RATIONALE FOR THE CORE CURRICULUM

- **Problem:** Different Colleges have different education requirements. When students change Colleges they often must take additional general education courses to satisfy the degree requirements of their new College. Students who transfer to the University from Community Colleges do not know how to prepare themselves unless they have made a choice of College. The Core Curriculum would substantially reduce or eliminate differences among the Colleges in general education requirements.

- **Problem:** Current general education requirements place heavy obligations on the Arts and Sciences Colleges for both decisions about curriculum content and for teaching, leaving much of the University faculty without either a teaching or a curricular "stake" in general education. The Core Curriculum would invite the participation of all University faculty, in both teaching and content deliberation.

- **Problem:** Current general education requirements are needlessly complex and difficult for students to navigate. The Core Curriculum greatly simplifies the degree requirements.

- **Problem:** The complexity of the general education program makes it very difficult to anticipate demand and ensure space for all students in a timely fashion. The declining faculty size makes the delivery of general education very more difficult. A single general education program will facilitate modeling and meeting demand.

- **Problem:** The current general education program lacks cohesion -- students satisfy general education requirements on the basis of a very large number of courses at every level of the curriculum (i.e. 100, 200, 300, and 400 level courses). Students do not systematically gain an appreciation for the principal areas of study, the knowledge and achievements of the various fields, or a minimum level of exposure to critical areas of inquiry. The Core Curriculum ensures that all students are systematically exposed to the principal content areas in the University and will have minimum levels of competence in the fields judged by the faculty to be necessary for all University-educated individuals.

- **Problem:** General education courses are spread throughout the student's experience at the University, prohibiting faculty from building on a common basis of knowledge in more advanced courses. The Core Curriculum will encourage students to finish the general education program and the foundation courses early in their programs of study.

- **Problem:** Under the current systems, students do not receive a common intellectual experience. The variety of paths through the general education systems at the University of Arizona means that graduates do not have a "University of Arizona" experience. The Core Curriculum will provide increased commonality of experience (although leaving substantial individualization of study).
A Proposal Regarding General Education

A University-Wide Structure

There will be a university-wide structure for general education, common across all colleges.

The Mathematics of the Structure

The structure will involve 30 units of non-skills-based (i.e. not mathematics, composition, or second language) coursework -- 18 units in a first tier to include 6 units in Traditions and Cultures, 6 units in Natural Science, and 6 units in Individuals and Societies; and 12 units in a second tier. The second tier will include the following three segments -- 6 units of Arts and Humanities, 6 units of Natural Science, and 6 units of Individuals and Societies.

Students will be expected to complete two of the three segments in the second tier as part of general education; the third segment will be completed by coursework in the major. (For example, majors in MCB will complete 6 units of second tier Arts and Humanities and 6 units of second tier Individuals and Societies; the 6 units of second tier Natural Science will be completed by coursework required as part of an MCB major.) Each major will identify which of the three segments is completed within its coursework.

Three units of coursework focusing on a non-western culture or on race, gender, class or ethnicity is also required, but may be fulfilled by appropriate first or second tier courses.

Students entering the University as freshmen will be expected to complete the first tier by the end of their second year of full-time work at the University and the second tier by the conclusion of their undergraduate degree.

The Content

The selection of courses in each of these segments will be common across all colleges.

The initial course choices will be selected by the University-wide General Education Committee from those currently approved in the Arts and Sciences general education program, from the core courses already approved and from those which might be submitted to the Committee in the future, building on the first tier guidelines developed by the faculty. The General Education Committee will develop guidelines for second tier courses.

The long-term goal will be to develop a selective set of courses that offer broad, rigorous treatments of fundamental knowledge and methods of inquiry. Should this goal ultimately preclude the inclusion of introductory chemistry and physics courses, majors in the College of Engineering will be allowed to satisfy their first tier Natural Science with their required chemistry and physics coursework; other technically-based majors may petition, with their dean's approval, a similar arrangement.

Foundations
The structure will also involve a third component. This component is intended to build a foundation in certain skills that can be further developed in first and second tier courses, as well as in major courses. It will include a course in mathematics (the character of which will vary with the major), courses in composition, fourth-semester skill level in a second language for all students in B.A. degree programs, and second-semester skill level in a second language for all students in non-B.A. degree programs.

Each segment of this component may be satisfied, at least in part, by demonstration of proficiency, as well as by coursework.

The Structure in Schematic Form

**Foundations**

Mathematics proficiency in one of three strands, varying with major

- ‘G’: Those students whose major requires general knowledge in mathematics only would take Mathematics in Modern Society (Mathematics 122). This is a topics course which naturally lends itself to the possibility of different sections according to the interests of different groups of students.

- ‘M’: Those students whose major requires moderate knowledge in mathematics would take Finite Mathematics, Brief Calculus, or a statistics course, where the choice is determined by the major selected. Students in this group would be expected to come from Architecture, BPA, or certain majors in SBS.

- ‘S’: Those students whose major requires substantial knowledge of mathematics would take calculus. This group would be comprised largely of students in Engineering and Science

Composition: one of four strands, varying with placement

1. A two-course sequence of English 101 and English 102 or the ESL equivalents
2. A two-course sequence of extended English 101 and English 102 or the ESL equivalents
3. A two-course honors sequence of English 103h and English 104h
4. A one-semester course in combination with an AP score of 4 or 5 or a placement writing portfolio demonstrating advanced proficiency. The course would be English 109 at least initially, but appropriate courses could be developed for this purpose across the curriculum, given careful design and monitoring.

Second Language: fourth-semester skill level for all B.A. degree programs
second-semester skill level for all non-B.A. degree programs

(see attachment for how this may be demonstrated)
**Tier One**

Traditions & Cultures 6 units

Individuals & Societies 6 units

Natural Sciences 6 units

18 units

**Tier Two**

Arts & Humanities 6 units

Individuals & Societies 6 units

Natural Science 6 units

12 units (6 units in major)

NOTE: One course must focus on non-western cultures or on race, gender, class, or ethnicity.

**Second Language**

B.A. degree students may fulfill the second language foundations requirement with one of the following options:

1. Completion of a two-course sequence beyond the second semester of post-secondary language instruction.
2. Completion with a C or higher of a three-or four-hundred level language course at the post-secondary level.
3. Completion of one course beyond the third semester in combination with an AP (Advanced Placement) score or a CLEP (College Level Entrance Program) score determined by the individual language department.
4. An AP score of 3 or higher or a CLEP score of 60 or higher in the language.
5. A minimum of one semester study abroad in a language program approved by the appropriate language department as the equivalent of fourth-semester skill level.

Non-B.A. degree students may fulfill the second language foundations requirement with one of the following options:

1. Scoring the equivalent of second-semester skill level on an entrance or placement examination administered by the University of Arizona.
2. Completion with a C or better of a second semester course at the post-secondary level.
3. An AP score of 2 or higher or a CLEP score of 41 or higher in the language.
American students who are native speakers of languages other than English (e.g. Spanish, American Sign Language, Navajo) will be accommodated by the appropriate department. Foreign students who are native speakers of languages other than English may fulfill the second language requirement through proficiency in English.

**Comparison with Current Arts and Sciences General Education**

The configuration of the current Arts and Sciences General Education is as follows:

I. Study Areas Total = 32 units
   A. Traditions and Cultures 9 units (3 units in List 1 and 6 units in List 2)
   B. Biological and Physical Science 8 units (2 four-unit laboratory courses)
   C. Individuals, Societies and Institutions 9 units
   D. Arts and Literature 6 units

II. Basic Proficiencies Total = 9 - 29 units
   A. Composition 6 units
   B. Mathematics 3 units
   C. Second Language *

* Fourth-semester skill level is required. For most languages, this equals 16 units of coursework; for some languages, this may equal 20 units. It is also possible to have no units in a second language if a student demonstrates fourth-semester skill level by examination.

Thus, within Arts and Sciences the change would:

- rearrange the distribution of requirements in the Study Areas, essentially by increasing the number of science units (from 8 to 12) for non-science students.
- reduce the number of units corresponding to the Study Areas in Tier 1 and Tier 2 from 32 units to 30 units.
- allow a choice between non-western civilization and race, gender, class, ethnicity requirements, rather than requiring both.
- locate fourth semester language skill level in the B.A. degree only, reducing it to second semester level for the B.S. degree.
- create the option that a student could satisfy the foundational mathematics requirement by examination.
- potentially create a new option for the foundational composition requirement.

Education students follow Arts and Sciences general education, so the same comments apply.

**Comparison with Current Engineering General Education Requirements**

Engineering currently requires:
16-18 units of humanities and social sciences, where the number varies with the major.

English 101-102
Math 125a-125b
Chemistry 103a/104a and Chemistry 103b/104b or MSE 110, Physics 141

Thus, within Engineering and Mines the change would:

- institute a second language requirement (which could, however, be met at entry by a proficiency exam).
- restructure the 16-18 humanities and social sciences units into Tier 1 Traditions and Cultures, Tier 1 and Tier 2 Individuals and Societies, and Tier 2 Arts and Humanities, and add 6-8 units in these areas.
- potentially create a new option for the foundational composition requirement.
- institute a requirement in non-western civilization or gender, race, class or ethnicity.

**Comparison with Current Fine Arts General Education Requirements**

The configuration for BFA and BM degrees requires:

I. Study Areas Total = 33 units
   Science 3 units
   Non-western and minority studies 3 units
   Individuals, Societies, and Institutions 6-9 units (depending on major
   Arts 3-6 units (depending on major)
   Western Civilization 6 units (but not for BFA in Fine Arts Studies)
   major-specific general education 9-15 units

II. Communication and Conceptualization Total = 12 units
   Composition 6 units
   Mathematics 3 units
   Oral communication 3 units

Thus, for the professional degrees within Fine Arts, the change would:

- institute a second language requirement (which could, however, be met at entry).
  Note that vocal performance majors are currently required to take 16 units of French, German, or Italian.
- increase the science requirement by 9 units, from 3 to 12 units.
  - restructure the current non-science study area requirements and reduce the number of associated units from 30 to 18, not including the 6 units in Tier 2 Arts and Humanities which would presumably be part of the major. The total of 18 units is consistent with the current number of non-major specific general education requirements.
- remove the oral communication requirement as a general education requirement.
• potentially create a new option for the foundational composition requirement.

**Comparison with Current BPA General Education Requirements**

I. Study Areas Total = 33 units  
  Biological and Physical Science 6 units  
  Social and Behavioral Science and Ethics 6 units  
  Western and Non-western Civ 9 units  
  International and Multicultural 6 units  
  Arts and/or Literature 6 units  

II. Basic Skills Total = 17  
  Composition 6 units  
  Mathematics 3 units  
  Two semesters of foreign language 8 units

Note that this listing excludes BPA's pre-professional requirements (MIS 111, ACCT 200, ACCT 210, ECON 200). It also excludes COMM 412, as an upper division course, and MATH 123 and STAT 275, as although these are listed under BPA's current general education program, it is reasonable to separate them from general education per se. None of these requirements would be affected by a change in general education.

Thus, for BPA the change would:

• reduce the number of units in the study areas by 3 units.  
• rearrange the distribution of requirements in the study areas, increasing the number of science units by 6 (from 6 units to 12 units) and reducing the non-science units by 9 (from 27 units to 18 units).  
• potentially create a new option for the foundational composition requirement.

**Comparison with Current Agriculture General Education Requirements**

1. Study Areas Total = 28 - 32 units  
   Students complete 5 of the following 6:  
   1. Western Civilization 6-9 (varying with major)  
   2. Biological and Life Sciences 7-8 (varying with major)  
   3. Physical and Environmental Sciences 8  
   4. Individuals, Societies, and Institutions 6-9 (varying with major)  
   5. Non-western civilization 3  
   6. Arts, Literature, and Language 6  

2. Basic Skills 18 units  
   Composition 6  
   Mathematics 3
Communication 6  
Computer Skills 3

Thus, for Agriculture, the change would:

- reduce by 2 for some majors and increase by 2 for others the number of units in the Study Areas.
- redistribute the requirements in the Study Areas. If an Agriculture degree were to identify Tier 2 science as part of the major, the science portion of general education would change from 15-16 to 6 and the Tier 1 Traditions and Cultures, Tier 1 and 2 Individuals and Societies, and Tier 2 Arts and Humanities would change from 21 units to 24 units. If an Agriculture degree were to identify Tier 2 Individuals and Societies as part of the major, the science portion of general education would change from 15-16 to 12 and the Tier 1 Traditions and Cultures, Tier 1 and 2 Individuals and Societies, and Tier 2 Arts and Humanities would change from 21 units to 18 units.
- remove communication and computer skills from general education
- institute a second language requirement (which could, however, be met at entry).
- potentially create a new option for the foundational composition requirement

Comparison with Current Architecture General Education Requirements

Composition 6 units  
Math 117, 118 or Calculus 3 units minimum  
Physics 102a/180a 4 units  
General Education Electives Total = 36 units (12 are supposed to be upper division)  
Fine Arts 3 units  
Social Sciences and Humanities 6 units  
Science and Technology 6 units  
Business, Management and Govt 6 units  
Architecture 6 units

open units

Thus, for Architecture, the change would:

- institute a second language requirement (which could, however, be met at entry).
- increase the number of science units from 10 to 12.
  - redistribute fine arts, social science and humanities, and open units (totaling 18) to Tier 1 Traditions and Cultures (6 units), Tier 1 Individuals and Societies (6 units), and Tier 2 Arts and Humanities (6 units) — under the assumption that Architecture will identify Individuals and Societies as part of its major.
o remove the Business, Management and Govt and the Architecture requirements from general education. With some minor adjustment, these could remain part of the Architecture degree requirements without adversely affecting the number of units required given the unit equivalencies noted above.

o potentially create a new option for the foundational composition requirement

**Comparison with Current Nursing General Education Requirements**

Composition 6 units  
Math/Statistics  
Chemistry 101a/102a and 101b/102b  
Ecol 181R/L  
MIC 205  
General Education  
Western Civ 3 units  
Non-Western Civ 3 units  
Individuals, Soc, and Inst 6 units  
Arts/Literature 6 units

Thus, for Nursing, the change would:

- require an additional 6 units in Individuals and Societies.
- institute a second language requirement (which could, however, be met at entry).
  - potentially create a new option for the foundational composition requirement

**Comparison with Current Pharmacy General Education Requirements**

Pharmacy requires the following:

Composition  
Math 123  
Chem 103a/104a, 103b/104b  
Ecol 181/182  
Humanities 6 units  
Social Science 6 units  
Literature 3 units

Thus, the proposed university-wide structure would involve:
• institute a second language requirement (which could, however, be met at entry).
  o restructure the current 15 units in non-science general education and add 9 units. [Note, however, that Pharmacy also requires Econ 200 which could conceivably be a Tier II Individuals and Societies course. Thus, the addition is more reasonably calculated at 6 units.]
  o potentially create a new option for the foundational composition requirement

**Comparison with Current General Education in Health-Related Professions**

I. Study Areas Total = 36  
   Traditions and Cultures 9 units  
   Biological and Physical Sciences 12 units  
   Individuals, Societies, and Institutions 9 units  
   Arts and Literature 6 units

II. Skills and Proficiencies Total = 9 - 17  
   Composition 6 units  
   Mathematics 3 units  
   Foreign Language second semester proficiency

Note: Although the general structure of general education is identical for all majors in the School, some majors specify particular courses in Traditions and Cultures or Individuals, Societies, and Institutions not all of which would appear to be viable general options. For example, the major in Physical Education specifies EXSS 288 (Historical and Philosophical Perspectives of Sport and Physical Education) as a necessary choice for Traditions and Cultures.

Thus, the adoption of the proposed university-wide structure would:

• redistribute the non-science Study Area requirements.
• potentially eliminate some of the current choices in the Study Areas, at least as general education requirements.
• potentially create a new option for the foundational composition requirement

**Transition**

Moving from the current situation, where each college has a distinct general education program, to the proposed university-wide structure could be likened to changing the tire on a car while it speeds along the freeway. We don't have the luxury of pulling over to the side, maybe under the shade of a tree, to jack up the car; we have to continue to deliver courses to our current crop of students even as we begin to offer a different experience to students newly entering the University.

This is a major argument in favor of this proposal's two-step process. We begin with an agreement that all colleges will share in a single university-wide general education structure and
we populate this structure with courses that already exist as general education courses. The adoption of a single structure is a major change for the University; it also will require significant adjustments by many Colleges. However, completing the structure with extant courses means that we will not immediately have to deliver two curriculums, one to students already in the system and another to students just entering it. We will also be able to draw initially from a stock of established courses that faculty members have put considerable effort into developing.

Implementing this agreement will not complete our task. We still must consider the question of whether the current curricular choices meet the foundational educational needs of preparing our undergraduates for the demands that will be made on them after graduation. Many both within and without the institution do not think that they do. But with the university-wide structure in place and functioning, we will be neither marooned at the side of the road nor forced to drive on the rim.

**Modifications Proposed**

- **Non-western/Gender, Race, Class, and Ethnicity**
  1. Require both a course in non-western civilization and a course focusing on gender, race, class, and ethnicity for all students. (proposed by some in the College of Humanities and in SBS)
  2. Require both a course in non-western civilization and a course focusing on gender, race, class, and ethnicity for all B.A. students. (proposed by some in the College of Humanities and in SBS)

- **Fine Arts**
  1. Restructure Tier II Arts and Humanities to require 3 units of fine arts. (proposed by the University-wide General Education Committee and the College of Fine Arts)

- **Tier II**
  1. Restructure Tier II to require six courses, with at least one each from Arts, Humanities, Science, and Individuals and Societies. Coursework in the major would satisfy one segment of Tier II. (Proposed by the College of Fine Arts)
  2. Restructure Tier II to require four courses, with one each from Arts, Humanities, Science, and Individuals and Societies. Coursework in the major would satisfy one segment of Tier II. (Proposed by the College of Fine Arts)

**Status report**

Decision reported -- 8 colleges

College of Agriculture Department Heads -- unanimous yes

College of Science Department Heads -- unanimous yes

College of Science Curriculum Committee -- 5 yes - 1 no
College of SBS Department Heads -- 11 yes - 2 no

College of SBS Curriculum Committee -- unanimous yes

College of Humanities Department Heads -- unanimous yes

College of Humanities Curriculum Committee -- unanimous yes

College of Nursing -- report of faculty in favor from the Dean's Office

College of Pharmacy Curriculum Committee -- unanimous yes to the concept; caution about application to pre-pharmacy students

College of Education Department Heads -- 4 yes - 2 no report

College of Fine Arts Executive and Curriculum Committees -- unanimous yes to concept and to Tier 1 structure; some concerns about Tier 2

Decision pending -- 3 colleges and Health Professions

College of Business and Public Administration

College of Architecture

College of Engineering and Mines

Health Professions

Student Distribution

in colleges positively disposed 13,100
in pending colleges 7,750
undecided students 4,800

17,900 7,750

Faculty Distribution

in colleges positively disposed 1004
in pending colleges 256
Lower Division SCH

in colleges positively disposed 173,061

in pending colleges 24,357