

PLEASE POST FOR ALL FACULTY TO READ!

EAST CAROLINA UNIVERSITY 1996-1997 FACULTY SENATE

The fifth regular meeting of the 1996/1997 Faculty Senate will be held on **Tuesday, 21 January 1997**, at 2:10 in the Mendenhall Student Center Downstairs Social Room.

PLEASE NOTE THE CHANGE IN LOCATION!

FULL AGENDA

- I. **Call to Order**
- II. **Approval of Minutes**
3 December 1996
- III. **Special Order of the Day**
 - A. Roll Call
 - B. Announcements
 - C. Richard Eakin, Chancellor
 - D. Richard Ringeisen, Vice Chancellor for Academic Affairs
 - E. James Hallock, Vice Chancellor for Health Sciences
 - F. Thomas Feldbush, Vice Chancellor for Research
 - G. Dot Clayton, Coordinator of Faculty Development Center
Intercampus Dialogue on Peer Review of Teaching (attachment 1).
 - H. Rita Reaves, Faculty Assembly Delegate
UNC Faculty Assembly Meeting of 15 November 1996
- IV. **Unfinished Business**
- V. **Report of Committees**
 - A. Committee on Committees, Bob Woodside
Nominations for 1997-98 Faculty Assembly Delegation (attachment 2).
 - B. Educational Policies and Planning, David Lawrence
Proposed revision to *ECU Faculty Manual*, Part V. Curriculum Development
(attachment 3).
 - C. Student Advising and Retention Committee, Rick Hebert
Proposed Steps to Enhance the Student Advising Process at ECU
(attachment 4).
 - D. University Curriculum Committee, Jim Smith
Curriculum matters contained in the minutes of the 14 November 1996,
Committee Meeting. (Copies of these minutes have been distributed to all units
and are available on the Faculty Senate web page.)
 - E. Ad Hoc Committee on a Freshman Cohort Program, Richard Miller
Committee Recommendations (attachment 5).
- VI. **New Business**

**Report to the East Carolina University Faculty
on the UNC Conference, "Intercampus Dialogue on Peer Review of Teaching"**

The University of North Carolina, the UNC Faculty Assembly, and the Institute for College and University Teaching jointly sponsored a conference for UNC campuses to discuss peer review of teaching. This conference, "Intercampus Dialogue on Peer Review of Teaching," was held September 13-14, 1996, at Black Mountain, North Carolina. Twelve of the sixteen campuses were represented by 57 faculty members. East Carolina University's delegation was composed of seven faculty members whose attendance was supported by Vice Chancellor Ringeisen.

Alice Arnold	Art Education, School of Art
Rick Barnes	Health Education, School of Health and Human Performance
Dorothy Clayton	Center for Faculty Development
Lou Everett	Community & Mental Health Nursing and Nursing Services Administration, School of Nursing
Judith Hunt	Management, School of Business
Marie Pokorny	Adult Health Nursing, School of Nursing
Linda Wolfe	Anthropology, College of Arts and Sciences

In 1993, UNC General Administration asked all constituent institutions to design and implement procedures for peer review of teaching (*Administrative Memorandum #338*). Since then, all sixteen campuses have been involved in their own efforts to comply. The goals of this conference were to provide a setting in which the participants could discuss the status of peer review (particularly direct classroom observation of teaching) and could share experiences in implementing this requirement.¹ Each participant was encouraged to come prepared to present a brief account of what is being done in their discipline and university. While the conference agenda contained both a developmental and evaluative focus, most of the discussions concentrated on the evaluative side.²

¹ Although the terms "peer review" and "peer observation of classroom teaching" are sometimes used as though they are equivalent, they are not. Peer observation of classroom teaching is a type of peer review.

² In the faculty development literature a distinction is made between developmental ("formative") and evaluative ("summative") uses of techniques such as peer classroom observation. When information from peer classroom observation is solely for the faculty member's own use, its purpose is formative, and the ownership and

Conference participants were divided into seven small discussion groups. The groups were formed from faculty members in related disciplines where possible. This had the advantage of distributing ECU's participants over several discussion groups. The major work of the conference, then, was conducted in three discussion sessions for each of the groups. In the first session, each group member shared what his or her academic unit is doing with regard to peer review, especially that mandated by UNC *Administrative Memorandum 338*. These discussions identified the nature of the procedures that were developed, attitudes towards the process, and levels of trust in how the collected information would be used. What emerged from the first meeting of each of the seven small groups was the variety of approaches and the differences in procedures. These differences exist within the same institution and within the same discipline across institutions.

At the second major discussion session, group members identified and discussed questions, problems, and issues associated with peer review. Many similar problems and questions were identified with peer review in general and with classroom observation in particular. A synthesis of these problems and questions is listed in a section of the conference report which follows.

The third major working session focused on possible solutions to some of the problems and questions which had been identified earlier. Some of these solutions are being tried at various campuses and others were proposed but, as yet, untried. These possible solutions are also covered in a separate section of the conference report.

On Saturday the group facilitators synthesized and summarized the substance of the small groups' discussions. These were presented to conference participants for any additions or comments. A panel of UNC Faculty Assembly delegates who participated in the conference discussed how faculty members can work with the Faculty Assembly to promote appropriate policies and practices regarding peer review of teaching. They also provided information on other proposals,

control over the use of this information remains with the faculty member. When the information gathered is employed for personnel evaluation, its use is summative, and it is subject to the rules and regulations associated with the personnel policy.

to scrutinize how faculty work and to evaluate the quality of instruction, that are being discussed by the legislature and the Board of Governors.

At the conclusion of the conference each campus' delegation met to exchange information and to talk about the "next step" each of us could take individually, and as an institution, to address this important matter. In our discussions we found variety in what is being done at ECU, much as we found variation when two faculty members from the same or similar disciplines discussed these matters in a working discussion group. We did agree that, in general, we are ahead of many of the other campuses in the good faith effort to comply with the directives from General Administration's *Memorandum 338*. ECU established university-wide procedures and instrument (Faculty Senate *Resolution # 93-44*) for peer classroom observation and provided a means for units either to modify this procedure and instrument or to develop their own subject to approval by their vice chancellor. This approach has provided us, at least initially, with a common "standard" (Faculty Senate *Resolution # 93-44*) and a way to acknowledge disciplinary differences in teaching environment and styles. The experimentation between units which such an approach permits has the potential to identify new approaches and ideas which can be shared with interested parties.

We also agreed that the requirement for "training" observers is prudent. Many faculty members from campuses which did not institute such a requirement felt this needs to occur on their campuses. At a minimum it sensitizes observers (and the observed) to the classroom observation process and procedures as well as encouraging discussions about the nature of good teaching.

In announcing the conference, its organizers indicated that they hoped it would result in the development of a set of key principles for peer review of teaching and would include examples of any model programs that emerged from the discussions. While no such key principles emerged, participants did find the sharing of different approaches, problems, and potential solutions useful. Conference participants were in general agreement that this sharing process needs to continue. Those of us from ECU who attended the conference collected examples of peer review, especially classroom observation, procedures and instruments provided by participants from other campuses. Copies of those examples will be held in the Center for Faculty Development where interested

faculty members can view them. In addition, the Center is compiling a notebook containing the procedures and instruments in use by units at East Carolina University. The notebook will be available for those who are interested in exploring alternatives to what they are currently using. In addition, a set of the documents directly relevant for peer classroom observation (listed below) will be included.

List of documents relevant for peer observation of classroom teaching at ECU.

1. UNC *Administrative Memorandum 338*, "Tenure and Teaching in the University of North Carolina," September 28, 1993
2. East Carolina University Faculty Senate *Resolution #93-44* (approved by the Faculty Senate December 7, 1993; approved by the Chancellor February 8, 1994)
3. Memorandum from Mike Duffy, Chair, Teaching Effectiveness Committee, "Considerations in Implementing Peer Review Procedures and Instrument," sent November 15, 1995
4. East Carolina University Academic Affairs Division, "Minimum Criteria for Unit Peer Observation Plans," issued by VCAA Yarbrough, March 5, 1996
5. East Carolina University School of Medicine, "Minimum Criteria for Departmental Peer Evaluation Plans," issue by VCHS and Dean, School of Medicine, January 3, 1996

INTERCAMPUS DIALOGUE ON PEER REVIEW OF TEACHING

SEPTEMBER 13-14, 1996 - BLUE RIDGE ASSEMBLY

Summary Report

A Current Status Report

Among the twelve UNC campuses represented at this conference, progress in developing procedures for peer review of teaching varies greatly. A few departments, particularly where faculty tend to be uneasy or fearful of how peer evaluations may be used, are still at "ground zero." Others have developed a relatively short and simple form or check sheet to guide classroom observation visits. Still others have written and implemented detailed and elaborate procedures that spell out the "Who, What and When" of peer evaluation. Most departments represented here have obviously invested considerable time and effort in grappling with the issues and trying to develop workable procedures, but no one claims to have discovered or designed the ideal peer review system. Indeed, one of the most striking aspects of this information exchange was the absolute uniqueness of each approach, even within the same discipline. Everyone seems to be developing their plans and procedures in isolation, tailoring their efforts to the particular needs--and the departmental "politics"--of the local academic unit.

If we are correct in assuming that the best approaches to peer review in the UNC system were presented at this conference, then we may conclude that, as a system, we are still in a period of trial-and-error experimentation with peer review of teaching. Different people are experimenting with different approaches without any great breakthrough, somewhat like the period in the history of aviation shortly before Orville and Wilbur's first flight. Much time and energy was invested in many innovative and promising approaches that didn't pan out. Unfortunately, during such a period, error tends to outweigh success. But this was probably a necessary and a worthwhile stage of development, wasn't it? Once the Wright brothers demonstrated a successful model, it soon became relatively easy to design flying machines for a variety of different purposes.

We need to continue sharing our successes and failures until we can produce some sort of "How-To" manual for developing sound procedures for peer review of teaching. The professional literature on this topic is growing rapidly, and we need to move forward with full awareness of the scholarly base of information that is available. We could certainly use a conceptual framework that explains the relationship of key variables in the peer review process, and then we might be able to test out some models that may have more widespread applicability. Perhaps doctoral candidates should be required to take a course on college teaching as part of their course work. And some campuses, especially those with doctoral degree program, might encourage their Ph.D. candidates to focus their dissertation research on this topic. Although we have not come up with a major breakthrough, this conference may be a step in that direction.

Problems/Issues

The following items were identified as issues/questions/concerns in dealing with peer review:

Definitions:

1. What is peer review?

Who is a peer? Why is the review occurring? What is being reviewed?

Problems/Issues - continued

2. What constitutes the "teaching" that is to be reviewed?
Problem: Narrow definition of teaching style or setting.
3. What "criteria" are to be used to measure "good" teaching?
Problem: Concern with prescribing one way to teach.

Status of teaching:

1. How can teaching be reviewed so that it counts and is rewarded?
Problems: Lack of reward for enhancing teaching. Rewards need to promote efforts to increase good teaching and cooperation not competition. Few to no rewards for those who do review a colleague's teaching.
2. Does the review process itself help to increase the focus upon teaching?

Environment within which peer review occurs:

1. How to move from a culture that stresses teaching as a "private" activity to one that has a collegial, collective concern with the quality of teaching?
Problem: This shift will be slow and difficult.
2. How to deal with the widespread cynicism about the value of teaching vs. research?
Problems: Emphasis on research is widely accepted internally. Professional prestige is tied to research.
3. How to create an atmosphere of trust within which peer review occurs?
Problems: Factional atmosphere within academic units. Philosophical biases intrude into the review process. Administrator/faculty dichotomy.
4. How to be more collegial but be "better than others" in order to receive "rewards?"
5. What roles do tenured vs. non-tenured, senior vs. junior faculty members play?
Problems: Indifference of senior faculty. Process is seen as threatening. Concern with loss of collegiality. Separate process for tenured and non-tenured send message that peer review is really about promotion and tenure, not about improving teaching.
6. How to achieve "enough" administrative responsibility so that peer review process can be implemented and yet preserve faculty involvement?
Problems: Faculty either avoid doing anything or perform a "meaningless" review. Need to lessen unevenness of implementation.

Formative vs. summative dilemma:

1. Can peer review fulfill both summative and formative functions? Should it?
Problems: Administrators focus on summative; faculty want formative. Administrators want summary quantitative data (often a number); faculty find qualitative more helpful.
2. How to place the focus on improving the quality of teaching regardless of whether it is for summative or formative purposes?

Implementing the process:

1. How can peer review recognize the different styles and philosophies of teaching?
Problems: Most are not trained to recognize or be sensitive to different approaches.
2. How to have the amount of time needed for quality observations and reviews?

Problems/Issues - continued

3. How to address the need for training to conduct peer review and evaluations?
Problem: Faculty and administrators need training in doing this.
4. How to make the peer review process and its "results" (e.g., classroom observation, review of teaching portfolio, etc.) as professional and objective as possible?
5. On the one hand, to what degree do there need to be "common standards" and, on the other hand, how much variety to reflect disciplinary differences, differences in teaching environments and styles?
6. How can learning outcomes be used as an indicator of how the faculty member is doing as a teacher?

Possible Solutions

Solutions generally fell into two main categories: those that can be accomplished with minimum effort and those that are more complex. Additionally, some of the solutions which require minimum effort can be accomplished by one person, and the rest require efforts of more than one, however, these levels will vary by culture. In departments and schools where the level of trust is high, less effort may be required to experiment. Small efforts should be regarded as tentative first steps, which are necessary to start any process of change. Some of the solutions are easily operationalized, while others are general and will require you to interpret how they are to be implemented.

Open dialogue/encourage talk about teaching, peer review and peer classroom observation. Be brave and open your classrooms to others.

Celebrate our strengths.

Teaching luncheons as a vehicle for informal conversations and to meet others on campus who are interested in teaching.

Visit other campuses to observe others teach or visit someone who teaches in another school or college on your campus.

Institute teaching awards at the department/school level, even if it is only a certificate that is handed out. Invite your departmental students to attend.

Regard peer review in general and peer classroom observation in particular as a dynamic not static process.

Share peer review models, techniques, processes that work.

Require all faculty to be involved in the process.

Have several models of peer observation for faculty to pick from so as not to overemphasize the traditional lecture model. Do the same for peer review.

Encourage administrators to allow time for teaching activities. Request/demand adequate time and reasonable deadlines to develop plans and do not cast the plans in stone in case they do not work well in your unit's culture.

Look at many aspects of teaching for peer review - not just peer classroom observation. This includes such things as keeping office hours, advising, doing topics courses for individual students, and course development/review/revision.

Possible Solutions - continued

- Have university /college level winners of teaching awards give short seminars on their strengths as teachers.
 - Have a corrective program for those who need improvement - do not give up on them.
 - Separate evaluation for merit and evaluation for promotion and tenure.
 - Allow people to attend and present papers on college teaching/education and receive credit for their efforts and reimbursement for their expenses.
 - Provide training for faculty in peer review, portfolio development, adolescent development, adult development, learning styles and teaching style and others which the faculty may want or need.
 - Require training for administrators on the proper use of the student evaluation of teaching information and the results of classroom observation to increase the probability of equity in merit and personnel decisions.
 - Start mentoring programs for teaching, research or both. Be sure it is voluntary and involves only people with a commitment to its value. For teaching mentors, make sure the individual is known to be a good teacher. Make an effort to use people who will not be involved in personnel decisions of the mentee.
 - Try collective reviews instead of individual reviews. For example, have a departmental teaching review (How good is our department collectively?). Develop a course portfolio for a course with several sections taught by several faculty, instead of an individual teaching portfolio.
 - Bring in someone experienced in military instructional techniques to assess your models of course design and evaluation of teaching.
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Faculty Senate Agenda
21 January 1997
Attachment 2.

COMMITTEE ON COMMITTEES REPORT

NOMINEES FOR THE 1997-1998 FACULTY ASSEMBLY
DELEGATION

Current Faculty Assembly Delegates

Dawn Clark	Theatre and Dance	1997	First Term
Larry Hough	Political Science	1997	Second Term
Don Sexauer	Art	1998	First Term
Henry Ferrell	History	1999	First Term
Rita Reaves	Industry and Technology	1999	First Term

Current Faculty Assembly Alternates

Mary Beth Foil	Medicine	1997
Mary Glascoff	Health & Human Perf.	1998
Marie Pokorny	Nursing	1998
Catherine Rigsby	Geology	1999
Bob Morrison	Chemistry	1999

Terms Expiring:

Dawn Clark, Theatre Arts
Larry Hough, Political Science*
Mary Beth Foil, Medicine

*ineligible for re-election (Part X, Bylaws, Section II.C., page X-4)

Nominees

<u>Name</u>	<u>Unit</u>	<u>Phone Ext.</u>
Lou Everett	Nursing	4306
Michael Felts	Health and Human Perf.	4636
Randy Joyner	Education	6175
Bob Morrison	Chemistry	6238
Allan Rosenberg	Medicine	816-3538

**Faculty Senate Agenda
21 January 1997
Attachment 3.**

**EDUCATIONAL POLICIES AND PLANNING
COMMITTEE REPORT**

PROPOSED REVISION TO ECU FACULTY MANUAL,

Part V. Academic Information, Curriculum Development

Replace the current information located in Section III. Curriculum Development with the following:

"Curriculum development is a faculty responsibility. Recommendations for new courses, course revisions, and changes in admission requirements for degree programs originate within the various schools and departments and within interdepartmental committees. Courses are approved by the unit faculty in accordance with unit code provisions and by the Council for Teacher Education, when appropriate. Undergraduate and 5000-level courses require consideration by the following bodies: the college or school curriculum committee, the University Curriculum Committee, the Faculty Senate, and the chancellor. In addition to unit approval and, when appropriate, Council for Teacher Education approval, 5000-level and other graduate courses require consideration by the Graduate Curriculum Committee and the Graduate Council. New and revised areas of concentration and options and revised minors which do not require UNC-General Administration approval are also approved by this procedure.

The development of new degree programs is a shared responsibility of the faculty, the administration at East Carolina University, the ECU Board of Trustees, the UNC-General Administration, and the UNC Board of Governors. The board of governors has final statutory responsibility to determine the functions, educational activities, and academic programs of the constituent institutions.

**REQUESTS FOR AUTHORIZATION TO PLAN NEW DEGREE PROGRAMS,
NEW MINORS AND NEW TRACKS WHICH REQUIRE NEW STATE
ALLOCATIONS**

Recommendations for new degree programs, as well as new minors and new tracks which require new state allocations from the UNC Board of Governors, originate within the various schools and departments or within interdepartmental committees. Academic units desiring to plan these new programs, except for new minors, must submit a notification of intent to the appropriate dean(s) (e.g., school, college, Graduate School), the director of the appropriate library (Joyner and/or Health Sciences Library), director of planning and institutional research, director of computer services, and the appropriate vice chancellor by January 1 of even numbered years. In addition to the notification of intent, the program will show evidence that the planned degree is a priority in the unit's strategic/operational plan. Before making any formal request to plan any of these new programs, the unit must consult with all other units that may be affected, including Joyner Library, Health Sciences Library, and Computing and Information Systems.

Requests for authorization to plan are reviewed on campus by undergraduate or graduate committees in the faculty governance review process as depicted in the accompanying flow chart. This chart is only intended to depict the flow of information from one body to another. Requests for authorization to plan a new degree program or new track requiring additional resources must be submitted to the appropriate oversight committees (e.g., Educational Policies and Planning Committee, Graduate Council) on or before October 1 of even numbered years. A copy of the notification of intent must be attached to the request.

Through administrative channels, the dean recommends to the vice chancellor for academic affairs or the vice chancellor for health sciences, as appropriate, who recommends to the chancellor. For undergraduate programs, the appropriate vice chancellor will recommend to the chancellor. For a graduate program, the dean also recommends to the vice chancellor for research and

**EDUCATIONAL POLICIES AND PLANNING COMMITTEE REPORT
(continued)**

graduate studies in his or her capacity as dean of the Graduate School who will, in turn, forward the recommendation of the Graduate Council to the vice chancellor for academic affairs or the vice chancellor for health sciences, as appropriate. The vice chancellor for research and graduate studies and appropriate vice chancellor will consult with one another and submit a joint recommendation to the chancellor. Should differences of opinion occur, each vice chancellor will submit his or her own individual recommendation. Requests for authorization to plan new degree programs and new tracks which require additional resources are forwarded to the president of the University of North Carolina by the chancellor. Proposals for new degree programs and new tracks which require additional resources require authorization to plan from the president of the University of North Carolina and the Committee on Educational Planning, Policies, and Programs of the board of governors. New minors follow only the campus approval process. (See below.)

REQUESTS FOR AUTHORIZATION TO ESTABLISH

Requests to establish new programs that have received authorization to plan must be approved by the unit faculty according to unit code requirements. Programs that have received authorization to plan must submit their request to establish to the appropriate oversight committees at least by November of the odd-numbered year following approval to plan. Before making any formal request to establish a new program, the unit must again consult with all the other units that may be affected, including Joyner Library, Health Sciences Library, and Computing and Information Systems. The requests to establish are then reviewed according to the faculty governance review process depicted in chart form, as follows. The administrative approval process is the same as that described above for requests for authorization to plan. The chancellor forwards the proposed new programs with the requests for authorization to establish to the president of the University of North Carolina for approval. The president submits the proposed program to the UNC Committee on Educational Planning, Policies, and Programs, which recommends to the board of governors. If the new programs require new resources, the Committee on Educational Planning, Policies, and Programs, acting jointly with the board's Committee on Budget and Finance, will so recommend to the board. The president will communicate to the chancellor the decision of the board and, in the event of favorable action, an approximate date for the initiation of the program.

REQUESTS FOR NEW MINORS

New minors follow the same on-campus procedure as new degree programs for request for authorization to plan and request to establish with the following exceptions: Notification of intent to plan a new minor must be submitted at least three months prior to submission of the request for authorization to plan. There is no specified timetable for submission of request for authorization to plan. Permission to plan, if authorized, will extend for a two-year period. Request to establish must be submitted at least one year prior to the date of intended implementation.

REQUESTS FOR NEW TRACKS WHICH DO NOT REQUIRE NEW STATE ALLOCATIONS

Notification of intent to plan a new track which does not require new state allocations must be submitted at least three months prior to submission of the request for authorization to establish. Units that wish to establish new tracks which do not require new state allocations must submit a request to establish at least one year prior to the date of intended implementation, following the procedure for establishing new degree programs. Evidence that the new track is a priority in the unit's strategic/operational plan must be shown.

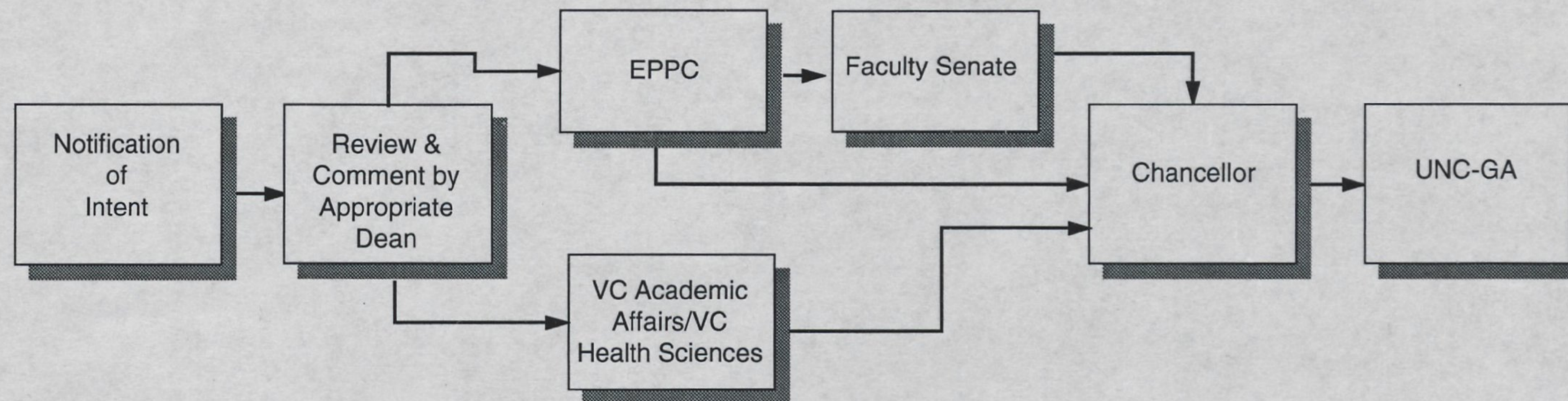
Formats for requests for authorization to plan and to establish new programs are available in the offices of deans and vice chancellors."

Informational Flow Chart

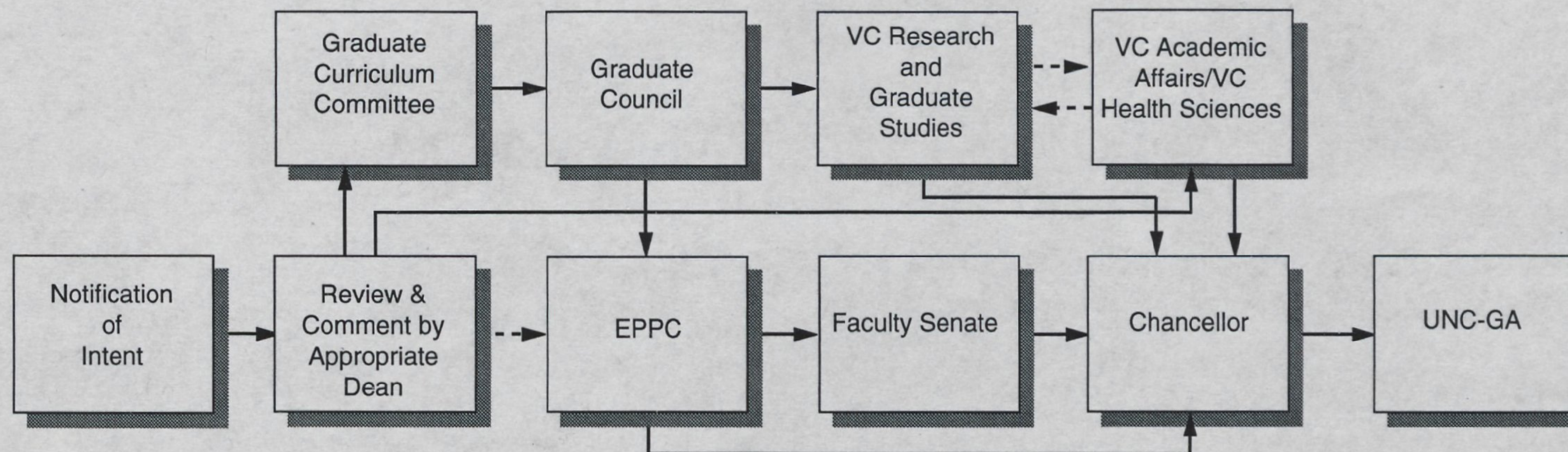
**CURRICULUM DEVELOPMENT
PROCEDURES FOR ESTABLISHING A NEW DEGREE PROGRAM**

AUTHORIZATION TO PLAN

Undergraduate Programs



Graduate Programs

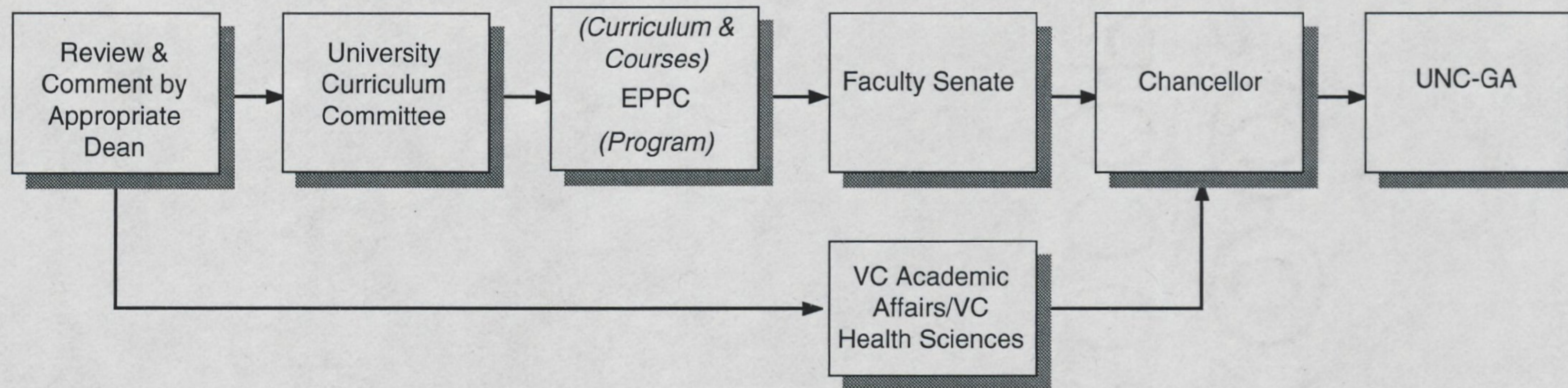


-----> Dotted = Communication optional
-----> Solid = Required routing

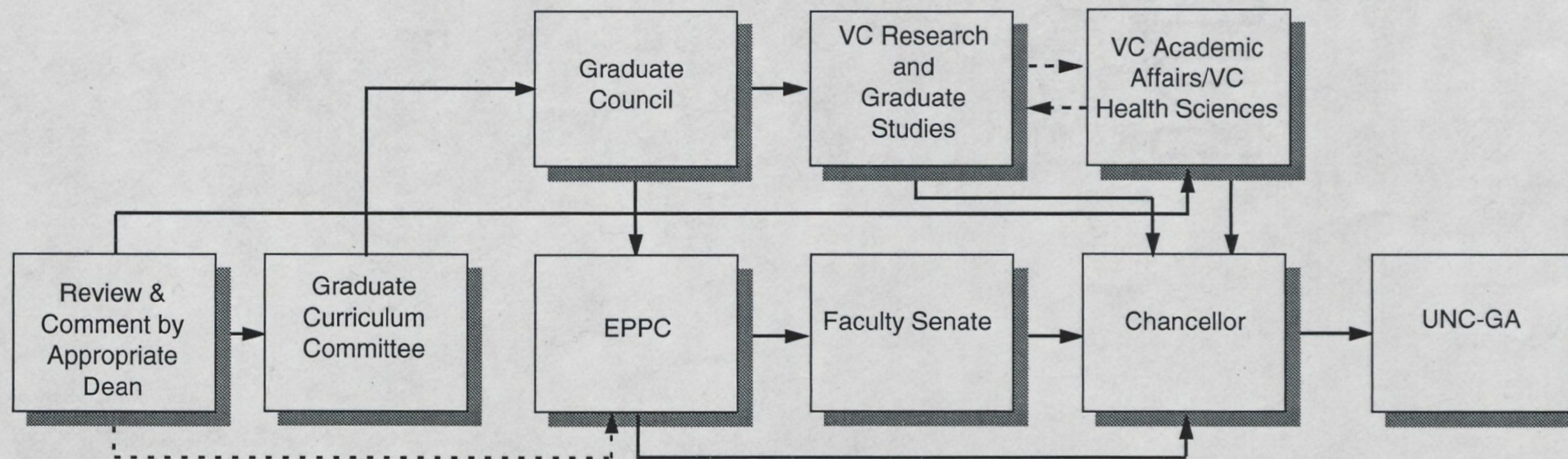
Informational Flow Chart

**CURRICULUM DEVELOPMENT
PROCEDURES FOR ESTABLISHING A NEW DEGREE PROGRAM
AUTHORIZATION TO ESTABLISH**

Undergraduate Programs



Graduate Programs



-----> Dotted = Communication optional
—————> Solid = Required routing

**Faculty Senate Agenda
21 January 1997
Attachment 4.**

**STUDENT ADVISING AND RETENTION
COMMITTEE REPORT**

**PROPOSED STEPS TO ENHANCE THE
STUDENT ADVISING PROCESS AT ECU**

The Student Advising & Retention Committee proposes the following resolution for endorsement. The Committee believes that the endorsement of this resolution by the Faculty Senate and implementation by academic units and individuals will have a positive effect on improving advising and retention of students at East Carolina University.

The Committee proposes the following steps to enhance the advising process:

1. Increase faculty and administrators (deans', department chairs') participation in advising workshops sponsored by academic units and the office of Undergraduate Studies (encouraging these individuals to attend a workshop at least every 3 years).
2. Incorporate in advising workshops presentations of successful advising strategies from previous advising award winners.
3. Increase student participation in the advising survey by employing practices of academic units which have achieved high response rates.
4. Send a list ing of student response rates by academic unit to unit heads for their information and review.
5. Encourage increased faculty participation in the advising survey.
6. Encourage unit administrators to use the advising survey results in faculty performance evaluations, as appropriate, if student participation in advising surveys is at a level warranted to be representative of the number of students being advised by that faculty member.

**Faculty Senate Agenda
21 January 1997
Attachment 5.**

**AD HOC COMMITTEE ON A
FRESHMAN COHORT PROGRAM REPORT**

In April 1995, the Faculty Senate endorsed the formation of an Ad Hoc Committee on a Freshman Academic Cohort Program, consisting of faculty and administrators, to plan and implement a Freshman Academic Cohort Program. The charge to the group was to consider such a program, formulate the specifics, consider offering a stipend to participating faculty, and report to the Faculty Senate with a formal plan for implementing the program no later than the 1996-97 academic year.

The Ad Hoc Committee provides the following report to the Faculty Senate.

Proposal to Implement a Freshman Learning Cluster Program at ECU
Ad Hoc Committee Report
November 7, 1996

Purpose:

The Freshman Cohort Ad Hoc Committee was created by the Vice Chancellor for Academic Affairs to respond to a resolution passed by the Faculty Senate and endorsed by the Chancellor to study and implement, as appropriate, a freshman cohort program at East Carolina. The purpose of the program is to encourage the connection of entering freshman students with the university, promote academics from the very beginning of the freshman experience, and, as a result, to increase the retention and progression of ECU students to graduation. This report proposes to implement a learning clusters (cohorts) program for approximately ten per cent of the freshman class beginning Fall 1997.

Rationale and Understandings:

Recent studies of the freshman experience in higher education by Tinto, Goodsell, and others have addressed the importance of incorporating new students into the university--making them feel a part of the institution--and providing them with the strategies and knowledge to negotiate successfully the university and the higher education experience. (See bibliography.) In this decade researchers/faculty and college administrators have recognized the ease with which students can "get lost" in the large, impersonal university. Their attempts to address problems of connection have led to the identification of ways of building smaller communities within the larger community of the university. A number of institutions have studied various ways of grouping entering students to facilitate their transition to the university. Among those efforts are the creation of residential colleges and other efforts in the residence halls and the creation of learning clusters in the students' academic programs; some institutions combine housing and academic programs. Learning community models are currently in operation in such institutions as the University of Washington, Arizona State University, the University of Kentucky, the University of Nebraska, Iowa State University, the University of Texas at Corpus Christi, and the University of North Carolina at Charlotte. The organizational structures of the learning communities at these and other institutions range from simple linked or paired courses to learning clusters, freshman interest groups (F.I.G.s), federated learning communities, coordinated studies programs, and residential programs.

Based upon the available information and member knowledge of ECU, the Cohort Ad Hoc Committee proposes to initiate a modest academic cluster program to include approximately ten per cent of the freshman class. The following understandings or guidelines are recommended:

Design/Eligibility

- The program will be available for first semester freshman students during the fall semester of each academic year.
- Initial implementation of the program will involve approximately 10 clusters: four clusters for undecided students, 2 clusters for business management intended majors, 2 clusters for elementary education intended majors, 1 cluster for special education intended majors, and 1 cluster for construction management/industrial technology intended major students.
- Clusters will generally include freshman composition, a social science course, a third general education course, and the freshman seminar (COAD 1000).
- The program will consist of approximately 300 students in clusters of 25 students each.

Scheduling

- The program will consist of approximately 300 students in clusters of 25 students each.
- Chairs of departments offering courses to be clustered will be asked to hold seats in identified sections of identified courses for learning cluster (learning community) enrollment during summer orientation programs. Times needed for sections will be identified by the planning committee no later than November of the academic year prior to implementation.
- Seats not used by students in the cluster will be released at the end of the freshman summer orientation program so that other students may enroll in those sections.
- A system for block registering will be developed by CIS/Registrar. Students enrolling in a learning cluster must remain in all courses in the cluster.

Advising

- Advisement of targeted students will be handled by the advisers of students in the selected intended majors (BIOL, ELEM, SPED, MGMT, CMGT/INDT, and UNDC) prior and during summer orientation.
- Insofar as practical, undecided students in clusters should be advised by faculty teaching in the cluster.

Cost

- The first year program will be implemented at minimal cost.
- Additional funds should be allocated to the Teaching Grants Committee to support grant proposals of faculty involved in the Clusters program.
- Involvement in the clusters should not preclude eligibility for other teaching grants.
- Funds will be sought to reimburse with travel money or operational budget money departments for the release of faculty to be trained and to teach a section of the freshman seminar (COAD 1000) when the course is required in a cohort.

Marketing

- Initial marketing of the clusters will be conducted by the Office of Admissions through information packets and materials. Focused marketing of the clusters will be conducted by the General College (undecided) and intended major departments

at orientation. Advisement of targeted students will include discussion of the academic clusters program and its benefits.

- Since the program is limited in size, participation will be on a first come/first served basis.
- After the initial year, the program will be marketed more extensively. Marketing strategies will be developed by the Admissions Office in conjunction with Undergraduate Studies and the participating departments to highlight the benefits of the program.

Implementation/Oversight

- During the initial implementation of the program, voluntary coordination among professors teaching clustered sections will be encouraged. Opportunities for collaboration will be provided.
- Increased collaboration will be expected as the program matures.
- The majority of courses to be included in the program are offered by departments in the College of Arts and Sciences. The departments in the College of Arts and Sciences will be asked to review the proposal and agree to hold seats, etc.
- A nuts and bolts ad hoc committee will be established to assist with the implementation of the program; the assistant dean of the College of Arts and Sciences will consult with College of Arts and Sciences departments to hold seats in selected sections. The ad hoc committee will work with the departments offering the courses, departments of included intended majors, Office of the Registrar, Office of Undergraduate Admissions, Office of New Student Orientation and the Freshman Experience, and the Office of Undergraduate Studies in scheduling, promoting, and enrolling students in, and otherwise administering, the program.
- In subsequent years, additional clusters will be added according to demand.

Time Line:

- 10/30/96 Ad Hoc Committee completion of proposal; development of letters of agreement for participating units
- 10/31/96 Review of proposal by affected departments, Vice Chancellor, etc.
- 11/05/96 Revision of proposal, if appropriate, after review by affected departments
- 12/01/96 Courses/sections submitted to the Office of the Registrar for blocking
- 12/05/96 Meeting with Office of Admissions, Orientation, and Undergraduate Studies, and members of participating departments concerning marketing of program
- 01/07/97 Interim Implementation Report presented to Faculty Senate
- 01/10/97 Contact the Teaching Grants Committee about grant proposals for faculty participating in clusters.
- 03/31/97 Courses held during early registration
- 04/01/97 Information about clusters mailed to incoming freshmen
- 04/30/97 Programming for blocking courses completed
- Jn-Jly 97 Registration of students into clusters during Summer Orientation
- 07/15/97 Release of remaining seats in clustered courses
- Aug. 97 Cluster meeting of students upon return to ECU for fall semester
- Aug. 97 Reception for participating faculty (perhaps breakfast prior to convocation)

- Aug. 97 Demographic data entered for matched pair study, general retention study
- Sept. 97 Obtain Freshman Survey Data for matched pair groups
- Oct. 97 Survey of students and faculty in program and departments involved (satisfaction)
- 11/01/97 Submission of tentative 1998 cluster schedule to departments
- 12/01/97 Revisions, if appropriate, returned to departments
- Jan. 98 Retention into second semester data collected and reported
- Jan. 98 Administer follow-up survey/post-test to paired groups
- Mar. 98 Prepare and Submit Annual Report and Research Report to appropriate office/s

Evaluation Design:

An evaluation design will be prepared and included in the report to the Faculty Senate. The evaluation will include satisfaction surveys completed by students, faculty, departments of intended majors, and departments offering the courses, as well as retention and gpa data. A matched pair study of business and elementary education intended majors will be conducted (large enough numbers), and retention/persistence data will be collected for all students participating in the program to be compared with general population and matched pair group and between different cohort patterns. NOTE: Additional funds will be requested for COAD 1000 as an integral part of undecided clusters and other clusters as appropriate.

Proposed Clusters for Fall 1997:

The 10 clusters proposed include 25 seats in each of the following sections:

ENGL 1100	12 sections	
PSYC 1000	5 sections	2 clusters in one section
ECON 2113	3 sections	
BIOL 1050	2 sections	
BIOL 1051	2 sections	
HLTH 1000	4 sections	
ANTH 1000	1 section	
POLS 1010	1 section	
SOCI 2110	1 section	
GEOG 1000	2 sections	
PHIL 1010	1 section	
COAD 1000	3 sections	
BIOL 1100	1 section	2 clusters in one section
BIOL 1101	2 sections	
CHEM 1150	1 section	2 clusters in one section
CHEM 1151	2 sections	
MATH 1065	1 section	2 clusters in one section

ENGL 1100		
BUS #1	ENGL 1100	MWF 1000
BUS #2	ENGL 1100	TTH 0930
SPED #1	ENGL 1100	MWF 0900
CMGT/INDT	ENGL 1100	TTH 1230
UNDC #1	ENGL 1100	MWF 0900

UNDC #2	ENGL 1100	TTH	1230
UNDC #3	ENGL 1100	MWF	0900
UNDC #4	ENGL 1100	TTH	1230
ELEM #1	ENGL 1100	TTH	0930
ELEM #2	ENGL 1100	TTH	1400
BIOL #1	ENGL 1100	TTH	0930
BIOL #2	ENGL 1100	TTH	0930

ECON 2113

BUS #1	ECON 2113	MWF	1100
BUS #2	ECON 2113	TTH	1100
CMGT/INDT	ECON 2113	TTH	0800

PSYC 1000

BUS #1	PSYC 1000	MWF	1300
BUS #2	PSYC 1000	TTH	1400
SPED #1	PSYC 1000	MWF	1000
CMGT/INDT	PSYC 1000	MWF	0900
ELEM #1	PSYC 1000	MWF	1000
ELEM #2	PSYC 1000	TTH	1230

BIOL 1050

SPED #1	BIOL 1050	MWF	1200
UNDC #1	BIOL 1050	MWF	1100
UNDC #4	BIOL 1050	TTH	0930

BIOL 1051

UNDC #1	BIOL 1051	M	1400-1700
UNDC #4	BIOL 1051	W	1400-1700
SPED #1	BIOL 1051	W	1400-1700

HLTH 1000

ELEM #1	HLTH 1000	MW	1100
ELEM #2	HLTH 1000	TTH	1100
SPED #1	HLTH 1000	TTH	1400
UNDC #3	HLTH 1000	MW	1400

POLS 1010

UNDC #1	POLS 1010	MWF	1000
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ANTH 1000

UNDC #2	ANTH 1000	TTH	0930
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GEOG 1000

ELEM #1	GEOG 1000	TTH	1100
ELEM #2	GEOG 1000	TTH	0930

SOCI 2110

UNDC #4	SOCI 2110	TTH	1400
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PHIL 1110

UNDC #3	PHIL 1110	MWF	1100
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COAD 1000

SPED #1	COAD 1000	TTH	0930
UNDC #2	COAD 1000	TTH	1100
UNDC #4	COAD 1000	TTH	1300 (?)

BIOL 1100

BIOL #1	BIOL 1100	MWF	0800
BIOL #2	BIOL 1100	MWF	0800

BIOL 1101

BIOL #1	BIOL 1101	TH	1400-1700
BIOL #2	BIOL 1101	T	1400-1700

CHEM 1150

BIOL #1	CHEM 1151	MWF	1000
BIOL #2	CHEM 1151	MWF	1000

CHEM 1151

BIOL #1	CHEM 1151	T	1400-1700
BIOL #2	CHEM 1151	TH	1400-1700

MATH 1065

BIOL #1	MATH 1065	MWF	1100
BIOL #2	MATH 1065	MWF	1100

Attachments

Elementary Education - Cohort #1

	Monday	Tuesday	Wednesday	Thursday	Friday
0800 - 0900					
0900 - 1000	GEOL 1500		GEOL 1500		GEOL 1500
1000 - 1100	PSYC 1000	ENGL 1100	PSYC 1000	ENGL 1100	PSYC 1000
1100 - 1200	HLTH 1000	GEOG 1000	HLTH 1000	GEOG 1000	
1200 - 1300					
1300 - 1400					
1400 - 1500					
1500 - 1600		GEOL 1501			
1600 - 1700					
1700 - 1800					
1830 - 2130					

PSYC 1000	MWF	10:00-11:00 AM
HLTH 1000	MW	11:00-12:00 N
ENGL 1100	TTh	9:30-10:45 AM
GEOG 1000	TTh	11:00-12:15 PM
Recommended additional courses to complete the schedule:		
MATH 0001/0045 or 2127		
GEOL 1501	T	3:00-6:00 PM
GEOL 1500	MWF	9:00-10:00 AM
or		
BIOL 1050/1051		

Elementary Education - Cohort #2

	Monday	Tuesday	Wednesday	Thursday	Friday
0800 - 0900		GEOL 1500		GEOL 1500	
0900 - 1000					
1000 - 1100		GEOG 1000		GEOG 1000	
1100 - 1200		HLTH 1000		HLTH 1000	
1200 - 1300					
1300 - 1400		PSYC 1000		PSYC 1000	
1400 - 1500		ENGL 1100		ENGL 1100	
1500 - 1600					
1600 - 1700					
1830 - 2130		GEOL 1501			

PSYC 1000	TTh	12:30-1:45 PM
HLTH 1000	TTh	11:00-11:50 AM
ENGL 1100	TTh	2:00-3:15 PM
GEOG 1000	TTh	9:30-10:45 AM
Recommended additional courses to complete the schedule:		
MATH 0001/0045 or 2127		
GEOL 1501	T	6:30-9:30 PM
GEOL 1500	TTh	8:00-9:15 AM
or		
BIOL 1050/1051		

Special Education - Cohort #1

	Monday	Tuesday	Wednesday	Thursday	Friday
0800 - 0900					
0900 - 1000	ENGL 1100		ENGL 1100		ENGL 1100
1000 - 1100	PSYC 1000	COAD 1000	PSYC 1000	COAD 1000	PSYC 1000
1100 - 1200					
1200 - 1300	BIOL 1050		BIOL 1050		BIOL 1050
1300 - 1400					
1400 - 1500		HLTH 1000	BIOL 1051	HLTH 1000	
1500 - 1600					
1600 - 1700					
1830 - 2130					

PSYC 1000	MWF	10:00-11:00 AM
ENGL 1100	MWF	9:00-10:00 AM
BIOL 1050	MWF	12:00- 1:00 PM
BIOL 1051	W	2:00-5:00 PM
HLTH 1000	TTh	2:00-3:00 PM
COAD 1000	TTh	9:30-10:30 PM
Recommended additional courses to complete the schedule:		
MATH 0001/0045 or 2127		
HIST 1030 or 1050		
EXSS 1000		

Construction Management/Industrial Technology - Cohort #1

	Monday	Tuesday	Wednesday	Thursday	Friday
0800 - 0900		ECON 2113		ECON 2113	
0900 - 1000	PSYC 1000	ITEC 2000	PSYC 1000	ITEC 2000	PSYC 1000
1000 - 1100	CMGT 2660		CMGT 2660		
1100 - 1200	ENGL 1100		ENGL 1100		ENGL 1100
1200 - 1300					
1300 - 1400					
1400 - 1500			CMGT 2661		
1500 - 1600					
1600 - 1700					
1830 - 2130					

CMGT 2660	MW	10:00-10:50 AM
CMGT 2661	W	2:00-4:00 PM
PSYC 1000	MWF	9:00- 10:00 AM
ENGL 1100	MWF	11:00-12:00 PM
ITEC 2000	TTh	9:30-11:30 AM
ECON 2113	TTh	8:00- 9:15 AM
Recommended additional courses to complete the schedule: MATH 0001/0045 or 1065 CMGT 2664 PHIL 1100		

Business Management - Cohort #1

	Monday	Tuesday	Wednesday	Thursday	Friday
0800 - 0900					
0900 - 1000					
1000 - 1100	ENGL 1100		ENGL 1100		ENGL 1100
1100 - 1200	ECON 2113		ECON 2113		ECON 2113
1200 - 1300					
1300 - 1400	PSYC 1000		PSYC 1000		PSYC 1000
1400 - 1500					
1500 - 1600					
1600 - 1700					
1830 - 2130					

ENGL 1100	MWF	10:00-11:00 AM
ECON 2113	MWF	11:00-12:00 PM
PSYC 1000	MWF	1:00- 2:00 PM
Recommended additional courses to complete the schedule: MATH 0001/0045 or 1065		

Business Management - Cohort #2

	Monday	Tuesday	Wednesday	Thursday	Friday
0800 - 0900					
0900 - 1000					
1000 - 1100		ENGL 1100		ENGL 1100	
1100 - 1200		ECON 2113		ECON 2113	
1200 - 1300					
1300 - 1400					
1400 - 1500		PSYC 1000		PSYC 1000	
1500 - 1600					
1600 - 1700					
1830 - 2130					

ENGL 1100	TTh	9:30-10:45AM
ECON 2113	TTh	11:00-12:15 PM
PSYC 1000	TTh	2:00- 3:15 PM
Recommended additional courses to complete the schedule: MATH 0001/0045 or 1065		

Elementary Education - Cohort #1

	Monday	Tuesday	Wednesday	Thursday	Friday
0800 - 0900					
0900 - 1000	GEOL 1500		GEOL 1500		GEOL 1500
1000 - 1100	PSYC 1000	ENGL 1100	PSYC 1000	ENGL 1100	PSYC 1000
1100 - 1200	HLTH 1000	GEOG 1000	HLTH 1000	GEOG 1000	
1200 - 1300					
1300 - 1400					
1400 - 1500					
1500 - 1600		GEOL 1501			
1600 - 1700					
1700 - 1800					
1830 - 2130					

PSYC 1000	MWF	10:00-11:00 AM
HLTH 1000	MW	11:00-12:00 N
ENGL 1100	TTh	9:30-10:45 AM
GEOG 1000	TTh	11:00-12:15 PM
Recommended additional courses to complete the schedule:		
MATH 0001/0045 or 2127		
GEOL 1501	T	3:00-6:00 PM
GEOL 1500	MWF	9:00-10:00 AM
or		
BIOL 1050/1051		

Elementary Education - Cohort #2

	Monday	Tuesday	Wednesday	Thursday	Friday
0800 - 0900		GEOL 1500		GEOL 1500	
0900 - 1000					
1000 - 1100		GEOG 1000		GEOG 1000	
1100 - 1200		HLTH 1000		HLTH 1000	
1200 - 1300					
1300 - 1400		PSYC 1000		PSYC 1000	
1400 - 1500		ENGL 1100		ENGL 1100	
1500 - 1600					
1600 - 1700					
1830 - 2130		GEOL 1501			

PSYC 1000	TTh	12:30-1:45 PM
HLTH 1000	TTh	11:00-11:50 AM
ENGL 1100	TTh	2:00-3:15 PM
GEOG 1000	TTh	9:30-10:45 AM
Recommended additional courses to complete the schedule:		
MATH 0001/0045 or 2127		
GEOL 1501	T	6:30-9:30 PM
GEOL 1500	TTh	8:00-9:15 AM
or		
BIOL 1050/1051		

Special Education - Cohort #1

	Monday	Tuesday	Wednesday	Thursday	Friday
0800 - 0900					
0900 - 1000	ENGL 1100		ENGL 1100		ENGL 1100
1000 - 1100	PSYC 1000	COAD 1000	PSYC 1000	COAD 1000	PSYC 1000
1100 - 1200					
1200 - 1300	BIOL 1050		BIOL 1050		BIOL 1050
1300 - 1400					
1400 - 1500		HLTH 1000	BIOL 1051	HLTH 1000	
1500 - 1600					
1600 - 1700					
1830 - 2130					

PSYC 1000	MWF	10:00-11:00 AM
ENGL 1100	MWF	9:00-10:00 AM
BIOL 1050	MWF	12:00- 1:00 PM
BIOL 1051	W	2:00-5:00 PM
HLTH 1000	TTh	2:00-3:00 PM
COAD 1000	TTh	9:30-10:30 PM
Recommended additional courses to complete the schedule:		
MATH 0001/0045 or 2127		
HIST 1030 or 1050		
EXSS 1000		

Construction Management/Industrial Technology - Cohort #1

	Monday	Tuesday	Wednesday	Thursday	Friday
0800 - 0900		ECON 2113		ECON 2113	
0900 - 1000	PSYC 1000	ITEC 2000	PSYC 1000	ITEC 2000	PSYC 1000
1000 - 1100	CMGT 2660		CMGT 2660		
1100 - 1200	ENGL 1100		ENGL 1100		ENGL 1100
1200 - 1300					
1300 - 1400					
1400 - 1500			CMGT 2661		
1500 - 1600					
1600 - 1700					
1830 - 2130					

CMGT 2660	MW	10:00-10:50 AM
CMGT 2661	W	2:00-4:00 PM
PSYC 1000	MWF	9:00- 10:00 AM
ENGL 1100	MWF	11:00-12:00 PM
ITEC 2000	TTh	9:30-11:30 AM
ECON 2113	TTh	8:00- 9:15 AM

Recommended additional courses to complete the schedule:
 MATH 0001/0045 or 1065
 CMGT 2664
 PHIL 1100

Business Management - Cohort #1

	Monday	Tuesday	Wednesday	Thursday	Friday
0800 - 0900					
0900 - 1000					
1000 - 1100	ENGL 1100		ENGL 1100		ENGL 1100
1100 - 1200	ECON 2113		ECON 2113		ECON 2113
1200 - 1300					
1300 - 1400	PSYC 1000		PSYC 1000		PSYC 1000
1400 - 1500					
1500 - 1600					
1600 - 1700					
1830 - 2130					

ENGL 1100	MWF	10:00-11:00 AM
ECON 2113	MWF	11:00-12:00 PM
PSYC 1000	MWF	1:00- 2:00 PM

Recommended additional courses to complete the schedule:
 MATH 0001/0045 or 1065

Business Management - Cohort #2

	Monday	Tuesday	Wednesday	Thursday	Friday
0800 - 0900					
0900 - 1000		ENGL 1100		ENGL 1100	
1000 - 1100					
1100 - 1200		ECON 2113		ECON 2113	
1200 - 1300					
1300 - 1400					
1400 - 1500		PSYC 1000		PSYC 1000	
1500 - 1600					
1600 - 1700					
1830 - 2130					

ENGL 1100	TTh	9:30-10:45AM
ECON 2113	TTh	11:00-12:15 PM
PSYC 1000	TTh	2:00- 3:15 PM

Recommended additional courses to complete the schedule:
 MATH 0001/0045 or 1065

Undecided - Cohort #1

	Monday	Tuesday	Wednesday	Thursday	Friday
0800 - 0900					
0900 - 1000	ENGL 1100		ENGL 1100		ENGL 1100
1000 - 1100	POLS 1010		POLS 1010		POLS 1010
1100 - 1200	BIOL 1050		BIOL 1050		BIOL 1050
1200 - 1300					
1300 - 1400					
1400 - 1500	BIOL 1051				
1500 - 1600					
1600 - 1700					
1830 - 2130					

ENGL 1100	MWF	9:00-10:00AM
POLS 1010	MWF	10:00-11:00 AM
BIOL 1050	MWF	11:00- 12:00 PM
BIOL 1051	M	2:00-5:00 PM
Recommended additional courses to complete the schedule:		
MATH 0001/0045 or 1065		
HLTH 1000		

Undecided - Cohort #2

	Monday	Tuesday	Wednesday	Thursday	Friday
0800 - 0900					
0900 - 1000					
1000 - 1100		ANTH 1000		ANTH 1000	
1100 - 1200		COAD 1000		COAD 1000	
1200 - 1300					
1300 - 1400		ENGL 1100		ENGL 1100	
1400 - 1500					
1500 - 1600					
1600 - 1700					
1830 - 2130					

ENGL 1100	TTh	12:30- 1:45 PM
ANTH 1000	TTh	9:30-10:45 AM
COAD 1000	TTh	11:00-12:00 PM
Recommended additional courses to complete the schedule:		
MATH 0001/0045 or 1065		

Undecided - Cohort #3

	Monday	Tuesday	Wednesday	Thursday	Friday
0800 - 0900					
0900 - 1000	ENGL 1100		ENGL 1100		ENGL 1100
1000 - 1100					
1100 - 1200	PHIL 1110		PHIL 1110		PHIL 1110
1200 - 1300					
1300 - 1400					
1400 - 1500	HLTH 1000		HLTH 1000		
1500 - 1600					
1600 - 1700					
1830 - 2130					

ENGL 1100	MWF	9:00-10:00AM
PHIL 1110	MWF	11:00-12:00 PM
HLTH 1000	MW	2:00- 2:50 PM
Recommended additional courses to complete the schedule: MATH 0001/0045 or 1065		

Undecided - Cohort #4

	Monday	Tuesday	Wednesday	Thursday	Friday
0800 - 0900					
0900 - 1000					
1000 - 1100		BIOL 1050		BIOL 1050	
1100 - 1200		COAD 1000		COAD 1000	
1200 - 1300					
1300 - 1400		ENGL 1100		ENGL 1100	
1400 - 1500		SOCI 2110	BIOL 1051	SOCI 2110	
1500 - 1600					
1600 - 1700					
1830 - 2130					

ENGL 1100	TTh	12:30-1:45 PM
SOCI 2110	TTh	2:00-3:15 PM
COAD 1000	TTh	11:00- 12:00 PM
BIOL 1050	TTh	9:30-10:45 AM
BIOL 1051	W	2:00-5:00 PM
Recommended additional courses to complete the schedule: MATH 0001/0045 or 1065		

Biology - Cohort #1

	Monday	Tuesday	Wednesday	Thursday	Friday
0800 - 0900	BIOL 1100		BIOL 1100		BIOL 1100
0900 - 1000		ENGL 1100		ENGL 1100	
1000 - 1100	CHEM 1150		CHEM 1150		CHEM 1150
1100 - 1200	MATH 1065		MATH 1065		MATH 1065
1200 - 1300					
1300 - 1400					
1400 - 1500		CHEM 1151		BIOL 1101	
1500 - 1600					
1600 - 1700					
1830 - 2130					

ENGL 1100	TTh	9:30-10:45 AM
BIOL 1100	MWF	8:00-9:00 AM
BIOL 1101	Th	2:00-5:00 PM
CHEM 1150	MWF	10:00-11:00 AM
CHEM 1151	T	2:00-5:00 PM
MATH 1065	MWF	11:00-12:00 N

Recommended additional courses to complete the schedule:

Biology - Cohort #2

	Monday	Tuesday	Wednesday	Thursday	Friday
0800 - 0900	BIOL 1100		BIOL 1100		BIOL 1100
0900 - 1000		ENGL 1100		ENGL 1100	
1000 - 1100	CHEM 1150		CHEM 1150		CHEM 1150
1100 - 1200	MATH 1065		MATH 1065		MATH 1065
1200 - 1300					
1300 - 1400					
1400 - 1500		BIOL 1101		CHEM 1151	
1500 - 1600					
1600 - 1700					
1830 - 2130					

ENGL 1100	TTh	9:30-10:45 AM
BIOL 1100	MWF	8:00-9:00 AM
BIOL 1101	T	2:00-5:00 PM
CHEM 1150	MWF	10:00-11:00 AM
CHEM 1151	Th	2:00-5:00 PM
MATH 1065	MWF	11:00-12:00 N

Recommended additional courses to complete the schedule: