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**ABSTRACT**

An overview is provided of the development of Bergen Community College's (BCC) general education curriculum between 1982 and 1987. First, introductory comments review the state regulations implemented in 1983 to govern general education at all New Jersey community colleges. Next, the paper explains the original charge and final recommendations of BCC's Committee on General Education. These recommendations resulted in the revision of all BCC degree and certificate programs in accordance with a new system of general education requirements. After contrasting general education at BCC before and after 1983, the paper discusses the organization of the current program within five categories: communications, humanities, social sciences, natural sciences and mathematics, and health and physical education. Next, the paper explains that the committee originally recommended the development of five core courses to fulfill general education requirements in these areas, but when confronted with strong faculty opposition to the core course plan, they developed a list of existing courses that could be taken to meet the requirements instead. After presenting this list, the paper summarizes the major changes that have taken place in the general education program in the past five years. The next sections consider the effects of the curricular changes on enrollment and registration patterns. Finally, unresolved problems and concerns are identified. (EJV)

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GENERAL EDUCATION REFORM IN THE NEW JERSEY COMMUNITY COLLEGES:  
THE BERGEN COMMUNITY COLLEGE EXPERIENCE, 1982-1987

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Princeton University

Mid-Career Fellowship Program

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GENERAL EDUCATION REFORM IN THE NEW JERSEY COMMUNITY COLLEGES:  
THE BERGEN COMMUNITY COLLEGE EXPERIENCE, 1982-1987

In the spring of 1983, following several years of statewide discussion of the nature, content, and value of general education, the New Jersey Board of Higher Education effected a revision of the state regulations governing general education requirements at all New Jersey community colleges. The revised regulations require that all students in associate degree programs take a "broad distribution of courses" in communications (English composition and speech), mathematics and the natural sciences, the social sciences (anthropology, economics, geography, political science, psychology, sociology), and the humanities (fine arts, foreign languages, history, literature, philosophy, religion). Students in associate in arts (AA) degree programs must take not less than 45 credits of general education; those in associate in science (AS) degree programs must take a

minimum of 30 credits of general education; and those pursuing the associate in applied science (AAS) degree must take at least 20 credits of general education. The state regulations also require that all one-year certificate programs "shall include at least 6, preferably 9, semester credit hours of general education, with at least one communications course." In addition, the regulations state that "theoretically based physical education courses may be counted as general education if they are a requirement of the college [emphasis added]." Finally, the new state regulations require all New Jersey community colleges to review and, if necessary, revise their programs of general education so as to render them consistent with the mandates of the Board of Higher Education and to implement all necessary changes in such programs as of the fall semester of 1984 (although the deadline for implementation has now been changed to the fall of 1985). (See NJ Administrative Code, 9:4-1.6.) The Board had promulgated a similar set of revised regulations on general education and degree standards in the state four-year colleges in 1980 (see NJ Administrative Code, 9:2-8.2 through 9:2-8.4).

For a number of years prior to the issuing of the new state regulations on general education in the New Jersey community colleges, the faculty and administration of Bergen Community College (BCC) had been studying and discussing ways in which the college's general education program might be restructured. In the summer of 1982, and in anticipation of the changes that would

be required by the (then impending) state action described above, Dr. Jose Lopez-Isa, president of the college, created the BCC Committee on General Education. President Lopez-Isa charged the Committee to conduct a careful study of current general education programs at BCC and at other institutions of higher learning, to formulate a coherent rationale for general education, and to develop a set of proposals aimed at improving the college's general education programs and at bringing them into conformity with the revised regulations then under consideration by the New Jersey Board of Higher Education. On the basis of a college-wide process of discussion, debate, research, and thought covering a seven-month period, the Committee issued, on May 11, 1983, a 140-page report on General Education at Bergen Community College (Paramus, New Jersey: Bergen Community College, 1983).

The report of the Committee on General Education was used as the basis of a thoroughgoing reconstruction of the college's curricular structures, a reconstruction that was worked out in detail by the executive committees of the College-Wide Curriculum Committee and of the Faculty Senate. By the end of July 1983, all BCC degree and certificate programs had been revised in accordance with a new system of general education requirements that had been approved by the Curriculum Committee, the Faculty Senate, and the president of the college. Most of these changes were implemented as of the fall 1983 semester (one year ahead of the initially-announced state deadline), but a few of the curricular revisions were not implemented until the fall of 1984.

The new curriculum requirements (outlined below, pp. 9-22) are binding on students entering the college as of the fall of 1983; students enrolled prior to that time may choose to follow the new requirement system if they wish to do so.

GENERAL EDUCATION AT BCC PRIOR TO 1983

General education requirements at BCC had remained virtually unaltered from 1968 to 1983. Prior to the curriculum reform that took effect in the fall of 1983, the college's associate in arts (AA) and associate in science (AS) degree (transfer) programs were structured as follows:

<u>General Education Requirements</u>	<u>AA</u>	<u>AS</u>
English Composition	6	6
English Electives (mostly literature)	6	6
Speech Communication	3	3
Modern Language	6-8	6-8
History	6	6
Music or Art Appreciation	3	3
Mathematics	6	8
Laboratory Science	6-8	8
Physical Education	<u>4</u>	<u>4</u>
	46-50	50-52
Free Electives and/or "Major" Requirements	<u>14-18</u> <u>64-66</u>	<u>12-14</u> <u>64-66</u>

Thus, while students pursuing the AA or AS degree\* were required to take 9 credits in communications (English composition and speech), 21-23 credits in the humanities (literature, foreign languages, history, and fine arts), 12-16 credits in mathematics and natural sciences, and 4 credits in physical education, they were not required to take courses in the social sciences, as required by the new state regulations on general education in the community colleges. The committee on general education also found that the omission of philosophy and religious studies from the "humanities" component of the general education program was a deficiency which should be remedied.

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\*Prior to the full implementation of the BCC general education reform in the fall of 1984, students in the college's AA degree program were offered "optional areas of concentration" in Art; Behavioral Science; Broadcasting; Business Administration; Communication Arts; Education; Health and Physical Education; Humanities; Labor Studies; Law, Justice, and Society; Leisure and Recreation; Music; Public Administration; Social Science; Theatre; and Women's Studies. AS degree options were offered in General Science; Biology; Chemistry; Computer Science; Engineering Science; Mathematics; and Physics. As a result of the general education reform of 1982-4, the college's list of AA and AS degree options has been altered (see below, pp. 8).

Pre-1983 associate in applied science (AAS) degree programs required students to take a total of 64-72 credits for graduation. To fulfill their general education requirements, students in such programs were required to take at least 20 credits in the liberal arts and sciences: 6 credits in English composition, 3 credits in either art or music appreciation, 4 credits in physical education, and at least 7 credits in some combination (prescribed in each AAS curriculum) of communications, humanities, social science, mathematics, or laboratory science courses. In addition to this general education requirement, students pursuing the AAS degree were required to take between 44 and 52 credits (relative to the program requirements in each AAS curriculum) in a major field of study (e.g. nursing, business computer programming, commercial art).\* Some AAS degree programs did not require students to take courses in mathematics and/or in the natural sciences; and others did not require work in the social sciences and/or in the humanities.

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\*The number of AAS degree programs offered at BCC was not changed significantly as a result of the general education reform of 1982-4. A list of current AAS programs is included in the table on p. 8, below.



Prior to 1983, there was no state requirement that certificate programs contain a general education component, and the only such requirement in BCC certificate programs at that time was a 3-credit requirement in English composition.\*

### GENERAL EDUCATION AT BCC SINCE 1983

#### Degree and Certificate Programs

As a result of the curriculum reform of 1982-4, BCC associate in arts (AA) and associate in science (AS) degree programs have been significantly restructured. The college now offers a two-track AA degree program and a three-track AS degree program, encompassing a total of thirty "optional areas of concentration" in the liberal arts and sciences. In addition to these AA and AS degree programs, the college also offers twenty-seven associate in applied science (AAS) degree programs and twelve certificate programs. The college's degree and certificate programs are listed in the table on the following page. (Specific descriptions of all degree and certificate programs are listed in the Bergen Community College Academic Bulletin.)

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\*The number of certificate programs offered at BCC was not changed significantly as a result of the general education reform of 1982-4. A list of current certificate programs is included in the table on p. 8, below.

# Programs by Degree

The academic programs at Bergen Community College are classified as transfer or career.

**TRANSFER PROGRAMS** include general education courses which correspond to the freshman and sophomore offerings at most colleges and universities. Students who transfer to a four year college in New Jersey will receive credit for their studies at Bergen

## TRANSFER PROGRAMS

**Associate in Arts Degree**  
Options:

General Curriculum (Liberal Arts)  
Communication Arts  
Economics  
Foreign Language  
History  
Leisure and Recreation  
Literature  
Philosophy & Religion  
Political Science  
Psychology  
Sociology  
Women's Studies

**Associate in Arts Degree**  
Options:

Art  
Music  
Theatre Arts—Acting

**Associate in Science Degree**

Options in Natural Sciences and Mathematics:

General Curriculum (Natural Sciences & Mathematics)  
Biology  
Chemistry  
Computer Science  
Mathematics  
Physics

**Associate in Science Degree**

Option in:

Engineering Science

**Associate in Science Degree**

Options in Professional Studies:

General Curriculum (Professional Concentrations)  
Broadcasting  
Business Administration  
Business Administration—International Trade  
Business Administration—Management  
Business Administration—Marketing  
Education  
Labor Studies

**CAREER PROGRAMS** give students the training needed to enter their chosen field of employment. Completion of these programs leads to an Associate in Applied Science degree or a certificate. Requirements for career programs are developed with the help of business, community, and government leaders who know the changing needs of the job market.

## CAREER PROGRAMS

**Associate in Applied Science Degree**

**Allied Health**

Career Mobility LPN/ADN  
Dental Hygiene  
Diagnostic Medical Sonography  
Medical Laboratory Technology  
Medical Office Assistant  
Nursing  
Radiography  
Respiratory Therapy

**Business Administration**

Accounting  
Banking, Credit & Finance  
Real Estate  
Retail Business Management

**Business Technologies**

Business Computer Programming—Mainframe  
Business Computer Programming—Microcomputer  
Hotel-Restaurant Management  
Office Systems Technology  
(Executive Secretary Option)  
Office Systems Technology  
(Word Processing Option)

**Human Services**

Criminal Justice  
Early Childhood Education

**Industrial and Design Technologies**

Automotive Technology  
Automotive Technology Apprenticeship Program  
Commercial Art  
Drafting & Design Technology  
Electrical Technology

**Science Technology**

Ornamental Horticulture  
Ornamental Horticulture—Horticulture Therapy Technician

**One Year Certificate Programs**

Computer Science  
Data Entry/Micro-Mini Computer Operations  
Exercise Science  
Floral Design  
Legal Assistant  
Media Technician  
Real Estate Salesperson  
Secretarial Studies  
Small Business Management  
Surgical Technology  
Travel Service  
Word Processing

The Overall Structure  
of the BCC General Education Program

Many writers (e.g., Cohen and Brawer 316-323) have pointed out that there is no generally accepted definition of the nature and purposes of general education. However, after reviewing and discussing much of the literature on the idea of general education, the members of the BCC Committee on General Education agreed to base their work on the following assumptions:

The concept of general education is a modern expression of the ancient ideal of the well-educated and therefore cultured and liberated person, in touch with the realities of human existence, both past and present. A general education is what all truly educated people have (and ought to have) in common. As such, general education is opposed to excessive academic "individualism" and "overspecialization," to the fragmentation of the learning process via "disciplinism" and "departmentalism." General education stresses common or shared learning, the communal-social rather than the private-individualistic aspects of the educational enterprise. General education requirements are to be distinguished from elective and "major" requirements. "Free" electives and academic "majors" express the private and individual concerns of both students and faculty; but general education, which is oriented toward common learning, is an

attempt to create a sphere of higher education shared by all students and faculty.\*

The Committee also found that, in spite of many controversies in the field, there is in fact broad agreement in the academic community that a general education program should require students to study major ideas, leading themes, basic problems, fundamental methods of inquiry, and significant literature (both classical and modern) in the humanities, the social sciences, and the natural sciences. While there is less agreement as to the inclusion of courses in "communications," physical education, and mathematics in programs of general education, the Committee decided that such courses should be included in the Bergen Community College program.

The State Board of Higher Education's regulations (cited above) mandated the inclusion of "communications" courses in all community college general education programs, and, while some members of the BCC faculty were (and are) unconvinced that speech

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\*For a fuller statement of the theoretical basis of the committee's work, see General Education at Bergen Community College 13-15, 98-130. See also Boyer and Levine passim.

courses represent meaningful general education offerings, most were persuaded that at least two courses in English composition are a necessity for all associate degree candidates.

The decision to include a physical education requirement in the college's general education program was opposed by some members of the BCC faculty. Others, however, argued that a comprehensive education should include a "gymnastic" dimension (following Plato and Aristotle); and still others simply appealed to the fact that the college had been requiring all degree candidates to take four credits in physical education in the past and that the total elimination of the physical education requirement would eliminate the jobs of many or perhaps all faculty in the physical education area.

The mathematics component of the BCC general education program was vigorously defended by members of the mathematics faculty, who received argumentative support from some faculty outside of the mathematics area; and the fact that the leader of the mathematics faculty was both a member of the Committee on General Education and the head of the BCC faculty union (i.e., a man with significant "political" power and clout) did much to convince the Committee (and later the Faculty Senate) that mathematics should certainly have a prominent place in the BCC general education program.

The Committee on General Education thus adopted the view that a meaningful general education program should include systematic studies in reading, writing, speaking, and listening (communication skills); in the arts, foreign languages, history, literature, philosophy, and religion (the humanities); in economics, geography, political science, psychology, and sociology (the social sciences); in mathematics, the natural sciences, and modern technology; in health and physical education; and, in general, in the theory and practice of reflective, coherent, and critical thinking. However, because of time limitations and realistic restrictions on the number of general education credits that may be required of students, no single student is able (let alone inclined) to take courses in all of the subjects named above. To be comprehensive, balanced, and systematic, general education programs must encompass all of the major academic fields; but to be realistic and reasonable, such programs must offer, in addition to a number of "prescribed" courses (e.g., English composition), some "distributional" choices within certain general "zones" of academic endeavor.

Thus, on the basis of its own deliberations and on the basis of the requirements set forth by the New Jersey Board of Higher Education, the BCC Committee on General Education recommended, and the BCC Faculty Senate agreed, that, as of the fall of 1983, general education courses at BCC were to be organized under five basic categories, in the following order:

1. Communications, which includes courses in reading, writing, speaking, and listening, and other courses "designed to enhance facility in the English language."
2. Humanities, which includes the fields of fine arts (art, music, and theatre), foreign languages, history, literature, and philosophy and religion. General education courses in these fields emphasize cognitive comprehension, appreciation, and criticism of the human intellectual and cultural heritage.
3. Social Sciences, which includes courses in economics, geography, political science, psychology, and sociology. General education courses in the social sciences concentrate on the promotion of self-awareness and social-mindedness in students; on major social, economic, and political problems of contemporary society; and on the responsibilities of citizenship in the modern world.
4. Natural Sciences and Mathematics, which includes courses in college-level mathematics, computer science, the physical sciences, and the biological sciences. Such courses are designed to induce in students a conceptual understanding of the nature and applications of mathematics, computer technology, and the natural sciences.
5. Health and Physical Education, which includes "theoretically based" courses concentrating on the principles of bodily well-being and on the relationship between bodily well-being and other dimensions of human existence.

Program Requirements at BCC

The general education, free elective, and major requirements currently in effect in BCC degree and certificate programs are listed on the Chart on the following page.



PROGRAM REQUIREMENTS

<u>Subject Area</u>	<u>AA Degree</u>		<u>AS Degree</u>			<u>AAS Degrees</u> <u>Certificates</u>	
	<u>Liberal Arts</u>	<u>Fine and Performing Arts</u>	<u>Natural Sciences &amp; Mathematics</u>	<u>Engineering Science</u>	<u>Professional Studies</u>		
<u>Communications</u>							
English Comp.	6	6	6	6	6	6	3
Speech Com.	3	3	3		3		
<u>Humanities</u>	24	21	12	6	15	6	
Fine Arts	(no more than 6 credits in any one of listed fields)		(from at least three of listed fields)		(no more than 6 credits in any one of listed fields)		
Foreign Languages							
History							
Literature							
Philosophy/Religion							
<u>Social Sciences</u>	9	6	6	6	6	3	
Economics	(from at least two of listed fields)		(from two of listed fields)		(from two of listed fields)		
Geography							
Political Sci.							
Psychology							
Sociology							
<u>Natural Sciences and Mathematics</u>						3-4	
Math/Computer Sci.	6	3	8	8	6	(in either Math. or Natural Sci.)	
Natural Sciences	6-8	3-4	8	8	6-8		
<u>Health and Physical Education</u>							
Foundations of P.E.	2	2	2	2	2	2	
Foundations Exper.	1	1	1	1	1	1	
<u>General Education Electives</u>							3-6*
<u>Free Electives and/or Major Requirements</u>	<u>6-9</u>	<u>18-21</u>	<u>18-20</u>	<u>29</u>	<u>18-21</u>	<u>43-49</u>	<u>21-30</u>
<u>Total Credits</u>	<u>64-66</u>	<u>64-66</u>	<u>64-66</u>	<u>66</u>	<u>64-66</u>	<u>64-71</u>	<u>30-36</u>

\*In Humanities, Social Sciences, Mathematics, or Natural Sciences.

Courses Approved for the Purposes of General Education

Once the overall structure of the new BCC program of general education was decided on, the question arose as to exactly which courses should be offered or required for the purposes of general education. Following the lead of many writers in the field of general education (e.g., Cohen and Brawer 334-340; Luckenbill and McCabe passim), the BCC Committee on General Education initially proposed the creation of a set of "core" courses that were to be interdisciplinary and thematic in nature. There was to be one three-credit "core" course for each of the five areas in the new general education program (communications, humanities, social sciences, natural sciences and mathematics, and health and physical education). The "core" curriculum was to be supplemented by additional "distributional" elective requirements in the five basic general education areas. Each of the "core" courses was to be designed to give students an integrated and conceptual (albeit introductory) understanding of a given field of academic endeavor.

The proposed titles and descriptions of the five "core" courses were as follows:

1. Communications: Introduction to Critical Thought and Expression. An interdisciplinary study of the theory and practice of effective communication. Students will be introduced to the basic principles and methods of logical analysis, or persuasive argumentation, and of competent reading, writing, speaking, listening, and thinking. Attention will be given to

the nature, content, and limitations of various communications media. The course will emphasize the role of critical reasoning in effective human communication. [Prerequisite: English Composition] [This course was intended to replace English Composition II.]

2. Humanities: Introduction to the Humanities. An interdisciplinary study of human thought and culture. Major themes in the history of human culture and civilization, of philosophy and religion, of language and literature, and of the arts will be developed and discussed. The aim of the course will be the conceptual understanding and critical appreciation of humankind's intellectual and cultural achievements. [No prerequisites]

3. Social Sciences: Introduction to the Social Sciences. An interdisciplinary study of the nature, history, and philosophy of the social sciences. The various social sciences will be distinguished from one another, and the basic principles, methods, and theories of each will be discussed. In general, the course will seek to convey to students an understanding of the character and significance of social scientific research and reasoning. [No prerequisites]

4. Natural Sciences and Mathematics: Introduction to the Natural Sciences. An interdisciplinary study of the nature, history, and philosophy of the natural sciences. Topics covered will include the nature, scope, and limits of "scientific method;" types of scientific inquiry; the place of mathematics in

modern science; the relationship between modern science and technology; and the impact of science and technology on modern culture. [No prerequisites]

5. Health and Physical Education: Introduction to Human Health and Well-Being. An interdisciplinary study of the theory and practice of human well-being. The importance of physical activity and training in the student's attempt to understand him- or herself as a "whole person" will be emphasized, and the scientific principles of cardiovascular fitness, weight control, bodily strength, flexibility, and motor fitness will be thoroughly discussed. [No prerequisites]

As originally proposed, the "core" courses could have been team-taught or taught by individual faculty members with general competence in the areas to be covered.

As it turned out, however, there was wide (if not overwhelming) faculty opposition to the introduction of the aforementioned "core" curriculum. The prevailing view, in summary, was that such interdisciplinary theme courses were inadvisable because (1) modern academic learning is specialized and thus departmentalized, (2) such courses tend to be both superficial and overly demanding of both students and teachers, (3) team-teaching does not usually work out, and (4) there are too few "generalists" capable of teaching competently a properly organized interdisciplinary theme course. Members of the natural science and mathematics faculty were particularly insistent in

asserting that the only really effective and educationally meaningful approach to their subjects is through "lab science" and standard mathematics courses.

Given the general and strong opposition to the "core" courses listed above, the BCC Committee on General Education decided against officially proposing the introduction of said courses. Instead, the Committee proposed that already-existing discipline-based courses at the college should form the substantive basis of the new general education program. Thus, it was decided that, in fulfilling their general education requirements, students must select from a list of discipline-specific courses approved for the purposes of general education (see p. 21, below). Descriptions of these (and other) courses can be found in the Bergen Community College Academic Bulletin.

The policy adopted by BCC as of 1983 is that courses offered for the purposes of general education should be general in their orientation rather than highly specialized or vocational in nature. Such courses should introduce students to the basic subject matters and methodologies of broad fields of academic endeavor in the areas of communications, humanities, social sciences, natural sciences and mathematics, and health and physical education. General education courses should aim at expanding the intellectual and cultural horizons of the student qua human being, and should not be viewed merely as components of the student's major field of study. Moreover, as the development of critical thinking and writing skills is essential to the

student's success in the BCC general education program, the college's general education courses should provide students with the opportunity to develop these skills through a variety of appropriate critical thinking and writing assignments.

The list of courses approved for the purposes of general education at BCC is reviewed and, where necessary, altered each year under the general supervision of the BCC Coordinating Committee on General Education Programs (see p. 24, below).

In the view of this writer, the current general education course list contains courses that are not readily transferable to four-year colleges and universities (e.g., SP111, the HP courses, HS113, HS114, HS121, HS126, HS130, HS131, LT205, LT206, LT209, LT220, LT224, MA170, and MA250). Moreover, several of these courses have not run at BCC in recent years. Such courses should be eliminated from the general education course list, but faculty are resistant to such elimination, fearing that it will mark "the beginning of the end" for their respective disciplines.

## COURSES APPROVED FOR GENERAL EDUCATION (1987-88)

The following courses approved for the purposes of general education at Bergen Community College are regarded as general education courses at many, but not all other colleges and universities in New Jersey and other states. A student who intends to transfer into a bachelor's degree program at another institution of higher learning should consult with his/her academic advisor at Bergen Community College to determine which of the following courses will meet general education requirements at the college or university of his/her choice.

The general education courses listed below have been approved as of the publication of this booklet. The development of critical thinking and writing skills is essential to the student's success in the Bergen Community College general education program. Therefore the college's general education courses will provide students with the opportunity to develop these skills through a variety of appropriate critical thinking and writing assignments.

### COMMUNICATION

- SP111 Speech Communication
- WR101 English Comp I
- WR201 English Comp II

### HEALTH & PHYSICAL EDUCATION

- HP101 Fnds Physical Educ
- HP201 FPE-EXP-Aerobics
- HP202 FPE-EXP-Body Cond Male
- HP203 FPE-EXP-Body Cond Female
- HP204 FPE-EXP-Young & Fit
- HP205 FPE-EXP-Swim Cond
- HP206 FPE-EXP-Weight Train
- HP207 FPE-EXP-Bike Cond
- HP208 FPE-EXP-40+ Fitness

### HUMANITIES

#### Fine Arts

- MS101 Music Appreciation
- MS107 Music History I
- MS108 Music History II
- MS110 Music, Art, & Drama
- TH101 Intro to Theatre
- VA101 Art Appreciation
- VA102 Art History through the Renaissance
- VA103 Art History since the Renaissance

#### Foreign Languages

- FL110 French I
- FL200 French II
- FL201 Intermed French I
- FL202 Intermed French II
- FL111 German I
- FL210 German II
- FL211 Intermed German I
- FL212 Intermed German II
- FL112 Italian I
- FL220 Italian II
- FL221 Intermed Italian I
- FL222 Intermed Italian II
- FL120 Japanese I
- FL260 Japanese II
- FL261 Intermed Japanese I
- FL114 Russian I
- FL240 Russian II
- FL241 Intermed Russian I
- FL113 Spanish I
- FL230 Spanish II
- FL231 Intermed Spanish I
- FL232 Intermed Spanish II

### History

- HS101 Hist West Civil to the Reformation
- HS102 Hist West Civil since the Reformation
- HS105 Women in History
- HS106 Hist of Mod Europe to the French Revolution
- HS107 Hist of Mod Europe since the French Revolution
- HS111 US History to the Reconstruction
- HS112 US History since the Reconstruction
- HS113 History of 20th Century US to World War II
- HS114 History of 20th Century US since World War II
- HS121 Modern Asian History
- HS126 Modern African History
- HS130 Latin American History to Independence
- HS131 Latin American History since Independence
- HS144 Contemp Amer Issues & Problems

### Literature

- LT203 World Literature I
- LT204 World Literature II
- LT205 English Writers I
- LT206 English Writers II
- LT209 American Literature
- LT215 The Black Literary Voice in America
- LT220 Social Aspects of Literature
- LT224 Topics in International Literature
- LT228 Women in Literature

### Philosophy and Religion

- PR101 Intro to Philosophy
- PR102 Ethics
- PR103 Basic Logic
- PR104 Topics in Philosophy
- PR120 Intro to Religion
- PR121 Religions of the World

### NATURAL SCIENCES & MATHEMATICS

#### Mathematics & Computer Sciences

- MA130 Intro to Mathematics
- MA150 Elem Statistics
- MA155 Finite Mathematics
- †MA163 Comp Prog: BASIC
- MA173 Computer Science I
- MA180 Pre Cal: Col Alg & Trig
- MA250 Stat Anal Using SPSS
- †MA263 Comp Prog. Advan BASIC
- MA280 Calculus I
- MA281 Calculus II
- MA282 Calculus III

### Biology

- \*BS101 General Biology I
- \*BS104 Fund Microbiology
- \*BS107 Intro to Human Bio
- \*BS108 Intro to Envir Bio
- \*BS203 General Biology II

### Chemistry

- \*CH100 Intro to Chemistry
- \*CH112 College Chemistry
- \*CH140 Gen'l Chemistry I
- \*CH141 Gen'l Chem I-Lab
- \*CH240 Gen I Chem II
- \*CH241 Gen I Chemistry II-Lab

### Physics

- \*PH106 Earth-Sci Meteor-Geol
- \*PH107 Earth-Sci Astron-Ocean
- \*PH185 Intro to Physics
- \*PH186 General Physics I
- \*PH190 Physics I
- \*PH286 General Physics II
- \*PH290 Physics II
- \*PH291 Physics III

### SOCIAL SCIENCES

#### Economics

- EC101 Macro Economics
- EC201 Micro Economics

#### Geography

- GE101 Geography

#### Political Science

- PL101 American Gov't
- PL102 Int'l Relations
- PL103 Modern Ideology
- PL104 State & Local Gov't
- PL107 Introduction to Politics

#### Psychology

- PY101 Gen'l Psychology
- PY102 Psych Mental Health
- PY201 Child Psychology
- PY207 Psychology of Women I

#### Sociology

- SO101 Sociology
- SO103 Sociology of the Family
- SO120 Sociology of Sex Roles
- SO121 The Changing Roles of Women
- SO130 Cultural Anthropology

†MA163 and MA263 are 2 credit courses and do not individually satisfy a 3 credit Mathematics/Computer Science (MA) requirement

\*LAB SCIENCE ELECTIVE

SUMMARY OF MAJOR CHANGES  
IN THE BCC GENERAL EDUCATION PROGRAM, 1982-1987

1. Overall Reform of Program Structures. As a result of the work of the BCC General Education Committee during the 1982-1983 academic year, the general education components of all BCC degree and certificate programs were reconstructed in accordance with the newly promulgated regulations of the New Jersey Board of Higher Education. As of the fall of 1983, all enrollees in the college's degree programs were required to take a "broad distribution of courses" in communications, humanities, social sciences, natural sciences and mathematics, and health and physical education.

Also as a result of the general education reform of 1982-3, students in all BCC certificate programs are now required to take 3 credits in English composition and 3-6 credits of general education in the humanities, the social sciences, the natural sciences, or mathematics.

2. Social Science Requirements. Prior to 1983, BCC degree candidates were not required to take general education courses in the social sciences; but, as of 1983, all of the college's degree programs require students to elect courses in economics, geography, political science, psychology, or sociology (with specific credit and distribution requirements in the social sciences being determined on a program-by-program basis).



3. Humanities Requirements. Before 1983, students pursuing the AA or AS degree at BCC were required to take 3 credits in either music or art appreciation, 6-8 credits in foreign languages, 6 credits in history, and 6 credits in literature, for a total of 21-23 credits in the humanities. AAS degree candidates were required to take only 3 credits in either art or music appreciation. These prescriptive requirements in the humanities were abolished as of 1983. Under the current BCC general education program, students in the college's various degree programs are required to take a distribution of courses in the humanities, to be selected from a list of approved general education courses in fine arts, foreign languages, history, literature, and philosophy and religion. The specific number of credits required in the humanities and the distribution thereof are determined on a program-by-program basis (see above, pp. 15).

As a result of the changes effected by the recent general education reform, humanities requirements were increased in the college's certificate, AA, and AAS degree programs and decreased in its AS degree programs.

4. Natural Sciences and Mathematics Requirements. All BCC AAS degree programs now include a 3-4 credit requirement in natural sciences or mathematics. Prior to 1983, there was no such overall requirement in the college's AAS degree programs.

5. AA and AS Degree Tracks. Prior to 1983, BCC offered single-track AA and AS degree programs. As of 1983, the college offers a two-track AA degree program (in Liberal Arts and in Fine and Performing Arts) and a three-track AS degree program (in Natural Sciences and Mathematics, in Engineering Science, and in Professional Studies).

6. The BCC Coordinating Committee on General Education Programs. Upon completion of its assigned tasks in the spring of 1983, the BCC General Education Committee was dissolved and reconstituted by President Lopez-Isa as the "BCC Coordinating Committee on General Education Programs." The Coordinating Committee, which has been functioning from the fall of 1983 to the present, was charged by Dr. Lopez-Isa to oversee and coordinate the many complicated facets of the curricular reform described herein, to monitor the college's general education programs from year to year, to make recommendations for improvements in said programs to appropriate college constituencies, and to report on a regular basis to the president of the college on the progress of the college's general education efforts.

7. Writing and Critical Thinking Across the General Education Curriculum. In the spring of 1986, the BCC Faculty Senate adopted a proposal from the Coordinating Committee on General Education Programs calling for the institution of a program of "Critical Thinking and Effective Writing 'Across the

General Education Curriculum'." The proposal, as finally approved by the Faculty Senate and then by the president of the college, was as follows:

RESOLVED:

1. The development of critical thinking and writing skills is essential to the student's success in the BCC general education program. Therefore, the college's general education courses will provide students with the opportunity to develop these skills through a variety of appropriate critical thinking and writing assignments.
2. The preceding statement will be added to the prefatory section of the official list of BCC courses approved for the purposes of general education.
3. To support the policy expressed herein, writing assistance must be available to all students throughout their educational careers at BCC, especially after their completion of their required English composition courses. This writing assistance service should combine computer-assisted instruction, word processing, peer tutoring, faculty tutoring, and collaborative writing activities.
4. To further support the policy expressed herein, a writing and critical thinking resource service must be available to all faculty. This service will provide an information center on the teaching of thinking and writing skills, faculty consultations, class visits, and workshops designed to help instructors of "content" courses in their efforts to develop critical thinking and effective writing skills in the classroom.
5. The BCC faculty and administration should implement a program consistent with the preceding paragraphs 3. and 4. as of or before the fall semester of 1986.

The BCC program of critical thinking and effective writing across the general education curriculum, now in its second year of implementation, will require much institutional support and careful monitoring and supervision if it is to be successful.

ENROLLMENT PATTERNS IN THE BCC GENERAL EDUCATION PROGRAM

At the outset and throughout the early stages of the general education reform at BCC, many faculty members expressed strong apprehensions as to what effect the reform might have on enrollments in various disciplines and courses. The table presented on the following five pages is a survey of enrollment patterns at BCC in the five general education areas (communications, the humanities, the social sciences, the natural sciences and mathematics, and health and physical education) from the fall of 1979 through the spring of 1987. Only the total number of sections in those curricular areas during the years specified have been tabulated. Except for the last (eleventh) column in the table (which shows the average class sizes of the curricular areas listed for the 1986-87 academic year), average sizes of sections in the five areas surveyed have not been tabulated. Where appropriate, the table also includes enrollments by section in non-general education courses in the areas listed during the 1979-1987 period. Column 9 shows the percentages of increase or decrease of sections running in the various curricular areas listed during the period from the 1979-80 academic year through the 1982-83 academic year; and column 10 shows the percentages of increase or decrease of sections running in the same areas from the 1982-83 academic year through the 1986-87 academic year.

**REGISTRATION PATTERNS, 1979-1987\***

(by sections)

COMMUNICATIONS	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	PERCENTAGE CHANGE		AVERAGE
									1979-82/3	1982-86/7	CLASS SIZE
<b>English Composition</b>											
UR101	130	128	128	140	125	112	112	107	+ 8%	-24%	23.7
UR201	<u>91</u>	<u>82</u>	<u>82</u>	<u>89</u>	<u>92</u>	<u>84</u>	<u>82</u>	<u>79</u>	- 2%	-11%	20.6
	221	210	210	229	217	196	194	186	+ 4%	-19%	22.4
<b>Speech</b>											
SP111	57	67	70	71	75	76	68	69	+25%	- 3%	23.9

LITERATURE	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	PERCENTAGE CHANGE		AVERAGE
									1979-82/3	1982-86/7	CLASS SIZE
<b>Fine Arts</b>											
<b>General Education</b>											
BS101	44	42	34	31	26	20	21	22	-30%	-29%	29.7
BS110						1	2	2	N/A	N/A	22.5
TB101	1	1	1	1	2	4	6	9	0%	+800% (!)	24.8
VA101	53	49	39	38	27	23	21	20	-28%	-47%	31.6
VA102						1	2	3	N/A	N/A	17.7
VA103						<u>1</u>	<u>3</u>	<u>3</u>	N/A	N/A	23.7
	98	92	74	70	55	50	55	59	-29%	-16%	28.4
<b>Other</b>											
BS	24	29	25	22	26	32	37	36	- 8%	+64%	6.2**
TB	10	10	8	8	13	8	6	4	-20%	-50%	13.8
VA	<u>47</u>	<u>48</u>	<u>43</u>	<u>56</u>	<u>74</u>	<u>71</u>	<u>65</u>	<u>61***</u>	+19%	+ 9%	16.7
	81	87	76	86	113	111	108	101	+ 6%	+17%	12.8
Totals	179	169	159	156	168	161	163	163	-23%	+ 5%	18.2

**Foreign Languages**

<b>General Education</b>											
General Education	78	61	60	56	47	53	49	52	-28%	- 7%	18.6
Other	30	6	5	7	1	2	1	1	-77%	-86%	11.0
Totals	108	67	65	63	48	55	50	53	-42%	-16%	18.5

\*Exclusive of summer sessions.

\*\*includes small-size sections of Chorus, Orchestra, and Piano courses.

\*\*\*-6%, 1985-87; -14%, 1984-87; -18%, 1983-87.

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HUMANITIES	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	PERCENTAGE CHANGE		AVERAGE
									1979-82/3	1982-86/7	CLASS SIZE
											1986-87
<b>History</b>											
General Education	107	100	105	92	93	83	72	73	-14%	-21%	23.5
Other	17	11	8	17	3	7	6	3	0%	-82%	17.7
Totals	124	119	113	109	96	90	78	76	-12%	-30%	23.3
<b>Literature</b>											
General Education	40	34	37	36	15	17	20	20	-25%	-22%	23.1
Other					13	8	6	1	N/A	N/A	12.0
Totals	40	34	37	36	28	25	26	29	-25%	-19%	22.7
<b>Philosophy/Religion</b>											
General Education	11	10	11	11	15	18	29	36	0%	+227%	28.8
Other						1	1	0	N/A	N/A	N/A
Totals	11	10	11	11	15	19	30	36	0%	+227%	28.8
<b>HUMANITIES TOTALS</b>											
General Ed.	342	305	287	265	225	221	225	246	-23%	- 7%	24.6
Other	123	104	89	110	130	129	122	100	-14%	- 2%	12.7
Total	470	409	376	375	355	350	347	354*	-20%	- 6%	21.0

\*+2%, 1985-87.

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SOCIAL SCIENCES	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	PERCENTAGE CHANGE		AVERAGE
									1979-82/3	1982-86/7	CLASS SIZE
											1986-87
<b>Economics</b>											
General Education	17	19	18	19	27	30	30	29	+12%	+53%	26.3
Other	6	2	2	2	3	1	1	2	-66%	0% (CO-OP)	1.0
Totals	23	21	20	21	30	31	31	31	-9%	+48%	24.7
<b>Geography</b>											
General Education						2	6	8	N/A	N/A	30.5
Other						0	0	0	N/A	N/A	N/A
Totals						2	6	8	N/A	N/A	30.5
<b>Political Science</b>											
General Education	13	13	10	11	12	14	14	13	-15%	+18%	21.9
Other					2	1	1	0	N/A	0%	N/A
Totals	13	13	10	11	14	15	15	13	-15%	+18%	21.9
<b>Psychology</b>											
General Education	52	50	53	63	66	70	66	68	+21%	+8%	28.6
Other	47	39	37	37	37	39	33	36	-21%	-3%	18.0
Totals	99	89	90	100	103	109	99	104	+1%	+4%	24.9
<b>Sociology</b>											
General Education	39	32	35	39	42	51	48	53	0%	+36%	26.1
Other	13	14	15	9	14	12	6	11	-31%	+22%	20.5
Totals	52	46	50	46	56	63	54	64	-12%	+39%	25.1
<b>SOCIAL SCIENCES TOTALS</b>											
General Ed.	121	114	116	132	147	167	164	171	+9%	+30%	27.0
Other	66	55	54	48	56	53	41	49	-27%	+2%	17.9
Total	187	169	170	170	203	220	205	220	-9%	+29%	25.0

NATURAL SCIENCES AND MATHEMATICS	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	PERCENTAGE CHANGE		AVERAGE CLASS SIZE
									1979-82/3	1982-86/7	1986-87

**Mathematics & Computer Science (exclusive of courses in developmental mathematics)<sup>a</sup>**

General Education	64	59	59	79	82	86	87	81	+19%	+ 3%	24.9
Other	27	20	24	42	32	32	45	47	+56%	+11%	13.6
Totals	91	79	83	121	114	118	132	128	+33%	+ 6%	20.2

**Biology**

General Education	52	41	34	33	37	36	43	40	-37%	+21%	24.0
Other	81	76	71	62	52	19	37	36	-23%	-42%	18.5
Totals	133	117	105	95	89	85	80	76	-29%	-28%	21.4

**Chemistry**

General Education	35	34	32	36	32	33	45	35	+ 3%	- 3%	16.6
Other	21	20	18	20	12	19	4	2	- 5%	-90%	34.5
Totals	56	54	50	56	44	52	49	37	0%	-34%	17.6

**Physics**

General Education	20	16	13	18	19	18	21	20	-10%	+11%	21.2
Other	2	2	5	4	1	1	3	2	-50%	-50%	13.0
Totals	22	18	18	22	20	19	24	22	0%	0%	28.4

**NATURAL SCIENCES AND  
MATHEMATICS TOTALS**

General Ed.	171	150	138	166	170	173	196	176	- 3%	+ 6%	22.2
Other	131	118	118	128	97	181	89	87	- 2%	-32%	16.1
Total	302	268	256	294	267	274	285	263	- 3%	-11%	20.2

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<sup>a</sup>There were 6,683 students enrolled in Mathematics and Computer Science courses at BCC in 1986-87. 4,182 of these were enrolled in developmental (remedial) Mathematics courses; 1,941 were enrolled in general education Mathematics and Computer Science courses; and 640 were enrolled in non-general education Mathematics and Computer Science courses.



**HEALTH AND  
PHYSICAL  
EDUCATION**

	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	PERCENTAGE CHANGE		AVERAGE
									1979-82/3	1982-86/7	CLASS SIZE
<b>General Education</b>											
HP101	101	97	94	98	89	87	78	75	-3%	-23%	28.6
FPE Courses	175	143	115	117	40	43	44	47	-33%	-60%	24.0
	276	240	209	215	129	130	122	122	-22%	-43%	26.9
Other	27	16	21	24	83	62	48	53	-11%	+121%	28.2
<b>Totals</b>	<b>303</b>	<b>256</b>	<b>230</b>	<b>239</b>	<b>212</b>	<b>192</b>	<b>170</b>	<b>175*</b>	<b>-21%</b>	<b>-27%</b>	<b>24.9</b>

\*+3%, 1985-87.

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REGISTRATION PATTERNS, 1979-87: INTERPRETIVE COMMENTS

The foregoing table on registration patterns by section in the five general education areas during the 1979-87 period is the basis for the following analysis.

Communications

During the 1979-82/3 period, there was a 4% increase in the number of English Composition I and II sections running at BCC; whereas, during the 1982-86/7 period, the number of English Composition I and II sections declined by 19%. The number of sections of SP111 Speech Communication running at BCC increased by 25% during the 1979-82/3 period; and the number of sections of SP111 declined by 3% during the 1982-86/7 period.

As the general education reform of 1982-84 did not change the degree or certificate English composition requirements that had prevailed prior to 1983, it would appear that the 19% decline in the number of English Composition I and II sections running during the 1982-86/7 period cannot be attributed to changes in the college's general education programs. That decline may be reflective of general enrollment trends during the period in question and may be partially a result of state and BCC policies requiring large numbers of students to complete remedial courses in English before taking college-level composition courses.

The 1982-84 general education reform did result in a decline in the number of AAS degree programs requiring students to take

SP111, which may have caused or contributed to the leveling off and slight decline in the number of sections of SP111 running during the 1982-86/7 period.

### Humanities

Enrollments by section in humanities general education courses declined by 23% during the 1979-82/3 period and by 7% during the 1982-86/7 period; and enrollments by section in non-general education courses in the humanities declined by 14% during the 1979-82/3 period and by 2% during the 1982-86/7 period. Overall enrollments by section in the humanities declined by 20% from 1979 to 1982/3 and by 6% from 1982 to 1986/7. It is therefore probable that the general education reform of 1982-84 had the effect of slowing the general rates of decline in BCC's humanities offerings in recent years.

The new BCC general education program also appears to have slowed the rates of decline in the numbers of sections of general education courses running in the fine arts (-29% during the 1979-82/3 period; -16% during the 1982-86/7 period), foreign languages (-28% during the 1979-82/3 period; -7% during the 1982-86/7 period), and literature (-25% during the 1979-82/3 period; -22% during the 1982-86/7 period). Overall enrollments by section in foreign languages declined by 42% before and by 16% after the 1982-84 general education reform. In literature, the overall rates of decline were 25% before and 19% after the 1982-84 reform. Overall enrollments by section in the fine arts

declined by 23% before and increased by 5% after the 1982-84 general education reform. The latter increase is a result of expanded enrollments in non-general education music and visual arts (commercial art) courses and programs.

It should also be noted that overall enrollments by section in BCC humanities courses increased by 2% between 1985 and 1987. The number of sections of general education courses in the humanities increased by 9% during the same period.

Enrollments by section in BCC history courses declined by 12% between 1979/80 and 1982/3 and went into an even more precipitous decline after the new BCC general education program went into effect (-30% during the 1982-86/7 period). The latter decline was mitigated to some extent by the introduction of GE101 Geography as one of the college's general education offerings in the Social Sciences. GE101 has been a very successful course offering and has been taught by members of the BCC history faculty. Eight sections of GE101 ran during the 1986-1987 academic year, representing an increase of 300% between 1984 and 1987. If the successful sections of GE101 are added to the total number of sections running in history during the past three years, then the rate of decline in the number of sections taught by members of the BCC history faculty during the 1982-86/7 period was only 23% (which is still, however, a matter of concern for the college's historians).

Prior to 1983, the college's offerings in philosophy and religion were not included in the BCC general education program

(see above, pp. 4-5). As a result of the general education reform of 1982-84, philosophy and religion was included as one of the five humanities areas from which students may choose electives that will satisfy the general education requirements of their respective degree or certificate programs (see above, pp. 5, 7-17). Thus, while enrollments by section in the college's philosophy and religion courses had remained unchanged during the 1979-82/3 period, the number of sections in that discipline area increased from eleven in 1982/3 to thirty-six in 1986/7, an increase of 227%.

### Social Sciences

The number of sections of general education courses in the social sciences increased by 9% between 1979/80 and 1982/3, while overall enrollments by section in the social sciences declined by 9%. Since the general education reform of 1982-84, general education and overall enrollments by section in the social sciences have increased by 30% and by 2%, respectively.

Social Science disciplines that had suffered declines in the total number of sections offered during the 1979-82/3 period (economics, -9%; political science, -15%; and sociology, -12%) have experienced increases in enrollments by section during the 1982-86/7 period (economics, +48%; political science, +18%; and sociology, +39%).

Enrollments by section in general education courses in psychology increased by 21% between 1979/80 and 1982/3, but by

only 8% during the 1982-86/7 period. However, the rate of decline in enrollments by section in non-general education courses in psychology was 21% during the 1979-82/3 period and only 3% during the period from 1982/3 to 1986/7. Overall enrollments by section in the psychology area increased by 1% during the 1979-82/3 period and by 4% during the 1982-86/7 period.

As noted earlier, GE101 Geography was introduced as one of the college's general education offerings in the social sciences subsequent to the general education reform of 1982-84. Two sections of the course ran in 1984-85; six sections ran in 1985-86; and eight sections ran in 1986-87. In 1986-87, the average class size of GE101 was 30.5 students. It is clear that at least ten sections of the course would run each year (exclusive of summer sessions) if that number was offered.

#### Natural Sciences and Mathematics

The number of sections of general education courses in the natural sciences and mathematics declined by 3% during the 1979-82/3 period and increased by 6% during the 1982-86/7 period, possibly as a result of the general education reform of 1982-84. Overall enrollments by section in natural science and mathematics courses declined by 3% during the 1979-82/3 period and by 11% during the 1982-86/7 period, a continuing trend that is probably based on the reduction of enrollments in the college's Allied Health programs. Enrollments by section in non-general education

courses in biology fell off by 23% between 1979/80 and 1982/3 and by 42% between 1982/3 and 1986/7. During the same periods, the number of sections of non-general education courses in chemistry decreased by 5% and 90%, respectively.

Enrollments by section in physics have remained essentially constant throughout the 1979-1987 period.

Enrollments by section in mathematics and computer science general education courses increased by 19% during the 1979-82/3 period and by 3% during the 1982-86/7 period, and overall enrollments by section in that area increased by 33% during the 1979-82/3 period and by 6% during the 1982-86/7 period. Although the rates of increase in the numbers of sections running in mathematics and computer science have been lower during the latter period, the mathematics and computer science program appears quite healthy at this time.

#### Health and Physical Education

Enrollments in the BCC health and physical education program have been declining steadily over the past eight years. The general education reform of 1982-84, which reduced the college-wide requirement in health and physical education from four to three credits, gave added impetus to the aforesaid decline. Between 1979/80 and 1982/3, overall enrollments by section in the college's health and physical education courses declined by 21% (22% in general education courses); the rate of decline between 1982/3 and 1986/7 was 27% (43% in general

education courses). However, overall enrollments by section in health and physical education increased by 3% during the 1985-87 period.

### Average Class Sizes

The largest average class sizes of general education courses were in the following disciplinary areas:

1. Geography	30.5 students per section
2. Music	29.1 students per section
3. Visual Arts	29.1 students per section
4. Philosophy & Religion	28.8 students per section
5. Psychology	28.6 students per section
6. Health & Phys. Ed.	26.9 students per section
7. Economics	26.3 students per section
8. Sociology	26.1 students per section.

The smallest average class sizes of general education courses were in the following disciplinary areas:

1. English Comp. I & II	22.4 students per section
2. Political Science	21.9 students per section
3. Physics	21.2 students per section
4. Foreign Languages	18.6 students per section
5. Chemistry	16.6 students per section



A MAJOR PROBLEM:COMMUNITY COLLEGE STUDENTS AND THE DEMANDS OF GENERAL EDUCATION

The institution of a serious and effective general education program at the community college level is difficult (some would say impossible), given the educational background of the average community college student. The average community college student is not ready for a rigorous college-level program of study in the humanities, social sciences, and natural sciences. Such a program will inevitably demand a high level of intellectual activity; it will include an emphasis on the theory and practice of disciplined, systematic, and critical inquiry; it will require the study of sophisticated and therefore difficult literature; and it will focus on the logical analysis, clarification, and evaluation of the "big questions" and "great ideas" in the history of human thought. But the average community college student reads and writes at the fourth, fifth, sixth, or seventh grade level, has a very limited vocabulary, experiences great difficulty with seventh grade arithmetic and even greater difficulty with high school algebra, and performs less well than the average four-year college freshman on the Watson-Glaser Critical Thinking Appraisal (a 52.80 raw score, which places him in the 45th percentile among lower-division college students who have been subjected to the Watson-Glaser test).

Moreover, the average community college student (even after completing remedial and college-level courses in English composition) is deficient in effective study and research skills, is not particularly interested in reading and writing, and does not know how to write essays, book reviews, or research papers; he fears and "hates" mathematics and finds discussions and demonstrations of logical methods and "critical thinking" techniques bewildering and almost impossible to employ in his own "life-world."

The average community college student wants the college to equip him with "marketable vocational skills" that will enable him to get an adequately-paying job soon (i.e., within the next two or three years) and/or to offer him a course of studies that will permit him to transfer to and survive at a four-year college or university in the near future (again, within the next two or three years).

Remedial (or so-called "developmental") programs in basic linguistic and mathematical skills have now become a central feature of American higher education--at both four-year and two-year institutions. More and more students deficient in the basic skills associated with reading, writing, speaking, logical thinking, and mathematical procedures are coming to college. Even after being subjected to the aforesaid remedial programs, too many contemporary college students remain ill-equipped with the basic tools of learning. Thus, community college instructors in the major college-level subject matters (history, literature, philosophy, the social sciences, mathematics, the natural

sciences, etc.) find all too often that they are spending a great deal of their course time teaching the fundamentals, not on their subject matters, but of basic literacy.

Such instructors find that they must make every effort to select reading materials, whether primary or secondary, that are at least close to their students' average reading comprehension level and to plan class sessions so that the required readings can be discussed at length and in some depth in class. Technical terminology and concepts must either be avoided or very carefully defined and repeatedly reviewed. Instructors in general education courses cannot assume that their students are familiar with the techniques of academic research and writing, but, in pursuit of the goals of general education, such instructors must require students to do a substantial amount of expository and critical writing in response to the material presented in their courses. However, writing assignments and tests must be formulated with the utmost simplicity, clarity, and specificity. Community college students seem to require a great deal of specific and detailed information concerning exactly what their teachers expect of them, with reference to both reading and writing assignments.

The community college instructor in a college-level general education course can therefore take nothing for granted concerning her students' vocabularies, their comprehension of concepts, or their readiness for college-level reading and writing--or for

reading and writing per se! To stand a chance of being successful in teaching at the community college level, the instructor must make herself ready and willing to get "back to basics" and to build from "Ground Zero"--an extremely difficult assignment for subject-matter college teachers with no special training in and perhaps little aptitude or liking for the teaching of basic learning skills such as reading, writing, or elementary and secondary school mathematics.

#### CONCLUSION

The BCC general education reform described in the foregoing review has been, on the whole, highly successful. The program offers students--especially those in the college's transfer (AA and AS degree) programs--a comprehensive educational program based on a substantial core of general education requirements in communications, the humanities, the social sciences, the natural sciences and mathematics, and health and physical education.

Students who follow the prescriptions and options offered by the BCC general education program will expand significantly their opportunities to become generally educated citizens of a constitutional republic and will find that transfer from BCC to four-year colleges and universities is facilitated by their adherence to this college's transfer program requirements. Students in the college's non-transfer (AAS degree and certificate)

programs are given the opportunity to make at least some progress toward the goal of becoming generally educated persons, although the latter programs offer only minimal support to those pursuing that goal.

The BCC general education program will have to be reviewed carefully and critically on a regular basis and will require close supervision and coordination if it is to continue as a successful (and perhaps the) central dimension of the college's overall institutional mission.

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