| AUTHOR <br> TITLE | Cronk, George <br> Generel Education Reform in the Now Jersey Community Colleges: The Bergen Community College Experience, 1982-1987. |
| :---: | :---: |
| INSTITUTION | Princeten Univ., NJ. Mid-Career Fellowship Program. |
| PUB DATE | [88! |
| NOTE | 47p. |
| PUB TYPE | Reports - Descriptive (141) |
| EDRS PRICE | MF01/PC02 Plus Postage. |
| DESCRIPTORS | Academic Education; College Curriculum; Community |
|  | Colleges; XCurriculum Design; xCurriculum |
|  | Development; Degree Requirements; xEducational |
|  | Change; Enrollment Influences; Enrollment Trends; |
|  | xGeneral Education; State Standards; Two Year |
|  | Colleges |
| IDENTIFIERS | KBergen Community College NJ |


#### Abstract

An overview is provided of the development of Bergen Community College's (BCC) general educstion 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 finel recommendations of BCC's Committee on General Education. These recommendetions resulted in the revision of all BCC degree and certificate programs in accordance with a new system of general edusation requirements. After contrasting general education at BCC before and after 1983, the peper discusses the organization of the current program within five cetegories: 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 $r$ sxt sections consider the effects of the curricular changes on enrollment and registration petterns. Finally, unresolved problems and concerns are identified. (EJV)


## 

* Reproductions supplied by EDRS are the best that can be made $x$ $x$ from the original document. $x$



# GENERAL EDUCATION REFORM IN TYE NEW JERSEY COMMUNITY COLLECES: THE BERGEN COMMNITY CCLLEGE EXPERIENCE, 1982-1987 

George Cronk<br>Professor of Philosophy \& Religion Bergen Community College

"PERMISAION TO REPRODUCE THIS MATERIAL, iAS BEEN GRANTED BY

> G. Cronk

> George Cronk, J.D., Ph.D.

## 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 Nev Jersey community colleges. The revised regulations require that all students in associate degree programs take a "broad distribution $0_{i}$ 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 (fir. 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 $\epsilon$, preferably 9 , semester sredit 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 sequirement 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 deadine 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 ini 1980 (see NJ Adminstrative 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. Jise 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 proposais 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, deoate, 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 Comminity 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 Comittee 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 deadine), 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; studenes 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 remaired 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:

| General Education Requirements | AA | AS |
| :--- | :---: | :---: |
| 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 | $46-50$ | $50-52$ |
| Free Electives and/or |  |  |
| MMajor" Requirements | $\frac{14-18}{64-66}$ | $\frac{12-14}{64-66}$ |

Thus, while students pursuing the in 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.
*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 oi 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 commnications, humanities, social science, mathematics, or laboratory science courses. In addition to this general education requirement, students pursuing the as 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 taka courses in mathematics and/or in the natural sciences; and others did not require work in the social sciences and/or in thes humanities.
*The number of AAS dagree programs offered at BCC was not changed significantly as a result of the general education reform of 1982-4. A list of current AAS progams is included in the table on p. 8, below.

Priol 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 tho curriculum reform of 1982-4, BCC associate in arts (NA) 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 $A A$ and $A S$ 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 promrams are listed in the table on the following page. (Specific descriptions of all degree and certificate programs are listed in the Bergen Commanity College Academic Bulletin.)
*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 sophoraore offering, at movt colleges and universities. Students who transfer to a four year college in New Jersey will receive credit for their viudics at Bergen

| TRANSTER PROGRAMS | Associatu in Science Degree |
| :---: | :---: |
| Aseociate is Arts Depree | Options in Natural Sciences ano Mathematics: |
| Oprions: |  |
| General Curriculum (Liberal Ars) | Brology |
| Communcetion Arts | Chemustry |
| Econornes | Computer Science |
| Foreupn Language | Mathematucs |
| History | Physics |
| Leisure and Pecreation |  |
| Literature | Associste in Science Degree |
| Philosophy \& Religion | Option in: |
| Pelitical Scrence |  |
| Psycholozy | Engineering Science |
| Sociology |  |
| Women's Sudics | Associnte in Science Degree Options in Profescional Studies: |
| Aspociate in Arts Degree |  |
| Option: | General Curriculum (Professional Concentrations) Brondcust:r |
| Art | Business Adr anustration |
| Music | Business Adminustration-International Trade |
| Theatre Arts-Acting | Busuness Admurustration-Management <br> B isuness Adminustration-Marketung <br> Education <br> Labor Studies |

CAREER PROGRAMS give students the training nceded 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 jeb mariet.

## CAREER PROGRAMS

Associate in Applied Science Degree

## Allied Health

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

## Businest Administration

## Accounting

Bankung, Credit \& Finance
Real Estate
Retal Business Management

## Business Technologies

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

Human Services
Crimunal justuce
Early Childhood Education
Industrial and Design Technologies
Automotive Technology
Automotive Cechnology Apprenticeship Progranı
Commercial An
Drafting \& Design Technology
Electrical Technoiogy
Science Technologv
Cmamental Horticulture
Omamental Horticulture-Horticulture Therapy Technician

One Year Certificate Programs
Computeı Science
Data Entry/Micro-Mini Computer Opera:ions
Exercise Science
Floral Design
Legal Assistant
Media Technician
Real Estate Salesperson
Secretarial Studics
Small Busiress 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 definitior of the nature and purposes of genergl 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 peopie have (and ought to have) in common. As such, general education is opposed to excessive academic "indivirlualism" and "overspecialization," to the fragmerication of the learning process via "disciplinism" and "departmentalism." General education stresses common or shared learning, the commural-social rather than the private-individualistic aspects of the educational enterprise, General education requirements are to be distinguished from elective and "major" requirements. "Fres" 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 sield, 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 cf 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 matiematice 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
*For a fullar 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 necisssity for all associ:s degree candidates.

The decision to includs is . isical education requirement in the college's general education program was opposed by some meabers of the BCC faculty. Others, nowever, arqued tha, 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 mequiring 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 sducation area.

The mathematics component of the BCC general education program was vigorously defended by members of the mathematics faculty, who received argumentative sipport from some faculty outsida of the mathematics area; ard 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 -ignificant "political" power and clout) did much to convince the Committae (and later the Faculty Senate) that matnesatics should certainly have a proninent place in the BCC general education program.

The Comittee on General Education this adopted the view that a meaningful general education program should include systematic studies in reaing, writing, speaking, and listening (communication skifls): in the arts, foreign languages, history, ifterature, philosophy, and religion (the humanities); in economics, geography, political science, psychology, and sociology (the sociai sciences); in mathematics, the natural sciences, and modern technology; in health and physical education; and, in general, in the theory ani practice of reflective, coherent, and critical thinking. However, because of time limitations and realistic restrictions on the rumber 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 inciudes 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, litezature, 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, ecunomic, 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 conceprual understanding of the nature and applications of rathematics, 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 =lective, and major requirements currently in effect in BCC degree and certificate programs are listed on the Chart on the following page.


In Huanaties, Social Sciences, Hathenatics, or Natural Sciences.

## Courges 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 3xactly 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., Sohen and Brawer 334-340; Luckenbill and McCabe pasgim.), the BCC Comittee on General Education initially proposed the creation of a set of "core" courses that were to be interdiscipiinary and thematic in nature. Tlere 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 (aibeit 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 $0:$ 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 communirations media. The course will emphasisze 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 Eocial Sciences. An interdisciplianry study of the nacure, history, and priflosophy 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. [Vo prerequisites]
4. Natural Sciences and Mathematics: Introduction to the Natural Sciences. An interdisciplianry study of the nature, history, and philosophy of the natural sciences. Topics covered will included 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 himor herself as a "whole person" will be emphasized, and the scientific principles of cardiovascular fitness, weight contrcl, 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 tirned 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 inadvisabl: 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 Comittee proposed that already-existing disciplinebased courses at tho 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 natuie. Suich courses should introduce students to the basic subject matters and methodologies of broad fields of academic endeavor in the areas of communications, humanitjes, 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 Comittee 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., SP1ll, 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 respeative disciplines.

## COURSES APPROVED FOR GENERAL EDUCATION (1957-88)

The following courses approved for the purposes of general education at Bergen Communty Coliege are reg?oder as general education courses at mant but ous all other colleges and universues in New Jersey and other states A student who intends to transfer inio a bacheior's ózgree program at another inatitution of higher tearit ing should consult with husher acedemic advisor at Bergen Community College to dertermine which of the foliowing courses will meet general education requirenientat the college or university of his/her choice.

The general educauon courses listed below have been approved as of the publication ot this tooklet
The development of critucal thinking and writing skills is essential to the student's success in the Bergen Community College generai education programil Iherefive the college's general education courses will provide students with the opportunity to deveiop these skiits through a var:ety of appronriate critical thinking and writing assignments.

| COMMIUNJCATION |  | History |  |
| :---: | :---: | :---: | :---: |
| SPIII | Speech Communication | HSLOI | Hist West Civil to the Reformation |
| Wriot | English Comp I | HS102 | Hist West Civil since the Reformation |
| WR20: | English Comp II | HS10S | Women in History |
|  |  | HS106 | Hist of Mod Europe to the French Revolution |
| HEALTH E PHYSICAL DDUCATION |  | HS107 | Hist of Mod Europe since the French Revolution |
| HP10i | Fnds Piysucal Educ | HSIII | US History to the Reconstruction |
| HP201 | FPE-EXP-Acrobics | HSIL2 | US History since the Reconstruction |
| HP202 | FPE-EXP-Body Cond Male | HSIL | History of 20th Certury US to World War II |
| HP203 | FPE-EXP-Body Cond Female | HSII4 | History of 20hh Century US since World War II |
| HP204 | FPE-EXP-Young \& Fit | HS121 | Modem Asian History |
| HP20S | FPE-EXP-Swim Cond | HS126 | Modern African History |
| HP206 | FPE-EXPWerght Tran | HS130 | Latın Amencan History to Independence |
| HP207 | FPE-EXP-Bike Cond | HS13I | Laun American History since Independence |
| HP208 | FPE-EXP-40+Fitness | HS144 | Contemp Amer Issues \& Problems |
| HUMANITIES |  | Literature |  |
| Fine Arts |  | LT203 | World Literature I |
| MS101 | Music Apprectation | LT204 | World Literature II |
| MS107 | Music History I | LT205 | English Writers I |
| MS108 | Music History II | LT206 | Engi ish Writers II |
| MS110 | Music, An, \& Drama | LTE09 | American Literature |
| THiOl | Intro to Theatre | LTİS | The Black Literary Voice in America |
| VA101 | Art Appreciation | LT20 | Social Aspects of Literature |
| VA102 | Art History through the Renaissance | LT224 | Topics in International Literature |
| VA103 | Art History sunce the Renassance | LTE2 | Women in Literature |
| Foreifn Languages |  | Philosophy ana Religion |  |
| FLIIO | French I | PRIOI | Intre to Philosophy |
| FL200 | French II | PR102 | Ethics |
| FL201 | Intermed French I | PR103 | Basic Logic |
| FL202 | Intermed French II | PR104 | Topics in Philosophy |
| FLIII | German I | PRI20 | Intro to Religion |
| FL210 | German II | PRI2I | Religions of the World |
| FL211 | Intermed German I |  |  |
| FL212 | Intermed German II | NATURAL SCIENCES \& MATHEMATIC |  |
| FLIL | Italian I | Mathematics \& Computer Sciences |  |
| FL220 | Italan II | Mal30 | Intro to Mathematics |
| FL221 | T-armed Italuan I | MAISO | Elem Sturstics |
| FL222 | Intermed Intian II | MALSS | Finte Mathematics |
| FLi20 | Japanese I | tMAl63 | Comp Pros: BASIC |
| FL260 | Japanese IU | MAI73 | Computer Science I |
| FL261 | Intermed Japanese I | MA180 | Pre Cal. Col Als 2 Tris |
| FLIH | Russtan I | MA250 | Stat Anal Using SPSS |
| FL240 | Russian II | +MA263 | Comp Prog. Advan BASIC |
| FL241 | Intermed Russian I | MA280 | Calculus I |
| FLI13 | Spanısh I | MA281 | Calculus I] |
| FL230 | Spanish III | MA282 | Calculus III |
| FL231 | Intermed Spanish I |  |  |
| FL232 | Intermed Spanish II |  |  |


| Biology |  |
| :---: | :---: |
| -BS101 | General Bıology 1 |
| -BSIO4 | Fund Microbiology |
| ${ }^{*}$ BSIOT | Intro to Human Bio |
| ${ }^{*}$ BS108 | Intro to Envir Bio |
| *BS203 | General Biclogy II |
| Chemist | try |
| ${ }^{*} \mathrm{CH} 100$ | Intro to Chemivir |
| ${ }^{*} \mathrm{CH} 112$ | College Chemutry |
| ${ }^{*} \mathrm{CH} 140$ | Gen'l Chemistry I |
| ${ }^{*} \mathrm{CH} 141$ | Gen'l Chem 1-Lab |
| ${ }^{*} \mathrm{CH} 240$ | Gen I Chem II |
| ${ }^{*} \mathrm{CH} 241$ | Gen 1 Chemanty ll |

## Physics

${ }^{-}$PH106 Earth-Scı Meteor-Geul
-PH1OT Earth-Scl Astron-Octan
-PH185 Intro to Physics
-PH186 General Physics I

- PHI90 Physics I
${ }^{*}$ PH286 General Phyncr II
*PH290 Physics II
*PH291 Physicsill
SOCIAL SCIENCE
Economics
EClO1 Macro Elonomics:
EC201 Micro Ecunomis

Gengraphy
GEIOI Gelographt

Political Science
PLi01 American Gov 1
PL102 Intil Relations
PL103 Modern Ideology
PLIO4 State \& Local Gow't
PLIOT Introduction to Politics

Pyychology

| PYIOI | Gen'1 Psychology |
| :---: | :---: |
| PY102 | Psych Mental Health |
| PY201 | Child Psychology |
| PY20 | Pavchologe of Women I |
| Sociology |  |
| SOIOI | Sixiology |
| SO103 | Socrology of the Family |
| SOl20 | Sociology of Sex Rolc: |
| SOI21 | The Changing Rolce of W inien |
| SO130 | Cultural Anthropulang. |

tMA163 and MA263 are 2 credit courses and do not individually satısfy a 3 credıt Mathematics/Computer Scıence (MA) requirement
*LAB SCIENCE ELECTIVE

## 

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 reconstrucied 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 $A S$ 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 wredits 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 siagle-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 Comittee 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 or 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 presicient nf the college, was as follows:

## RESOLVED:

1. The developme"t of critical thinking and writing skills is essentiai to the student's sliccess 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 purroses of general education.
3. To support the policy expresses 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 instructicn, word processing, peer tutoring, faculty tutoring, and collaborative writing activities.
4. To further support the policy e.pressed herein, a writing and critical thinking rescurce service must be available to all faculty. This serv: $2 e$ will provide an information center on the teaching of hinking and writing skills, faculty consultations, class visits, and workshops designed to help instructors of "content" courses in their efforts to devalop 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 sirnnort and careful monitoring and supervision if it. is tr 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 genaral education areas (communications, the humanities, the social sciences, the natural sciences and mathematics, ind 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 tabulisted. 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 surseyed have not been tabulated. Where appropriate, the table also includes enrcllments by section in non-general education courses in the areas listed during the 1979-1987 period. Column 9 shows the nercentages 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 acaderic year; and column 10 shows the percentages of increase or decrease of sections running in the same areas from the 1982-83 academic year thrcugh the 1986-87 academic year.

| comilichlions | 1979-8! | 1889-81 | 1881-82 | 1982-83 | 1883-84 | 1984-85 | 1985-86 | 1986-87 | 1979-82/3 | 82-86/7 | 1986-92 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Enslinhformitioz |  |  |  |  |  |  |  |  |  |  |  |
| 01101 | 130 | 128 | 128 | 148 | 125 | 112 | 112 | 107 | + 88 | -248 | 23.7 |
| $0 \mathrm{R2O1}$ | 91 | 2? | - 8 | -89 | 92 | 81 | 82 | 19 | - 28 | -118 | 20.6 |
|  | 221 | $2: 0$ | 210 | 229 | 217 | 196 | 194 | 186 | +48 | -198 | 22.4 |

Senct

| 53111 | 57 | 67 | 70 | 71 | 75 | 76 | 68 | 69 | +258 | -38 | 23.9 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |


| Hamlliss | 1979-81 | 1890-81 | 1781-82 | 1982-83 | 1983-84 | 1984-85 | 1985-86 | 1986=07 | PELELILSE CHIMGE | IVERLGE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  | CLISS_SI2\% |
|  |  |  |  |  |  |  |  |  | 1979-82/3 1922-86/7 | 1986-81 |


| Gempal Edseation |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ESIOI | 44 | 42 | . 34 | 31 | 26 | 20 | 21 | 22 | -308 | -298 | 29.7 |
| -SIIO |  |  |  |  |  | 1 | 2 | 2 | 1/1 | 1/1 | 22.5 |
| Tliol | 1 | 1 | 1 | 1 | 2 | 4 | 6 | 9 | 08 | 48008 (1) | 24.8 |
| 7101 | 53 | 49 | 39 | 38 | 27 | 23 | 21 | 20 | -288 | -478 | 31.6 |
| 11102 |  |  |  |  |  | 1 | 2 | 3 | I/1 | //1 | 17.7 |
| V1103 |  |  |  |  |  | 1 | --3 | 3 | 1/1 | 1/1 | 23.7 |
|  | 98 | 92 | 74 | 70 | $\overline{55}$ | 50 | 55 | 59 | -298 | -168 | 28.4 |

Other

| HS | 24 | 29 | 25 | 22 | 26 | 32 | 37 | 36 | -88 | +648 | 6.28 \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 11 | 10 | 10 | 8 | 8 | 13 | 8 | 6 | 4 | -208 | -508 | 13.1 |
| V1 | 47 | 48 | 43 | -56 | 74 | 11 | -65 | $61^{888}$ | +198 | + 98 | 16.7 |
|  | 81 | 87 | 76 | 86 | 113 | 111 | 108 | 181 | +68 | +178 | 12.8 |
| Totals | 179 | 169 | 151 | 156 | 168 | 161 | 163 | 163 | -238 | +58 | 18.2 |

Encipelingrate

| Cemal <br> Edecation | 78 | 61 | 60 | 56 | 47 | 53 | 49 | 52 | -288 | -78 | 18.6 |
| :--- | ---: | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Othar | 30 | 6 | 5 | 7 | 1 | 2 | 1 | 1 | -778 | -868 | 11.0 |
| Totals | 108 | 67 | 65 | 63 | 48 | 55 | 50 | 53 | -428 | -168 | 18.5 |

## afselasive of samar sessions.

alacledes mall-sizo sections of Choris, Orchastra, and Piano coarses.
888-68, 1985-87; -148, 1884-87; -188, 1983-87.

listory
General

| Edseation | 107 | 100 | 105 | 92 | 93 | 83 | 72 | 73 | -148 | -218 | 23.5 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Other | 17 | 11 | 8 | 17 | 3 | 7 | 6 | 3 | 08 | -828 | 17.7 |
| Rotals | 124 | 119 | 113 | 109 | 96 | 90 | 78 | 76 | -128 | -308 | 23.3 |

## Literntire

| Gemeral Edreation | 4. | 34 | 37 | 36 | 15 | 17 | 20 | 28 | -258 | -228 | 23.1 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Other |  |  |  |  | 13 | 8 | 6 | 1 | I/1 | 1/1 | 12.0 |
| Potals | 48 | 34 | 37 | 36 | 28 | 25 | 26 | 29 | -258 | -198 | 22.7 |

## Philosonh/Relicion

Geperal

| Idscation | 11 | 10 | 11 | 11 | 15 | 18 | 29 | 36 | 08 | 42278 | 20.8 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Otber |  |  |  |  |  | 10 | 1 | 0 | $1 / 1$ | $1 / 8$ | $1 / 1$ |
| Iotals | 11 | 10 | 11 | 11 | 15 | 19 | 30 | 36 | 08 | 42278 | 20.8 |

TMAMIES FOTMS

| General Ed. | 342 | 385 | 287 | 265 | 225 | 221 | 225 | 246 | -238 | - 78 | 24.6 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 3ther | 1ą | 119 | -89 | 118 | 130 | 129 | 122 | 188 | -148 | - 28 | 12.7 |
| Total | 470 | 418 | 376 | 375 | 355 | 350 | 347 | 3544 | -208 | - 68 | 21.0 |

1+28, 1985-87.

## BEST COPY AVAILABLE

| SRCIM SCIEKCS | 1979-81 | 1890-4 | 1881-6? | 1882-83 | 1983-64 | 1984-85 | 1985-06 | 1986-87 |  | $\begin{gathered} \text { SIERLCE } \\ \text { CMISS.S12E } \\ 1886-87 \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Econotict |  |  |  |  |  |  |  |  |  |  |

Cemaral

| Edecation | 17 | 19 | 18 | 19 | 27 | 30 | 30 | 29 | +128 | +538 | 26.3 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Other | 6 | 2 | 2 | 2 | 3 | $!$ | 1 | 2 | -668 |  | 1.0 |
| Potals | 23 | 21 | 20 | 21 | 30 | 31 | 31 | 31 | -98 | +488 | 24.7 |

Gemernls

| Comeral |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Edncation | 2 | 6 | 8 | 1/1 | 1/1 | 30.5 |
| Other | 0 | 0 | 1 | 1/1 | /1/ | 1/1/ |
| Potals | 2 | 6 | 84 | 1/1 | [/1 | 36.5 |

Relitical_Scimes

| Gamaral Education | 13 | 13 | 10 | 11 | 12 | 14 | 14 | 13 | -158 | -188 | 21.9 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Other |  |  |  |  | 2 | 1 | 1 | 0 | 1/4 | 08 | I/1 |
| Totals | 13 | 13 | 11 | 11 | 14 | 15 | 15 | $!3$ | -158 | +188 | 24.9 |

Inscholony

| Gameral Edreation | 52 | 50 | 53 | 63 | 66 | 70 | 66 | 68 | +218 | - 88 | 28.6 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Other | 47 | 39 | 37 | 37 | 37 | 39 | 33 | 36 | -218 | - 38 | 18.1 |
| Totale | 99 | 89 | 90 | 100 | 103 | 109 | 99 | 184 | + 18 | + 48 | 24.9 |

Seciolory

| Gemeral Edreation | 39 | 32 | 35 | 39 | 42 | 51 | 48 | 53 | 08 | +368 | 26.1 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Other | 13 | 14 | 15 | 9 | 14 | 12 | 6 | 11 | -318 | +228 | 20.5 |
| Potale | 52 | 46 | 50 | 46 | 56 | 63 | 54 | 64 | -128 | -398 | 25.1 |

SACHM CCITMAS TOFULS

| Cazaral Ed. | 121 | 114 | 116 | 132 | 147 | 167 | 164 | 171 | - 98 | +308 | 27.1 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Other | 6 | 55 | 54 | 4. | 56 | 53 | 11 | 49 | -278 | + 28 | 17.9 |
| Total | 187 | 169 | 170 | 170 | 203 | 220 | 205 | 220 | - 98 | +298 | 250 |



Cemeral

| Edecatios | 64 | 59 | 59 | 79 | 82 | 86 | 87 | 81 | +198 | + 38 | 24.9 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Other | 27 | 20 | 24 | 42 | 32 | 32 | 45 | 47 | 4 568 | +118 | 13.6 |
| Totals | 91 | 79 | 83 | 121 | 114 | 118 | 132 | 128 | -338 | - 68 | 20.2 |

Diglens

| Cemeral |  |  |  |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Edseation | 52 | 41 | 34 | 33 | 37 | 36 | 43 | 40 | -378 | +218 | 24.0 |
| Othar | 81 | 76 | 71 | 62 | 52 | 19 | 37 | 36 | -238 | -428 | 18.5 |
| Cotals | 133 | 117 | 185 | 95 | 89 | 85 | 80 | 76 | -298 | -288 | 21.4 |

GMoistry

| Gemeral <br> Education | 35 | 34 | 32 | 36 | 32 | 33 | 45 | 35 | +38 | -38 | 16.6 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Other | 21 | 20 | 18 | 20 | 12 | 19 | 4 | 2 | -58 | -908 | 34.5 |
| Totals | 56 | 54 | 50 | 56 | 44 | 52 | 49 | 37 | 08 | -348 | 17.6 |

Prient

| Gemaral <br> Edreation | 20 | 16 | 13 | 18 | 19 | 18 | 21 | 20 | -108 | 4118 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Othor | 2 | 2 | 5 | 4 | 1 | 1 | 3 | 2 | -508 | -508 |
| Totale | 22 | 18 | 18 | 22 | 20 | 19 | 24 | 22 | 08 | 08 |

MITMLSCIETESA11
Mrngutics iotus

| Cemaral id. | 171 | 150 | 138 | 166 | 178 | 173 | 196 | 176 | -38 | +68 | 22.2 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Other | 131 | 118 | 118 | 128 | 97 | 181 | -89 | -87 | -28 | -328 | 16.1 |
| Total | 302 | 268 | 256 | 294 | 267 | 274 | 285 | 263 | -38 | -118 | 20.2 |

## BEST COPY AVAILABLE


 Criance conreas; and 641 mere aroiled in mop-goneral ducation bathantics and Coapator Scionce conrses.

Gomaral Edreation

| 18181 | 101 | 97 | 94 | 98 | 89 | 87 | 78 | 75 | - 38 | -238 | 28.6 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| pPE Coirsea | 175 | 143 | 115 | 117 | 41 | . 13 | - 41 | 47 | -338 | -608 | 24.0 |
|  | 276 | 248 | 209 | 215 | 129 | 138 | 122 | 122 | -228 | -438 | 26.9 |
| Other | 27 | 16 | 21 | 24 | 83 | 62 | 48 | 53 | -118 | +1218 | 20.2 |
| Totals | 303 | 256 | 230 | 239 | 212 | 192 | 179 | 175: | -218 | -č78 | 24.9 |

* 48 , 1995-87.


## 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 it 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 sectiona of SP1ll Speech Communication running at BCC increased by 25\% during the 1979-82/3 period; and the number of sections of SP111 declined by 38 during the 1982-86/7 period.

As the general education raform of 1092-84 did not change the degree or certificate English composition requirements that had prevailed prior to 1983, it would appear that the 198 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 stuidents to complete remedial courses in English before taking college-level -umposition courses.

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

SP1ll, which may have caused or contributed to the leveling off and slight decline in the number of sections of SPlll running during the 1982-86/7 period.

## Humanities

Enrollments by section in humanities general education courses declined by 23t 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 1983-86/7 period), and literature ( $-25 \%$ during the 1979-82/3 period; -22t 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 enrol'ments by section in the fine arts
declined by 23: before and increased by 5\% after the 1982-84 gisneral 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 generaj education courses in the humanities increased ty 9t during the same period.

Enrollments by section in BCC history courses declined by $12 \%$ between 1979/80 and 2982/3 and went into an even more precipitous decline after the new BCC general education program went into effect ( -308 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 hear, representing an increase of $300 \%$ between 1984 and 1987. If the successful sections of GEIO1 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 $238^{\circ}$ (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 perind, 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 secticn in general education courses in psychology increased hy $21 \%$ between 1979/80 and 1982/3, but by
only 8 f during the $1982-86 / 7$ period. However, the rate of decline in enrollments by section in non-general education courses in psychology was 21t 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 t 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 tio the gensral 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 summe sessions) if that number was offered.

## Natural Scierces and Mathematics

The number of sections of general education courses in the natural sciences and mathematics declined by 34 during the 1979-82/3 period and increased by $6 t$ during the 1982-86/7 period, possibly as a result of the general education reform of 1982-84. Overall enrollmente by section in natural science and mathematics courses deciined by 3 d during the $1979-82 / 3$ period and by 11t during the 1982-86/7 pariod, a continuinf 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 increaser by 19\% during the 1979-82/3 period and by 3 if 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

Enroliments in the BCC health and physical education program have been deciining 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 38 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
2. Music
3. Visual Arts
4. Philosophy \& Religion
5. Psychology
6. Health \& Phys. Ed.
7. Economics
8. Sociology

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

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

## A MAJOR FROBLEM: <br> COMMUNITY COLLEGE STUDENTS AND THE DEMANDS OF GENERAL EDUCATION

The institution of a serious and effective general education program at the sommunity college leve; j.s 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 riyorous college-level program of study in the humanities, social sciences, and natural sciences. Such a prograin will inevitatiy 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 vocakilary, experiences great difficuity with seventh grade arj.thmetic and even greater d:ifficulty 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 "lifeworld."

The average community college student wants the college to equip him w-ch "marketable vocational skills" that will snable 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 inguistic and mathematical skills have now become a central feature of American higher education--at both four-year and twoyear institutions. More and more sturients deficient in the basic skills associated with reading, writing, speaking, logical thinking, and mathematical procedures are coming to college. Eve. 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 scicial 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 $O_{i}$ their subject matters, but of basic literacy.

Such instructors find that they must make every effort to select reading materials, whether primary or scc.nndary, that are at least ciose to their students' average reading comprehension level and to plan class sessions so that the required readings cari be discussed at length and in some depth in class. Technical terminology and concepts must ejther be avoided or very carefully defined and repeatedly reviewed. Instructors in general edication 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 the material presented in their courses. However, writing assigrments 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 concerring exactly what their teachers expect of them, with reference $\because 0$ both reading and writing assignmants.

The community college instructor in a college-level general educaton course can therefore take nothing for granted concerning her students' vocabularies, their comprehension of concepts, or their readiness for college-level raading 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 iiking for the teaching of basic learning skills such as reading, writing, or elementary and seccndary school mathematics.

## CONCLISION

The BCC general education reform described in the foregoing review has been, on the whole, ilighly successful. The program offers students-eespecially those in the college's transfer (AA and AS degree) programs--a comprehensive educational program based on a substistia? sore of general educat in requirements in communications, the numanities, the social sciences, the natural sciences and mathematics, and health and physical education.

Students who fellow the grescriptions and options offered by the BCC general eriucation program will expand significantly their opportunities to be come 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 tinis college's transfer program zequirements. 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 unly 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.

## BIBLIOGRAPHY AND WORKS CTTED

Barr, Donald. Who Pushed Humpty Dumpty? New York: Atheneum Books, 1971.

Barzun, Jacques. The House of Intellect, New York: Harper \& Row, 1959.

Bloom, Allan. The closing of the American yind. New York: Simon \& Schuster, 1987.

Boyer, Ernest L., and Arthur Levine. A ouesi for Common Iearning: The Aims of General Education, Washington, D.C.: The Carnegie Foundation for the Advancement of Teaching, ${ }^{\omega \times}$. Carnegie Foundation Essay," 1981.

Broudy, Harry S. Paradex and Proruse: Eseays on American Ifie and Education. Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1961.

Cohen, Arthur M., and Florence B. Brawer. The American Compunity College. San Francisco: Jossey-Bass Publishers, 1982.

Cronk, George. General Education at Bergen Community college. Paramus, New Jersey: Bergen Community College, 1983.

Derrick, Christopher. Escape From Scepticism: Liberal_Education as if Truth Mattered. Peru, Illinois: Sherwood Sugien \& Co., 1977.

Gray, J. Glenn. The Promise of Wisdom: A Philosophical Theory of Education. New York: Harper \& Row, 1972.

Hall, James W., and Barbara Kevles (eds.). In opposition to core Curriculume Westport, Connecticut: Greenwood Press, 1981.

Hill, Brian V. Educhtion and the Endangered Individual: A Critione of Yodern Thinkers. New York: Dell Publishing Company, 1975.

Hirsch, E.D., Jr. Cultural Ifteracy: What Every American Needs to Knowe Boston: Houghton Mifflin Co., 1987.

Hutchins, Robert M. The University of Utopia. Chicago: University of Chicago Press, 1953.

Johnson, B. Lamar (ed.). General Education in Two-Year colleges (San Francisco: Jossey-Bass Publishers, 1982.

Koerner, James D. (ed.). The New Iiberal Arter An Exchange of Viewne New York: Alfred P. Sloan Foundation, 1981.

Luckinbill, Jeffrey $\mathrm{D}_{\mathrm{i}}$, and Robert H. McCabe. Geneal Education in a Changing Society. Dubuque, Iowa: Kendall/Hunt Publishing Company, 1978.

Piltz, Anders. The World of Medieval Learning. Totnwa, New Jersey: Barnes \& Noble Books, 1981.

Ravitch, Diane, and Chester E. Finn, Jr. What Do our 17-Year Olds Know? New York: Harper \& Row, 1987.

Roche, George Charles III. Education in America, New York: The Foundation for Economic Education, Inc., 1969.

Rushdoony, Rousas J. Intellectual Schirophrenia: culture, Crisis. and Education. Philadelphia: The Presbyterian and Reformed Publishing Company, 1974.

Slusher, Howard J. Mane Sport, and Existence. Philadelphia: Lea and Febiger, 1967.

Starkey, Margaret M. (ed.) . The Education of Yodern Man: Some Differences of opinion. New York: Pitman Publishing Corporation, 1966.

Whitchead, Alfred North. The Aims of Education, New York: The Macmillan Company, 1929.

Zwerling, L. Steven. Second Best: The Crisis of the Community College. New York: McGraw-Hill Book Company, 1976.

## Articles

Botstein, Leon. "A Proper Education." Harper's Magazine, (September 1979), 33-37.

Boyer, Ernest L. "A Call for Common Learning." Review and Procesings of the community colleqe Humanities Association. (Fabruary 1982), 3-6.

Bucher, Charles A. "The Future of Physical Education and Sport." JOPERD. (October 1982), 12-24.

Coles, Robert. "What About Moral Sensibility?" Today's Education. (September-October 1977), 40-44.

Cronk, George. "Teaching Philosophy in the Community College." American Philosophical Associaition Newsletter on Teaching philosophy. (January 1980), 14-19.

English, Raymond. "Back To Basics: A Chance for Educational Reform?" The Univergity Bookmane (Winter 1978), 27-34.

Etzioni, Amitai. "Can Schools Teach Kids Values?" Today's Education. (September-October 1977), 29-38.

Friedrich, Otto. "Five Ways to Wisdom." Time. (September 27, 1982), 66-73.

Hill, Patrick J. "Communities of Learners: Curriculum as the Infrastructure of Academic Communities," in In opposition to Core Curriculum, ed. James W. Hall and Barbara Kevles. Westport, Connecticut: Greenwood Press, 1981, 107-134.

Lynn, Kenneth S. "Son of 'Gen Ed'." Commentary. (September 1978), 59-66.

Sayers, Dorothy L. "The Lost Tools of Learning." National Reviek. (January 19, 1979), 90-99.

Simon, Robert L. "A Defense of Liberal Arts Education." The Occasionel Review. (Autumn 2974), 91-97.

Wick, Daniel L. "In Defense of Knowledge: An Intellectual Framework for General Education." Change. (September 1981), 8-10.

Wresch, William. "Computers in English Class: Finally Beyond Grammar and Spelling Drills." College English. (September 1982), 483-490.

