
11f Natural science	46.7	28.8	41.7	95.2	31.6	70.5	39.7
11g Social science	76.7	68.8	80.4	72.6	71.5	47.9	85.3
11h Humanities	74.3	73.8	74.2	58.4	86.6	44.2	76.9
11i Historical perspective	58.4	60.3	64.9	49.3	68.5	41.1	57.3
11j The arts	44.5	92.8	37.5	34.3	45.8	26.6	41.1
11k Social diversity in the US	60.4	59.5	58.8	50.0	60.7	32.3	67.1
11l Diversity in world affairs	58.2	54.0	79.2	47.1	63.7	30.9	60.3
11m Non-western culture/thought	52.8	46.8	71.9	45.7	58.6	30.9	52.9
11n Critical thinking	78.3	74.4	73.2	80.4	79.0	81.7	78.3
11o Use of scientific methods & concepts	56.0	32.0	34.0	89.5	35.7	83.0	59.8
11p Integrating knowledge from different fields	72.8	70.6	73.2	80.9	70.0	71.3	72.4

12 To what extent do you think your Ohio State GEC helped prepare you for:							
	OVERALL	ART	ASC	BIO	HUM	MPS	SBS
12a Additional formal education	38.2	42.1	32.0	46.9	39.2	33.7	36.0
12b Your future work/career	29.5	37.3	33.0	38.8	24.9	24.2	27.4
12c Everyday life	35.8	35.7	32.0	48.6	29.7	33.7	35.5
12d Contributing to society	42.1	48.4	37.1	52.9	36.5	30.5	42.3
12e Life-long learning	51.7	57.9	50.5	59.0	48.4	42.1	51.4
13 The general education program strives to provide a broad education and help develop general skills across several domains. Overall, to what extent do you agree you achieved these overarching goals through your GEC?							
	OVERALL	ART	ASC	BIO	HUM	MPS	SBS
	43.5	43.7	39.2	54.3	41.8	33.7	42.5