TO: Alabama Council of Engineering Deans
FROM: Don Crump
RE: Articulation and General Studies Committee

Yesterday, the Articulation and General Studies Committee unanimously approved alternative general studies requirements for students in engineering. The alternative provisions require only 15 quarter hours or 9 semester hours in the humanities and fine arts and 15 quarter hours or 9 semester hours in history, social, and behavioral sciences. The requirement for a two-course sequence in history is eliminated and students may complete a two-course in-depth study in any discipline within the humanities, fine arts, history, social, or behavioral sciences. The total number of credit hours in Area V Preprofessional or Pre-Major Studies has been increased by 10 quarter hours or 6 semester hours. No changes were made in the requirements in Written Composition or Natural Sciences and Mathematics. A copy of the approved working draft applicable to engineering students is enclosed.

As you will recall from our November 27 meeting, you (engineering deans) agreed to develop Area V credit hour distribution or specific course requirements across the topics of Mathematics, Natural Science, and Computer Science that will be applicable to the more popular majors in engineering (e.g., civil, chemical, electrical, mechanical, and others). You agreed to have these to the Articulation and General Studies Committee by the end of March, 1996. The motion that was approved unanimously to accept the alternative requirements for engineering included the condition that Area V requirements for the more popular majors be provided by the due date.

On behalf of the AGSC, I am pleased that we were able to develop a solution that best serves students in engineering. I look forward to your response regarding Area V requirements by March 31, 1996. If I or any member of the committee may be of assistance, please call on us.

D. C.

DC/cj/faf/engleas
Enclosure
cc: Provosts/Academic Vice Presidents
December 12, 1995

MEMORANDUM

TO: Members and Alternates
    Articulation and General Studies Committee

FROM: Don Crump

RE: Approval of Areas I-IV and Engineering Alternative

At the December 6, 1995 meeting, the Articulation and General Studies Committee approved the requirements for Areas I-IV of the general studies curriculum and unanimously approved an engineering alternative for students planning to complete bachelor’s degree requirements in engineering. Enclosed is a copy of the approved general studies curriculum which includes the clarifications suggested by Dr. Robert Halli. A copy of the approved engineering alternative also is enclosed.

The Alabama Commission on Higher Education’s agenda for the December 15, 1995 meeting includes a report from the Articulation and General Studies Committee. I plan to report the decisions made by the AGSC on December 6 and to indicate that we will be working with groups of deans and with academic disciplinary committees to refine the specifications within the general studies for particular degree programs and to develop Area V requirements. I will indicate that Dr. Joe Morris has been elected committee chair for 1996 and the primary goal for the year will be the refinement of the general studies curriculum and initiating procedures for review and approval of courses for general studies designation.

I appreciate the opportunity to serve as committee chair and to get to know each of you over the past year and a half. I thank each of you for your cooperation and hard work during this time. Looking back, we indeed have made a great deal of progress. I recognize that each of us has had to make some compromises, but I believe we have come up with a workable solution that will serve students well. We continue to have much work to do, and I look forward to working with Dr. Joe Morris in the coming year.

Best wishes to each of you for a joyful holiday season and for a happy and productive new year!

D.C.

DC/cj/9am112
Enclosure
### Areas of Study

<table>
<thead>
<tr>
<th>Quarter Hours</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>6</td>
</tr>
</tbody>
</table>

#### I. Written Composition
Effective written communication skills are essential in a literate society. Requirements include at least 10 quarter hours or 6 semester hours in written composition.

#### II. Humanities and Fine Arts*
Study in the humanities addresses the ability to deal with questions of values, ethics, or aesthetics as they are represented in literature, philosophy, religion, and the arts, and is fundamental to general education. Requirements include at least 15 quarter hours or 9 semester hours in humanities with a minimum of 5 quarter hours or 3 semester hours in literature, 5 quarter hours or 3 semester hours in the arts, and the remaining quarter or semester hours from the humanities and/or fine arts. In addition to literature, disciplines in the humanities include, but are not limited to, philosophy, religious studies, speech, foreign languages, art, music, theatre, and dance.

Courses should be broad in scope and content rather than specific and should emphasize a global perspective. Courses in the arts should emphasize history and appreciation rather than performance. Examples in the humanities and fine arts include, but are not limited to, world literature, art history, music appreciation, comparative religions, and history or origins of dance.

*Students preparing to complete the B.S. degree in engineering must demonstrate in-depth study in a particular discipline of the humanities and fine arts or history, social, and behavioral sciences through completion of 10 quarter hours or 6 semester hours in a particular discipline.
III. Natural Sciences and Mathematics

Study in the natural sciences and mathematics emphasizes the scientific method and applies quantitative or inductive reasoning. Requirements include at least 18-20 quarter hours or 11-12 semester hours with at least 5 quarter hours or 3 semester hours in mathematics at the analytic geometry and calculus level or higher,* and at least 12-15 quarter hours or 8 semester hours in calculus-based physics which must include laboratory experiences.

Courses in the natural sciences must include laboratory experiences which emphasize the scientific method.

*Students planning to complete the B.S. degree in engineering can only transfer mathematics courses at the level of analytic geometry and calculus or higher.

IV. History, Social, and Behavioral Sciences*

Study in history and the social and behavioral sciences deals primarily with the study of human behavior, social and political structures, and economics. Requirements include at least 5 quarter hours or 3 semester hours in history and at least 10 quarter hours or 6 semester hours from history or other disciplines in the social and behavioral sciences. In addition to history, these disciplines include, but are not limited to, anthropology, economics, geography, political science, psychology, and sociology. Courses should be broad in scope and content, include global or international perspectives, and must emphasize the methods of inquiry in the social sciences.

*Students preparing to complete the B.S. degree in engineering must demonstrate in-depth study in a particular discipline of the humanities and fine arts or history, social, and behavioral sciences through completion of 10 quarter hours or 6 semester hours in a particular discipline.

I-IV. Totals

58-60 35-36
V. Pre-Professional and Major Courses

Courses appropriate to the degree requirements and major of the individual student:

Mathematics
  Calculus
  Advanced Calculus
  Probability and Statistics
  Differential Equations
  Linear Algebra
  Numerical Analysis

Natural Sciences

Computer Science

TOTAL  96  64
Historical

During 1994 and 1995, when Act 94-202 creating the articulation of general studies became fully understood, engineering educators in Alabama became concerned about its effect on:

- external accreditation (ABET)
- credit hour inflation
- time-to-graduate goals

Engineering educators met statewide during 1995, and agreed on an engineering alternative to the General Studies Curriculum that would attend to these concerns.

The engineering alternative was unanimously approved by the statewide Articulation and General Studies Committee in December, 1995, and was made a part of the GSC.

The engineering alternative affects Areas II, III, and IV as follows:

- Area II: reduces hours from 12 to 9
- Area III: increases hours from 11 to 12, and requires precalculus physics and a minimum of MA 125
- Area IV: reduces hours from 12 to 9

The total hours in Areas I-IV for the engineering alternative is 36, consistent with current UA average core requirements.

The engineering alternative will allow us to continue with ongoing program credit hour reductions to 128-130 hours in keeping with the timely graduation of our students.
Why the Engineering Alternative is necessary:

1. Engineering curricula have traditionally been rigid, with very little opportunity for elective courses and with higher credit hour requirements. Our average is 136 semester hours with a time to graduate of 4.7 years.

2. Engineering curricula continually balance the requirements of external accrediting agencies with the desire to increase humanities, social sciences, business, and foreign languages to the curricula.

3. Engineering curricula are under pressure statewide to reduce the number of hours and decrease time-to-graduate.

4. The statewide articulation general studies agreement at 41 hours will increase the current UA core for engineering students by at least 5 hours. The statewide engineering alternative accompanying the general studies agreement adjusts the credit hour levels in areas I-IV to current UA core levels, consistent with other engineering programs in AL.

5. The 5 hour increase will place most engineering curricula at the 141 semester hour level.

6. Engineering program credit hour reductions to 128 hours are desired by the UA Provost and state officials. The desired reduction will affect upper division engineering courses and will diminish the quality of engineering programs, jeopardizing accreditation.

7. An increase in credit hour requirements will make the UA College of Engineering less competitive with other engineering schools.

8. Acceptance of the engineering alternative will not affect any other programs at UA outside engineering (i.e, no giveaway by another program).
FACULTY MEETING

Provost Nancy Barrett

Thursday, October 16, 1997
4:00 P.M.
Ferguson Theater

Topic:

The State Articulation Agreement and
The University of Alabama Core Curriculum
MEMORANDUM

TO: All Faculty

FROM: Nancy S. Barrett, Provost

SUBJECT: The Articulation Agreement: Background and Current Choices

In 1994 the State of Alabama enacted legislation (State Act No. 94-202) mandating a statewide freshman and sophomore level general studies curriculum to be taken at all colleges and universities. The Act also contains the provision that "nothing herein shall be interpreted as restricting any institution from requiring additional general studies courses beyond the statewide general studies curriculum."

The legislation also established an Articulation and General Studies Committee (AGSC) consisting of representatives from the two-year and four-year institutions. The University of Alabama is represented through a University of Alabama System representative—formerly Dr. Donald Crump, currently Dean James Yarbrough. The Articulation and General Studies Committee also established "discipline committees," to recommend and review curriculum in various subject areas, on which the following UA faculty serve: James Raymond, Robert Halli, Thomas Fox, Susan Fleming, Jonathan Michaelsen, Robert Mellow, Beth Bennett, Norvin Richards, Lynne Adrian, Paul Allen, Keller Suberkropp, John Vincent, Joe Benson, J. W. Harrell, Jeff Norrell, David Weaver, Steve Prentice-Dunn, Norm Baldwin, Mary Fish, Gerald Cullot, David Brown, John Watkins, Judy Bonner, Lucinda Roff, Sara Barger, Robert Garner, David Heggem, Cully Clark, Ray Flumerfelt, and John Dolly.

Recently, the Articulation and General Studies Committee adopted a statewide general studies curriculum which must be in place at our University by Fall 1998. Although the new guidelines are similar to our current core curriculum requirements, there are some differences, and we have some options in bringing our curriculum into conformity with the state mandate. I am sending this memorandum and a preliminary ballot to you as background for a general faculty meeting to be held on October 16, 4:00 p.m., in the Ferguson Center Theater.

There are 41 hours of core requirements that are stipulated by the AGSC curriculum. The attached grid highlights areas of difference and similarity between the state requirements and our current core curriculum. For example, the state requires 3 hours in Fine Arts (history or appreciation—not performance or creative activity), while UA currently has no such requirement.

As you review the preliminary ballot, there are a number of complexities and consequences to consider. The preliminary ballot begins with the assumption that we will bring our core curriculum into conformity with the categories and credit hours of the state requirements. Ballot items 1, 2, and 3 cover those areas where the requirements of our current core curriculum exceed those of the AGSC curriculum. In each of these categories, changes in our core curriculum will have significant impact upon enrollments, resources, and course offerings, as well as the time needed by our students to complete their degrees.
To cite one particular example, under the state system foreign languages are counted in Area II as Humanities courses. If we continue to require a foreign language (or computer science), those students taking a foreign language would be able to count those hours in Area II. As a consequence, and due to the new Fine Arts requirement, such students would take for their required two-semester sequence (in literature or in history) a history sequence. Such a shift would have an effect on the respective number of sections offered in English and in History. Indeed, meeting the new requirement in Fine Arts will require a great number of new seats for the Fine Arts. Also, under our current core curriculum, many students opt to take an introductory course in areas such as Women's Studies, Religious Studies, American Studies, Classics, or Philosophy to satisfy distribution requirements in Humanities.

Another key provision of the state system is a three-hour requirement in Mathematics (vs. our current core of six hours). If we maintain our current six-hour math requirement while adding a Fine Arts requirement, our required core will jump to 44 required hours from the mandated 41 hours.

An additional 19 to 23 hours of transferable course work is currently being negotiated as pre-professional courses (Area V) by the discipline-based committees which will evaluate which courses must be counted toward the major.

Earlier the AGSC approved an exception to the mandated requirements for Engineering programs. We will need to decide whether to extend that exception to the UA core curriculum. This was the only exception approved by the AGSC and applies to all Engineering programs in the state. The rationale was to enable students in Engineering programs to complete their degrees in a timely fashion. Failure to conform to the state-wide agreement for Engineering could put the UA program at a competitive disadvantage within our state.

The choices that we face are complex. We must adhere to the state law and to the mandated general studies curriculum. We do, however, have a choice as to how we will fit our core curriculum into the categories mandated by the state system. We are also free to add requirements beyond those specified.

Last spring the University's Core Curriculum Oversight Committee proposed a major revision of our core curriculum—one with an interdisciplinary component, the opportunity for more depth in a specialized area, and a capstone core experience. This year, I have asked Dr. Hank Lazer to pursue this recommendation by working with representatives of the various colleges to develop a plan for an innovative, interdisciplinary core curriculum. Thus, I anticipate that over the next year, we will be involved in an ongoing discussion about curricular reform. Our current discussion about the new state requirements can be viewed as an initial step in streamlining our core requirements and in creating a distinctive and innovative core curriculum for our freshman and sophomore students.

As a follow-up to our meeting on October 16, I will schedule several additional meetings for interested faculty to discuss the articulation agreement and our core curriculum options. I will also listen to your suggestions for possible modifications of the choices and wording of options on the ballot. (Please note that on the final ballot there will be a fourth item relating to the Engineering exception. The details for this item were not available when the attached ballot was printed.) Then, I will distribute a final version of the ballot and tally your responses. I anticipate that we will be able to complete the voting by mid-November, after there has been adequate time for discussion and revision of the ballot.

Attachments

cc: President Andrew A. Sorensen
Vice Presidents

 предмет

(attachment/attachment)
Preliminary Ballot

This ballot presumes the adoption of the state-mandated general studies curriculum as the core curriculum for The University of Alabama. This curriculum is composed of four areas:

<table>
<thead>
<tr>
<th>Area I</th>
<th>6 semester hours of written composition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area II</td>
<td>12 semester hours of humanities and fine arts including at least three hours of literature** and three hours of fine arts</td>
</tr>
<tr>
<td>Area III</td>
<td>11 semester hours of natural sciences and mathematics including at least three hours in mathematics at the pre-calculus algebra level or higher and at least eight semester hours in that natural sciences which must include laboratory experiences</td>
</tr>
<tr>
<td>Area IV</td>
<td>12 semester hours of history, social and behavioral sciences with at least a 3-semester-hour course in history** and at least six semester hours from among other disciplines in the social and behavioral sciences</td>
</tr>
</tbody>
</table>

* Only courses approved by the State General Studies and Articulation Committee will meet these requirements.
** Students must take either a two-course sequence in literature or a two-course sequence in history.

Ballot items 1, 2, and 3 ask you to consider whether or not you wish to add to the state-mandated general studies curriculum those requirements which are currently part of The University of Alabama's core curriculum.

1. We recommend that The University of Alabama require students to complete either of the following two requirements:

   a. Six semester hours that either substantially integrate the application of appropriate software or require writing computer programs. Students must make extensive use of the computer as a condition for passing the course. Courses approved for C credit assume that students have a working knowledge of the computer. Check the prerequisites to ensure that you are eligible to enroll in a specific course.
   b. Two semesters in one foreign language (FL) in addition to the requirements specified in Area II of the State General Studies Curriculum. Students with two or more high school units of a foreign language will be assigned to foreign language courses by the foreign language advisors on the basis of placement test scores. Students placed in FR 103, SP 103, or intermediate courses (FR 201, SP 201) will satisfy the core curriculum requirement in one semester.

   Non-native speakers of English can fulfill the foreign language requirement by qualifying for enrollment in freshman composition (EH 120, EH 121, or EH 101) based on results of an English proficiency examination administered by The University of Alabama, or by presenting credit for successful completion of EH 101 at an accredited U.S. institution. Fulfilling the requirement by these means merely satisfies the core curriculum requirement and does not result in the awarding of credit hours.

2. We recommend that The University of Alabama require completion of 3 semester hours in courses for the mathematics (M) designation in addition to the pre-calculus algebra course mandated by the State's General Studies Curriculum.

3. We recommend that The University of Alabama require at least 6 semester hours in 300- and 400-level courses, preferably in the student's major, that are approved for the writing (W) designation.
## General Education Requirements and Core Curriculum Requirements

### 100 and 200 level courses only

<table>
<thead>
<tr>
<th>Area</th>
<th>Description</th>
<th>Current UA Core</th>
<th>New State Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>Written Composition</td>
<td>6 semester hours</td>
<td>6 semester hours</td>
</tr>
<tr>
<td>II</td>
<td>Humanities and Fine Arts</td>
<td>6-12 semester hours (includes history) None None</td>
<td>12 semester hours (does not include history) 3 semester hours 3 semester hours</td>
</tr>
<tr>
<td></td>
<td>Literature</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fine Arts</td>
<td></td>
<td></td>
</tr>
<tr>
<td>III</td>
<td>Natural Sciences and Mathematics</td>
<td>14 semester hours 8 semester hours including 2 hours of laboratory 6 hours of M designated courses (above MA 109)</td>
<td>11 semester hours 8 semester hours including 2 hours of laboratory 3 hours – MA 111 or higher (no stat or logic)</td>
</tr>
<tr>
<td></td>
<td>Natural Sciences</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mathematics</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IV</td>
<td>History, Social and Behavioral Sciences History</td>
<td>6–12 semester hours None</td>
<td>12 semester hours 3 semester hours</td>
</tr>
<tr>
<td></td>
<td>History</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Language</td>
<td>Two semesters in one foreign language or 6 semester hours in computer science</td>
<td>Can count foreign language as humanities credit, but not required</td>
</tr>
</tbody>
</table>

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1 Students are required to take 18 hours in the humanities and the social sciences combined. A student must take at least six hours in the humanities and at least six hours in the social sciences. A student may not take more than six hours in any single discipline to satisfy this requirement.

2 Students must take either a six-hour sequence in literature or a six-hour sequence in history.

3 Students are required to take 18 hours in the humanities and the social sciences combined. A student must take at least six hours in the humanities and at least six hours in the social sciences. A student may not take more than six hours in any single discipline to satisfy this requirement.

4 Students must take either a six-hour sequence in literature or a six-hour sequence in history.
<table>
<thead>
<tr>
<th>Area</th>
<th>Description</th>
<th>Current UA Requirement</th>
<th>General Studies Requirement</th>
<th>General Studies Requirement for Engineering</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>Written Composition</td>
<td>6 semester hours</td>
<td>6 semester hours</td>
<td>6 semester hours</td>
</tr>
<tr>
<td>II</td>
<td>Humanities and Fine Arts</td>
<td>6-12 semester hours</td>
<td>12 semester hours</td>
<td>9 semester hours</td>
</tr>
<tr>
<td></td>
<td>(Includes history)</td>
<td>(does not include history)</td>
<td></td>
<td>6 sem. hrs. in a particular discipline</td>
</tr>
<tr>
<td></td>
<td>Literature</td>
<td>none mandatory</td>
<td>3 semester hours</td>
<td>only one in-depth study in either II or IV</td>
</tr>
<tr>
<td></td>
<td>Fine Arts</td>
<td>none mandatory</td>
<td>3 semester hours</td>
<td>none mandatory</td>
</tr>
<tr>
<td>III</td>
<td>Natural Sciences and Mathematics</td>
<td>14 semester hours</td>
<td>11 semester hours</td>
<td>12 semester hours</td>
</tr>
<tr>
<td></td>
<td>Natural Sciences</td>
<td>8 semester hours,</td>
<td>8 semester hours,</td>
<td>8 semester hours of calculus-based</td>
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<tr>
<td></td>
<td>including 2 hours of laboratory</td>
<td>including 2 hours of laboratory</td>
<td></td>
<td>physics, including 2 hours of laboratory</td>
</tr>
<tr>
<td></td>
<td>Mathematics</td>
<td>6 hours of M-designated</td>
<td>3 semester hours, MA 111 or higher</td>
<td>MA 125 and higher</td>
</tr>
<tr>
<td></td>
<td>courses above MA 109</td>
<td>courses</td>
<td>no stat or logic</td>
<td></td>
</tr>
<tr>
<td>IV</td>
<td>History, Social and Behavioral Sciences</td>
<td>6-12 semester hours</td>
<td>12 semester hours</td>
<td>9 semester hours</td>
</tr>
<tr>
<td></td>
<td>History</td>
<td>none</td>
<td>3 semester hours</td>
<td>6 sem. hrs. in a particular discipline</td>
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<td></td>
<td></td>
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<td></td>
<td>only one in-depth study in either II or IV</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>history may be included in-depth</td>
</tr>
<tr>
<td></td>
<td>Language</td>
<td>two semesters in one</td>
<td>foreign language can count</td>
<td>foreign language can count</td>
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<td></td>
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<td>foreign language or 6</td>
<td>as humanities credit, but is</td>
<td>as humanities credit, but is</td>
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<td></td>
<td></td>
<td>semester hours in</td>
<td>not required</td>
<td>not required</td>
</tr>
<tr>
<td></td>
<td></td>
<td>computer science</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>32-44</td>
<td>41</td>
<td>36</td>
</tr>
</tbody>
</table>