

**Educational Policy Committee's Final 1993-4 Report
May Faculty Meeting**

Submitted by: Faculty: Chris Abelt, Jesse Bohl, Maryann Brink, John Drew, Mark Fowler (chair), Colleen Kennedy, Anne Henderson, Hans Tiefel, and Eugene Tracy. **Ex-officio Members:** David Lutzer, Heather Macdonald, Nancy Marshall, William Savely, Ronald Wheeler, William Geary, and Bruce Nielsen. **Students:** Sam Ozeck, Bridget Pool, and Jon Trinidad.

This report consists of four sections: 1) EPC motion for Faculty approval of curricular changes recommended by EPC in Spring 1994; 2) EPC May Progress Report on the New Curriculum Implementation; 3) EPC Implementation Motion on Freshman Seminars; and 4) EPC motion on the Computing Proficiency Requirement.

I EPC moves that the Faculty approve the Curricular Changes listed below:

A) New Courses:

Anthrology 415- Practicing Cultural Resources Management- 3 credits

Biology 209L- Insect Biology Laboratory (Lab for Bio 207), 1 credit

Classical Studies- Hebrew 201- 3 credits

Classical Studies- Hebrew 202- 3 credits

Computer Science 142- C++ for Pascal Programmers- 1 credit

Computer Science 434- Network Systems and Design- 3 credits

Computer Science 440- The Computing Profession and Society- 3 credits

Kinesiology 332L- Lab for Principles of Motor Learning- 0 credits

Modern Languages:

Russian 150- Freshman Seminar (Introduction to Russian Civilization)- 4 credits, W

Spanish 417- Hispanic Cinema- 3 credits

Religion 202- Introduction to Biblical Studies-- 4 credits

Religion 355- Torah- 3 credits

Religion 358- The Synoptic Gospels- 3 credits

Speech 202- Fundamentals of Oral Communication- 2 credits

B) Changes in Existing Courses:

Art History 150W- Freshman Seminar- for 4 credits, change of title and number, formerly FA 150W

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Art History 489- Topics in Art History- change of title and number, formerly Fine Art 460
 Biology 402- Microbiology- change of prerequisites to Bio 203, 204, or consent of instructor
 Biology 443- Molecular Genetics Laboratory-- for 1 credit, change of credits from 2 to 1
 Computer Science 151- Data Structures- change of number and revised content, formerly CS 301
 Computer Science 431- Artificial Intelligence- change of number and revised content, formerly CS 451
 Computer Science 313- Analysis of Algorithms- change of number, title and prerequisites, now requiring CS 151 and 240, formerly CS 433
 Economics 484- - change of number, formerly 483
 English 465 (Special Topics in English) cross-listed with Theatre 460 (Shakespeare on Stage)- for 3 credits
 English 475- Concentration Seminar- for 4 credits, change of title, content, A/S designation, and credits from 3 to 4
 English 494- Junior Honors Seminar- change of content and credits from 3 to 4
 Mathematics 111- Calculus- change to 3 hrs lecture, one hr computational lab
 Mathematics 112- Calculus- change to 3 hrs lecture, one hr computational lab
 Religion 203- change of number, formerly Religion 301
 Religion 204- change of number, formerly Religion 302
 Theatre 325- Survey of Theatre History from 500 B.C. to 1630 A.D.- change of title and content
 Theatre 326- Survey of Theatre History from 1630 to 1880- change of title and content
 Theatre 327- Survey of Theatre in the Twentieth Century- change of title and content

C) Changes in Concentration and Minor Requirements:

Biology Concentration Lab Requirements: students must complete laboratory work in at least three courses numbered 300 or above, or two such laboratory courses plus Biology 403 or 495-496.

Computer Science Concentration Requirements: A concentration in Computer Science requires 37 credits chosen from Computer Science courses. (For the purposes of satisfying concentration requirements, Math 413 and 414 may be counted along with Computer Science courses.) These 37 hours must include:

1. Computer Science 141, 151, 240, 304, 312, 313, and 423;
2. any 15 credits chosen from 300-400 level Computer Science courses excluding Computer Science 430 and 498. Math 413 and Math 414 count toward partial

fulfilment of this requirement.

Proficiency in Mathematics 111, 112, and 211 is also required for a concentration in Computer Science.

Math 214 can be substituted for CS 240 to satisfy 1 above. If this substitution is made, Math 214 will serve in place of CS 240 wherever the latter is specified as a prerequisite.

Math 401 can serve in place of CS 424 wherever the latter is specified as a prerequisite. Note however that Computer Science concentrators are strongly urged to use CS 424 instead of Math 401 and that Math 401 may not be used to satisfy 2 above.

Computer Science Requirements for a Minor: Computer Science requires 19 credits. These 19 credits must include Computer Science 141, 151, and 240, and any 9 credits chosen from 300-400 level Computer Science courses excluding Computer Science 430 and 498. Math 413 and 414 count toward partial fulfilment of the requirement for 9 elective credits. Math 214 can be substituted for CS 240 in satisfying the minor requirement. If mathematics courses are counted toward fulfilling the 19 credit requirement, at least 13 of the 19 hours must be taken within the Computer Science Department.

Economics Concentration Requirements: The number of credits in the concentration is reduced from a minimum of 31 to a minimum of 30. Econ 390 is no longer required.

Religion Concentration Requirements: A concentration in Religion requires 30 credit hours in the Department which must include the following distribution: 2 courses from the Abrahamic faiths (210, 300, 303); 1 course in Biblical studies; 1 course in Eastern Religions (311, 312, 313); any upper-level seminar (courses bearing only S designation); and two upper level courses (courses bearing only S designation).

D) Changes in Concentration Writing Requirements:

Computer Science: The Concentration Writing Requirement can be satisfied by successful completion of Computer Science 423W (in conjunction with enrollment in Computer Science 423) or Computer Science 440W (in conjunction with enrollment in Computer Science 440) or Computer Science 313W (in conjunction with enrollment in Computer Science 313) or by fulfilling the requirements of Computer Science 495-496, Honors project in Computer Science.

Economics: The concentration writing requirement can be satisfied either by successfully completing Economics 390 or by successfully completing an upper-level economics seminar (Econ 300, 355, 400, or 474), independent study (Econ 490), or honors project (Econ 495-496)

Religion: The concentration requirement in Religion can be fulfilled by passing any one of the following courses with a C- grade or better: 305, 308, 322, 330, 333, 335, 337, 339, 341, 355, 358, 365, 403, 404, 414, 481, 482, 490, 495/496.

II Third EPC Progress Report on New Curriculum Implementation

Action in Spring 1994: (There are a total of six sections to the New Curriculum Motion. Please recall that sections 1 and 5 of the New Curriculum Motion were implemented in Fall 1993.)

1) **Freshman Seminars:** a) faculty approval of EPC motion to split Section 3 of the New Curriculum Motion to allow Freshman Seminars to be implemented separately from the Upper Level Learning Experience; b) Faculty approval of the EPC motion on criteria for writing, reading, and discussion intensity for Section 3; c) faculty approval of EPC motion permitting Freshman Seminars to be taught for 3 as well as 4 credits; and d) perhaps faculty approval of EPC motion to implement Freshman Seminars for Fall 1994 (motion to be voted on in May).

2) **Computing Proficiency Requirement:** perhaps faculty approval of EPC motion on section 6 of the New Curriculum Motion; this EPC motion defined criteria for computing proficiency (motion to be voted on in May).

3) **GER criteria:** faculty approval of EPC motion on Section 2 of the New Curriculum Motion; this EPC motion specified application criteria for each of the seven GER's. A call from EPC for GER course proposals.

4) **GER Assessment:** faculty approval of EPC motion to postpone until Fall 1994 the presentation to the Faculty of the joint recommendation by the EPC and Assessment Steering Committee on procedures for assessing GER courses.

Remaining Items for Action in 1994-5 and Beyond:

1) Implementation motion(s) for the seven GER's.

2) The EPC-Assessment Steering Committee joint recommendation on assessing the GER's.

3) EPC motion on Section 4 of the New Curriculum Motion which pertains to Pass/No Pass vs. Pass/Fail courses.

- 4) Implementation motion on the Upper Level Learning Experience
- 5) Report and proposed recommendations to the Faculty on the use of Teaching Assistants for instructing undergraduates.

III EPC (Slightly Amended) Implementation Motion on Freshman Seminars: Please recall that the Faculty has voted to split the original Section 3 of the New Curriculum Motion, so that now the Freshman Seminar requirement can be implemented independently of the Upper Level Learning Experience requirement; EPC is not proposing that the latter requirement be implemented.

This proposal was first introduced as a topic for Faculty comment and advise at the April 19 Faculty meeting. In response to Faculty comment it has been amended as indicated below.

Faculty comment: Five Faculty comments were made:

First: under the original New Curriculum Motion only the GER's are subject to built-in periodic assessment. It was asked whether Freshman Seminars could be placed under the same ongoing assessment project, and whether this could be done this Spring so that EPC and the Assessment Steering Committee could begin working on an appropriate instrument for it over the Summer?

Second: should the new requirement read to apply only to 'entering freshman' in Fall 1994, rather than to all freshmen in Fall 1994?

Third: in the original implementation proposal, B(3) read "students must complete their freshman seminar requirement by the end of their first year at the College...". This suggests that students failing to satisfy the Freshman Seminar requirement in their first year will not be allowed to graduate. Was the suggestion intentional?

Fourth: Should we strive to keep Freshman Seminars exclusively for freshman? Having Juniors, Seniors, or even Sophomores in them can prevent a teacher from simultaneously involving all students equally and preserving the introductory level of the seminar.

And fifth: The original proposal is unclear as to how the Freshman Seminar requirement affects transfer students. More specifically, are students under this requirement who transfer in after having completed a year or more of college at another institution?

EPC Response:

Regarding the first comment, we had originally planned to propose making Freshman Seminars part of the assessment project in the Fall but see the advantages of having the Faculty approve of this proposal now. Accordingly, section C(3) has been added below.

Regarding the second comment, the answer is yes and the original proposal has been appropriately revised.

As for the third comment: the suggestion was unintentional and

we thank you for bringing it to our attention. B(3) has been appropriately revised.

As for the fourth comment: we agree that normally freshman seminars should be for freshmen. This is why we stipulate that freshman are expected to satisfy the freshman seminar requirement in their first year; why we have given freshmen priority for Spring Freshman Seminars if they did not take one in the Fall, etc. Having said this, however, two further points should be made: First, obviously we must accommodate sophomores who did not satisfy the requirement in their first year despite our 'incentives'. Second, there may be some Freshmen Seminars where having non-freshman would not be detrimental. The seminars on film, for example, seem to be a case in point, since students at all levels are usually 'beginners' in this field. Accordingly, it has been our policy to permit departments and individual instructors to decide whether a particular seminar belongs in this group. We ask, though, that they refrain from enrolling non-freshmen until during the Add/Drop period and that first year students have had every chance to enter the seminar.

Finally, the fifth comment: We understand this requirement as applying to the William and Mary student during her/his first year of college experience. Accordingly, if incoming students have already completed enough college work elsewhere to be classified as sophomores or above at William and Mary, and they have completed this work as college students, they will not be held to this requirement. On the other hand, incoming students classified as above the freshmen level because of AP credit or other work done while they were in High School (including any work done in college classes while they attended High School), will be held to it. Section B(4) below has been added to clarify this point.

EPC Implementation Motion: EPC certifies that the resources are now available to implement the Freshman Seminar graduation requirement, and moves that the Faculty approve it as a graduation requirement for all entering freshman as of Fall 1994.

This certification is based upon three factors: A) verification of adequate resources to implement Freshman Seminars; B) a logistic plan for implementing Freshman Seminars; and C) a plan for Freshman Seminar accreditation. All three are spelled out below:

A) Adequate Resources:

Departments, program directors, and deans have committed to "minimum or base departmental commitments" that total 91 freshman seminars per year. At 15 seats per seminar, this would give us a minimum of 1,365 seats. This is a conservative number because it reflects 26 stable long-term promises. For example, the actual number of seminars next year will be at least 100, resulting in 1,500 seats. In addition, since these commitments are made by a total of 26 departments, programs, and schools, our students will have a wide diversity of seminars from which to chose. Finally, we

will have considerable flexibility to adjust supply to demand because several departments have expressed a willingness and ability to offer more seminars in exchange for adjunct-level replacement funding.

B) The Logistics of the Requirement:

Randy Coleman has formulated the following plan for handling the logistics of implementation.

1. When first-year students enroll for Fall classes, they will be asked to list six seminars in order of preference. These choices must cover at least three subject fields, and no more than 3 can be selected from the same department or program. The Advising Office will register as many students as possible. A second mailing in July will be sent to students who have not been successfully placed. This will include a listing of seminars with openings and a second request form.

2. First-year students who do not complete the requirement during the first term will be given enrollment priority in the Spring.

3. The catalog and advising materials will emphasize that "students are expected to complete their freshman seminar requirement by the end of their first year at the College, and students may not declare their concentration before this requirement is completed." This latter stipulation should provide students with a modest and timely incentive to satisfy the requirement during their first year at the College.

4. The catalog and advising materials will also emphasize that
 a) incoming students having sophomore status or above due to AP credit or college courses taken before High School graduation will be subject to the Freshman Seminar requirement; but
 b) incoming transfer students classified at William and Mary as being sophomores or above due to college work done after High School graduation will not be subject to the Freshman Seminar requirement.

C) Seminar Accreditation:

All freshman seminars must meet guidelines that have been established by the EPC for reading-, writing- and discussion-intensity. The seminar accreditation process will work as follows.

1. In late Spring, 1994 the EPC will promulgate a statement to department chairs and Fall, 1994 and Spring, 1995 seminar instructors outlining the broad objectives of the freshman seminar program, as well as the specific operationalized guidelines passed by the faculty. Faculty members who self-identify their 1994-5 seminars as either currently meeting these guidelines, or as capable of meeting them after some redesign that can be accomplished before they are taught, need do nothing; their seminars will automatically meet the requirement. Faculty members who self-identify their 1994-1995 seminars as apparently not meeting the guidelines may submit proposals to EPC showing how their courses meet the spirit, if not the exact letter, of the guidelines. (The deadline for submitting such proposals is May 4.)

EPC will consider these on a case by case basis. Seminars that do not meet the guidelines and do not receive EPC approval will not meet the requirement. All other 1994-1995 freshman seminars will be certified on a one time basis as meeting the freshman seminar requirement.

[Note that 42 of the 50 seminars scheduled for the Fall are already credentialed for "W" credit, which is significantly more stringent than the 5,000-word writing requirement. Moreover, information that we have gathered from a survey of Fall, 1994 seminar instructors indicates that perhaps only two or three seminars do not at present meet the guidelines.] nt

2. Early in the Spring, 1995 term departments (not individual instructors) will be asked to certify that all of their freshman seminars thereafter will meet the guidelines specified by the faculty.

3. If the Faculty approves this Freshman Seminar implementation motion, assessing Freshman Seminars will become part of the periodic assessment process already applying to the GER's. Thus in Fall 1994 EPC and the Assessment Steering Committee will make a joint recommendation on how to carry out this assessment project which will include a proposal on the timing of and instrument for assessing Freshman Seminars.

IV EPC (Amended) Motion on a Definition and Criterion for the Computing Proficiency Requirement: Section 6 of the New Curriculum Motion stipulates computing proficiency as a general education requirement. The EPC motion below stipulates a definition of 'computing proficiency' and a criterion for evaluating proposals for satisfying the Computing Proficiency Requirement. At the April Faculty Meeting EPC proposed an earlier version of this motion as a topic for Faculty comment and advice.

Faculty comment: Some faculty members suggested that our definition of 'computing proficiency' was too strong. The definition stipulates that students must learn to do concentration-relative things with computers which would otherwise be "impractical, if not impossible". In some concentrations, it was argued, there may be no activity satisfying that description. Perhaps students can do things more quickly with than without computers; but nothing appropriate to the concentration would be impractical or impossible without computers. "Are we going to be required to arbitrarily require that concentrators learn to program computers or something? ...If there is to be the possibility for a department to say that all the computing skills that are required are those involved in word processing, that should be clear."

EPC Response: The Computing Proficiency Requirement is a concentration- relative requirement, and conceivably certain

concentrations can at present justify requiring no more than word processing at this time. We expect such concentrations to be few in number and that over time the use of more advanced computing skills will become increasingly widespread in virtually all fields. Nonetheless, we have amended our original proposal to make it clear that we allow for the possibility of such concentrations. (See especially the "Elaboration of Definition and Criteria" below.)

Statement of Computing Proficiency Requirement in Section 6:

Computing: Students must satisfy a Concentration Computing Requirement established by each department, program, or school and approved by the EPC. The purpose of the requirement is to ensure that all students have mastered the advanced computing skills appropriate to their respective disciplines. Students will be required to demonstrate proficiency in:

1. computer programming, or
2. the computer-aided composition of original, creative material (including mathematical or simulation models, music or other works of art, or significant experimental studies), or
3. the use of a computer to retrieve, process, and analyze numeric or non-numeric information.

Concentrations may designate certain departmental courses and/or courses in other departments (such as Computer Science) as satisfying the requirement. (Section III.B.4, page 9, of the Final Report - 4/15/93)

EPC Motion: EPC proposes that the Faculty adopt the following (A) Definition of "Computing Skills Appropriate to the Discipline" for the Computing Proficiency Requirement and the following (B) Criterion for Evaluating Proposals for Satisfying the Computing Proficiency Requirement:

A) Definition of "Computing Skills Appropriate to the Discipline": Students must demonstrate appropriate proficiency in at least one of the following categories:

1. computer programming, or
2. the computer-aided composition of original, creative material (including mathematical or simulation models, music or other works of art, or significant experimental studies), or
3. the use of a computer to retrieve, process, and analyze numeric or non-numeric information.

Normally students have demonstrated the computing proficiency appropriate to their disciplines when a) they have mastered the advanced computing skills in category 1, 2, or 3 which are

reasonable to expect of undergraduates in their field, and b) they have taken a discipline-specific course or acquired cumulative experience in which a computer is regularly used to do things that would otherwise be impractical, if not impossible.

B) Criterion for Evaluating Computing Proficiency Proposals: The adequacy of department/program proposals for satisfying the Computing Proficiency Requirement will be evaluated in terms of whether under those proposals students will attain the level of computing proficiency defined in (A).

Elaboration of Definition and Criterion:

The proposed definition in (A) emphasizes that, while the computing skills required are always defined relative to specific concentrations, those skills must satisfy a general standard of appropriateness: To be appropriate, the skills must be 'advanced' enough to be a genuine enhancement of students' capacity to work with the degree of competency and creativity it would be reasonable to expect of people at their level in their chosen disciplines. In most cases without these skills it would be impractical or even impossible for students to perform with that degree of competency and creativity. On the other hand, the appropriate computing skills must not be so difficult to acquire as to create unreasonable expectations of students in a given concentration. Moreover, it is understood that department/programs are not to inflate artificially their computing proficiency requirements where there are demonstrably no computing skills appropriate to their concentrations beyond word processing, data retrieval, etc.

The proposed criterion for department/program proposal evaluation in (B) should accommodate the wide variations between and within concentrations, the evolving nature of computer technology, and the changing nature of computing resources available to faculty and students on our campus. Departments and programs sponsoring concentrations will propose to EPC the manner in which concentrators would satisfy the Computing Proficiency Requirement. Concentrations will vary in their approach. For example: (a) some may develop one or more required courses, (b) some may develop cumulative experiences across several courses, (c) some may use course offerings from other departments such as Computer Science (e.g, CSCI 131 or 141), d) some may use the 1-Credit Computer Science Laboratory course discussed below under "Resources and Implementation", coupled with additional discipline-specific experiences which use or build on the basic skills in computing. Changes in virtually all disciplines are rapidly necessitating the acquisition of more advanced computing skills. Therefore all concentrations are strongly encouraged to review periodically developments in the use of computing in their concentrations and to revise their concentration Computing Proficiency Requirement as needed.

Resources and Implementation

Beginning in the fall semester of 1995, the Computer Science Department will do one of the following: 1) Partition the existing CSCI 131, a 3 credit hour course into a 1 credit-hour stand-alone laboratory course and a 2 credit hour lecture/discussion course. (The 2 credit hour course will require concurrent registration in the 1 credit hour laboratory course and, therefore, will be essentially equivalent to the current CSCI 131.) 2) Leave CSCI 131 as it is and create one or more 1-credit stand alone laboratory courses. Some concentrations may want to make this 1 credit laboratory course an option for satisfying part of their Computing Proficiency Requirement for their concentrators admitted under the 1995-96 catalog. They may also utilize examinations because the Computer Science Department will administer a computing proficiency examination (no credit awarded) to certify that students have the computing skills contained in the 1 credit-hour laboratory course.

The Computer Science Department has considerable experience that relates directly to the implementation of the laboratory course option. For many years, as part of CSCI 131, the department has organized and taught a 1-credit-hour-equivalent laboratory to hundreds of students each semester. The existing CSCI 131 currently serves approximately 700 students a year. Another 200 or so students take CSCI 141 each year -- a course which some departments, for example Math, might use to satisfy the Computing Proficiency Requirement. The point is that approximately 900 students already take CSCI 131 and/or 141 each year.

For the long term it is difficult to predict how the Computing Proficiency Requirement will affect staffing and resources because the requirement is discipline-specific. With respect to the proposed creation of a 1 credit laboratory course, a large percentage of students currently take CSCI 131 and an increasing percentage of matriculating students should be able to succeed on the common computing skills proficiency examination. In addition, because it will be possible for students to complete the 1 credit hour laboratory portion of CSCI 131 only (instead of the current 3 credit hour CSCI 131), it is likely that the overall resources currently devoted to staffing the 3 credit CSCI 131 course will be reduced (i.e, less lecture sections will be necessary).

Because the class admitted under the 1995-96 catalog will probably be the first required to meet the Computing Proficiency Requirement, full implementation may not occur until those students become upper division students in 1997-98. Because of wide variations in practices related to computing between concentrations, however, the subcommittee hopes that many departments will move much more quickly to phase in and enhance the concentration Computing Proficiency Requirement.

The first part of the document discusses the importance of maintaining accurate records of all transactions. It emphasizes that proper record-keeping is essential for the smooth operation of any business and for the protection of its interests. The text outlines various methods for organizing and storing these records, including the use of ledgers, journals, and other accounting systems. It also stresses the need for regular audits and reviews to ensure the accuracy and integrity of the data.

The second part of the document focuses on the financial aspects of the business, including the preparation of financial statements and the management of cash flow. It provides detailed instructions on how to calculate and report on key financial metrics such as profit, loss, and net worth. The text also discusses the importance of budgeting and forecasting to help the business plan for the future and avoid financial difficulties.

The third part of the document addresses the legal and regulatory requirements that businesses must comply with. It covers topics such as tax laws, labor regulations, and industry-specific rules. The text provides a comprehensive overview of these requirements and offers practical advice on how to navigate them successfully. It also highlights the importance of staying up-to-date on changes in the law and seeking professional advice when necessary.

The final part of the document discusses the importance of marketing and sales in the success of a business. It outlines various marketing strategies and techniques, including advertising, public relations, and direct marketing. The text also provides insights into the sales process, from identifying potential customers to closing deals and providing excellent customer service. It concludes by emphasizing the need for a strong marketing and sales plan to drive the growth and profitability of the business.