

**COLLEGE ACADEMIC AND STUDENT SUPPORT COUNCIL**  
**TUESDAY, JANUARY 15, 2008**  
**WOLFSON CAMPUS – ROOM 2106 – 1:30 P.M.**  
**MINUTES**

**CHAIR:** Emily Sendin

<b>MEMBERS PRESENT:</b>	John Alvarez	Santiago Aranegui
	Helen Brown	Loretta Blanchette
	Ana Maria Bradley-Hess	Martha Cavalaris
	Nelson de la Rosa	Frank Elsea
	Olubisi Faoye	Armando Ferrer
	Sheri Goldstein	Malou Harrison
	Harry Hoffman	Marta Junco-Ivern
	Ece Karayalcin	Chris Kinnaird
	A.J. Kreider	Joselle Laguerre
	Irene Lipof	Walter Mackey
	Connie Miller	Pamela Menke
	Oneyda Paneque	Mario Perez
	Yuly Pomares	Madeline Pumariega
	Herbert Robinson	Linda Saumell
	Lois Sargent	Carol Tulikangas
	Grace Telesco	Paul Tisevich
	Maria Vargas-O’Neel	Maria Valenzuela
	Richard White	

<b>MEMBER ABSENT:</b>	Jesus Alvarez	
	Marcia Anglin	Sent Notification
	Euphemia Jackson	Sent Notification
	Lourdes Oroza	Substitute Richard White
	Lourdes Perez	Substitute Mario Perez
	Alfredo Perez-Triff	
	Carol Petrozella	Substitute Connie Miller
	Jesus Reyes	
	Rebecca Sanchez	Sent Notification

**RESOURCE:** Christopher Charles  
Mollie DeHart  
Alan Lopez  
Gina Victoria

- PRESENTER:** Ruth Ann Balla  
Paul Edwards  
Phillip Parkerson  
Richard White
- GUEST:** Beverly Moore-Garcia  
Donna Jennings
- RECORDER:** Carol McAlister

1. **Welcome**  
Emily Sendin welcomed back returning CASSC member Maria Valenzuela (2006-2008 member) who was on maternity leave.

2. **Approval of the December 11, 2007 CASSC Minutes**  
The minutes of the December 11, 2007 meeting were approved as submitted.

3. **Dr. Goonen's Updates**

*Introduction*

Dr. Goonen introduced Dr. Donna Jennings and welcomed her in her new position as the Dean of Workforce Education and Development, effective January 7, 2008. In her prior position at MDC, Dr. Jennings served as the Director of the School of Justice at the North Campus.

*Implementation of the Bachelor of Science in Nursing*

The implementation of the Bachelor of Science in Nursing began this semester (2007-2). Medical Center Campus, along with Kathie Sigler, Walter Mackey, Madeline Pumariega, Mollie DeHart, faculty, and the nursing department were recognized for their dedication and efforts in the implementation of the Bachelor of Science in Nursing.

The semester began with 61 students of which 95% of the students graduated from MDC with an RN degree. All students are active RN's in the state of Florida. BSN elective courses are being developed in order for the students to transition into additional courses. Not only does the state mandate requirements for the Bachelor of Science in Nursing, but it is also necessary for accreditation to meet the National League for Nurses requirements upon graduation of the first BSN class.

*Student Services*

The College was open for two days during the holiday season (January 3<sup>rd</sup> and January 4<sup>th</sup>) for testing, advisement, and registration. As expected, there was a tremendous amount of activity. Students registered for approximately 75,000 credits on January 3<sup>rd</sup>, and a similar amount on January 4<sup>th</sup>. The following Monday, Tuesday and Wednesday were extremely busy days. Enrollment is up approximately 7% college-wide for credit, and 8% for non-credit.

Angel

Concerns were expressed about the Angel meetings held in December, 2007. These dates were selected since Angel personnel were available during this time frame. Unfortunately, many faculty were not able to attend as they were involved in end of semester tasks. Meetings were held on Kendall Campus, Wolfson Campus, and North Campus, and were well attended. If needed, for those who did not have the opportunity to attend, additional meetings will be planned.

Study Abroad Grant

Recognition was given to the Study Abroad Program Manager, Magnolia Hernandez, who in collaboration with Phillip Parkerson and Grants Development personnel prepared the Study Abroad grant. MDC received the \$100,000 grant from the Institute for Study Abroad (IFSA), a private foundation based in Indiana. The grant is to be used for two years (\$50,000 each year) to provide partial funding for 20 students each year to participate in the College Consortium for International Studies (CCIS) study abroad programs in Non-Western European countries. The study abroad program must include a full academic course load for the students, and an on site required service learning project.

Mathematics Across the Community College Curriculum

MDC hosted a national workshop on Mathematics Across the Community College Curriculum. Fourteen teams of math and non-math faculty from throughout the nation gathered in South Beach to discuss course design, strategies to focus on math throughout the curriculum, and to integrate math into a variety of what were traditionally viewed as non-mathematics disciplines. This conference was led by the American Mathematical Association of Two-Year Colleges (AMATYC) and is part of a three year grant funded by the National Science Foundation.

Curriculum

4. School of Computer & Engineering Technologies

Electrical Power Technology Program

Richard White presented a curriculum proposal to add two new course electives to the Electrical Power Technology program.

<u>Course Number</u>	<u>Course Title</u>	<u>Credits</u>	<u>Campus</u>	<u>Eff. Term</u>
ETI 2416C	Power Plant Machines & Components 1	4	1,2,3,5,6,7,8	2007-3

**Course Description:** This course is designed for students who are preparing for careers in industrial and/or power plant mechanical maintenance. Students learn the principles, concepts, and applications of various mechanical systems encountered in industrial applications, how to identify basic systems and components encountered in power plants, how to troubleshoot equipment problems, and basic procedures involved in maintaining and replacing component parts.

Prerequisite: ETI 1870

Special Fee: \$40.00

A.S. degree credit only. (2 hr. lecture; 4 hr. lab)

**UNANIMOUS  
APPROVAL  
35 IN FAVOR  
0 OPPOSED**

<u>Course Number</u>	<u>Course Title</u>	<u>Credits</u>	<u>Campus</u>	<u>Eff. Term</u>
ETM 1315C	Applied Pneumatics and Hydraulics	3	1,2,3,5,6,7,8	2007-3

**Course Description:** This course prepares students to perform mechanical maintenance on industrial equipment and devices. Students learn the theory and application of fluid mechanics, how to calibrate metering devices, and conduct elementary hydraulic tests.

Prerequisite or co-requisite: MAC 1105.

Special Fee: \$40.00

A.S. degree credit only. (2 hr. lecture; 2 hr. lab)

**UNANIMOUS  
APPROVAL  
35 IN FAVOR  
0 OPPOSED**

### Curriculum

#### 5. Biology, Health and Wellness

Harry Hoffman introduced Sandra Schultz who presented a new course description and course competencies for an existing course.

#### Change Existing Course

<u>Course Number</u>	<u>Course Title</u>	<u>Credits</u>	<u>Campus</u>	<u>Eff. Term</u>
HLP 1081	Fitness & Wellness for Life	3	1,2,3,5,6,7,8	2007-3

**Course Description:** In this course students will learn the roles of exercise, physical activity, diet, and stress management in achieving optimal wellness. Students will explore current developments in health and complete lab assignments, which will assist in the determination of their current health status. Individualized exercise and dietary protocols based on these assessments will be developed.

Special Fee. (3 hr lecture/lab)

**UNANIMOUS  
APPROVAL  
35 IN FAVOR  
0 OPPOSED**

6. **Math Course Substitutions for Students with Disabilities**

Paul Edwards, North Campus ACCESS Director, presented the math course substitutions for students with disabilities effective 2007-2 (**Attachment I**). It is the responsibility of the College-wide ACCESS Committee to make recommendations concerning updating the list of courses that can be used as substitutes for mathematics courses by students found to be eligible for such substitution. Input for the updated substitutions came from the ACCESS Directors college-wide, district staff, personnel in the mathematics area, etc. The final document was reviewed and approved by the Academic and Student Deans. The updated selection of courses represents a reasonable and logical approach to course substitution for mathematics. The range of courses is broader, as the prior list was restrictive, which allows individuals with different sorts of learning dysfunction to choose courses which test their abilities rather than their disability.

**COURSE SUBSTITUTION LIST  
FOR MATHEMATICS  
Effective Term - Spring 2007-2**

**CGS 1060 INTRODUCTION TO MICROCOMPUTER USAGE  
EME 2040 INTRODUCTION TO EDUCATIONAL TECHNOLOGY  
ACG 2001 PRINCIPLES OF ACCOUNTING 1  
ACG 2011 PRINCIPLES OF ACCOUNTING 2  
ACG 2021 FINANCIAL ACCOUNTING  
ACG 2100 INTERMEDIATE ACCOUNTING 1  
ACG 2110 INTERMEDIATE ACCOUNTING 2  
ECO 2013 PRINCIPLES OF ECONOMICS (Macro)  
ECO 2023 PRINCIPLES OF ECONOMICS (Micro)  
FIN 2100 PERSONAL FINANCE  
GEB 1011 PRINCIPLES OF BUSINESS  
PHI 1100 INTRODUCTION TO LOGIC  
PHI 2010 INTRODUCTION TO PHILOSOPHY  
PHI 2604 CRITICAL THINKING AND ETHICS  
AST 1002 DESCRIPTIVE ASTRONOMY  
BSC 1005 GENERAL EDUCATION BIOLOGY  
HUN 1201 ESSENTIALS OF HUMAN NUTRITION  
PHY 1004 INTRODUCTORY PHYSICS  
MUT 1001 MUSIC THEORY  
MUT 1111 MUSIC THEORY**

7. **International Education Committee**

Phillip Parkerson, Chair of the International Education Committee, presented an International Education Committee.

The International Education Committee (IEC) has been reconstituted and revived for 2007-2008 with faculty and staff representatives from every campus and the Virtual College. The Student Government has not yet named a representative to serve on the committee. The IEC is chaired by the Director of the Office of International Education (OIE).

The committee held two meetings during the fall term. At the first meeting on November 1, 2007, the committee discussed OIE initiatives in China, MDC's designation by the Department of State as a sponsor for Academic Exchange Visitor Programs (J-1 visa), the proposed International Student Recruitment Plan, and the Study Abroad Program. The group provided excellent input and suggestions for developing all the programs discussed. For example, it was recommended that Miami Dade College look into partnering with other U.S. institutions in our efforts to develop programs in China in order to offer enhanced opportunities to the students in those programs. It was also recommended that to an international student focus group, drawn from the MDC International Student Association, would be helpful in developing an international marketing strategy for MDC. One idea for such a marketing campaign was that MDC should produce a professional DVD with international students providing testimonials.

The second meeting of the International Education Committee took place on December 4, 2007. At that meeting, the committee was introduced to Diplomat-in-Residence Hilarion Martinez who briefed the group on his mission at MDC, the types of support he can offer to faculty and students, and various opportunities for fellowships and internships in foreign affairs provided by the Department of State and other federal agencies. The Associate Dean of International Programs at Wuxi South Ocean College, our partner institution in China, discussed plans for an articulation agreement for AA programs and to offer MDC AS degrees at Wuxi South Ocean College. Other topics of discussion were opportunities for faculty and students, such as the Fulbright Scholar Program, and the IIE/State Department international undergraduate programs that are designed to bring foreign students to community colleges in the U.S.

The International Education Committee is comprised of a group of highly motivated and dedicated faculty and administrators who are enthusiastic about developing international education programs at MDC. The next meeting is scheduled for January 31, 2008, where the group will discuss goals and objectives for international education at the College and other topics to be raised by committee members.

8. **ANGEL**

Ruth Ann Balla, Executive Director, Virtual College, discussed Angel implementation. Although she represents Virtual College, she represents the entire College for Angel implementation.

In December three meetings (Kendall, North, Wolfson) were held to gather input from faculty on the ANGEL implementation. Based on the discussion of those meetings, the following action items are planned:

- **Installation of the ANGEL December Service Pack**  
The service pack addresses many of the issues with Course Mail, as well as other improvements. The service pack was installed Friday, December 28, 2007.
- **Training**  
The Executive Director of Virtual College, Ruth Ann Balla, is working with College Training and Development (CT&D) and ANGEL to schedule face to face training during the spring term. A trainer from ANGEL will come to MDC, and you will be informed of the topics, dates and locations. If you have topics you would like to suggest, please send an e-mail to Ruth Ann Balla.
- **Availability of WebCT**  
The availability of WebCT will be extended. Originally the timeline had all courses (web enhanced and Virtual College) in ANGEL by summer (2007-3). Ruth Ann Balla explained that while she did not have the exact term to share at this meeting, Web CT would be available for web enhanced courses for at least 2007-3 and 2008-1. The terms, including the dates for virtual College courses, will be confirmed early in the spring term.

Faculty input will be solicited later in the spring term to evaluate the effectiveness of these items as well as plan the next steps.

9. **Announcements**

**Open House**

Madeline Pumariaga announced that MDC will host an Open House at all campuses and outreach centers on Wednesday, January 30, 2008, from 6:00p.m.-8:00 p.m. The event targets high school students, parents and anyone interested in higher education or career advancement. Attendees will receive information about financial aid and scholarship opportunities, admission requirements, and other pertinent information.

**Health Fair**

Madeline Pumariaga announced that the Medical Center Campus will host its annual Community Health Fair on Saturday, February 16, 2008, from 9:30 a.m. through 2:00 p.m. The Health Fair will be open to all College employees as well as the community.

CASSC Meeting  
January 15, 2008

Attendees will receive glaucoma, blood pressure, glucose, and cholesterol tests, as well as chair massages and dental screening.

*Faculty Recognition*

Armando Ferrer expressed his thanks to faculty for the efforts and assistance they provided during the first week of the semester by helping with advisement, directing students to get to locations, etc. Not only is wonderful work done in the classroom by faculty, but also their additional assistance is always appreciated, especially during peak registration periods. Please take this information back to the campuses.

*Mini-Term*

Armando Ferrer announced that the mini-term is coming up, and requested assistance to make sure that all students are aware of the mini-term.

*BSN Implementation Acknowledgement*

On behalf of Walter Mackey and Madeline Pumariega at Medical Center Campus, Pamela Menke recognized the efforts of Mollie DeHart, who chaired the BSN Implementation Steering Committee, as well as recognizing the faculty and staff at Medical Center Campus.

The meeting was adjourned at 2:30 p.m.

**(ATTACHMENT I)**

**REPLACING THE CURRENT COURSE SUBSTITUTION LIST  
ACCESS**

Federal laws, State laws, and State regulations clearly create and authorize the substitution for courses required for graduation by a student with disabilities whose specific diagnosis makes it impossible for him or her to successfully pass such courses. Procedures allow the substitution of any coursework. However, in practice, over 99% of all substitutions done at Miami Dade College have related to mathematics. Indeed, we have not felt the need to work to develop appropriate course lists except as substitutes for mathematics. Cases of other course substitutions can and should be dealt with on an individual basis. This document then will deal with altering our current list of courses, which can be used to substitute for mathematics requirements. College procedures are in place which describe in detail the steps which must be taken before a course substitution or CLAST Waiver in mathematics can be approved. Every student must present documentation which clearly indicates that his or her ability to do mathematics is directly and substantially compromised by his or her disability. The student is typically required to take a math class under the auspices of an access department so that he or she can receive tutorial support and extra time testing. Where possible, we work directly with instructors to see if accommodations can be made that will allow our students to be successful in mathematics. Only when all these approaches do not work, will we resort to course substitution and/or a CLAST waiver.

Under current College procedures, it is the responsibility of the College-wide ACCESS Committee to make recommendations concerning updating the list of courses that can be used as substitutes for mathematics courses by students found to be eligible for such substitution. It is expected that the committee will seek input from personnel in the mathematics area. Initially, our committee of ACCESS Directors and district support staff developed a list of proposed courses and the original version of this document. That was shared with two mathematics department Chairs, from North Campus and Inter-American Campus. We made changes to the document based on their feedback. During the Spring and Summer of 2007, the document was sent to the Deans of Student Services and to the Deans of Academic Affairs. It was approved by these groups and went to Campus CASCCs. Some issues were raised there and it was decided that, before the proposal was sent to College-wide CASCC, it should be reviewed by the mathematics faculty members. The document was thus e-mailed with other documents to the mathematics faculty who raised some questions about the efficacy of allowing course substitution, but had no specific comments on the courses proposed.

After consultation, it was decided that there was sufficient concern about the process that had been followed for the document to be required to go through the whole process AGAIN during the Fall semester. It was suggested that the first step be its formal presentation to the mathematics discipline meeting. This presentation occurred on Monday, September 24<sup>th</sup> in room 3215 on the Wolfson Campus. It was suggested that a number of changes be incorporated into

the document and this version reflects those changes. Assuming that the changes they wished are reflected in the document that goes forward, the Mathematics Discipline members present at the meeting accepted that their concerns were recognized and validated WITH changes made in the document.

Between the Summer and now, one proposed change was requested by a representative of one of our ACCESS Departments. This change was discussed with the Mathematics Discipline and therefore is incorporated into this document. He had requested that a second level music theory course be retained as a substitute course rather than being dropped as it had been in our earlier proposal. The document was circulated to the ACCESS Directors and was adopted by that committee at our meeting on October 11, 2007 on Kendall Campus Campus. The document will then go on to the Deans of Student Services, the Academic Affairs Deans, and then to Campus and College-wide CASSC. It is hoped that we will be able to use the new course list for substitutions proposed during the Spring semester. It is thus hoped that we can get this document through the review process by the end of the Fall semester.

When the list of courses was originally adopted, the primary principle that was used was that the courses that were chosen were deemed to include in their curricula some components which measured or taught elements similar to those inherent in mathematics. Thus, in music theory, to take one instance, there is a good deal of mathematics and logic involved in scales, notation, chords and so on.

As part of the current procedure, then, the CWAC proposes to make changes in the current list of courses which can be used. For the sake of completeness, the current list follows.

### **STUDENTS WITH DISABILITIES CURRENT 2006 MATHEMATICS SUBSTITUTION LIST**

The following courses may substitute for General Education Mathematics courses:

- ACG 2110 INTERMEDIATE ACCOUNTING 2**
- CGS 1060 INTRODUCTION TO MICROCOMPUTER USAGE**
- ECO 2013 PRINCIPLES OF ECONOMICS (MACRO)**
- FIN 2100 PERSONAL FINANCE**
- HUN 1201 ESSENTIALS OF HUMAN NUTRITION**
- MUT 1111 THEORY**
- PHI 1100 INTRODUCTION TO LOGIC**

It is the contention of the committee that the number of courses available as substitutes is simply too limited. Some of the courses are also not easily found on all campuses. Nor do they

necessarily seem to us to be the most appropriate courses that might have been chosen. Of the courses on the list, we are recommending that two be retained on the list but have easier options also made available from their subject areas: music theory and Accounting.

We would make the following comments on the currently used list. While the Personal Finance course is a good one, it is becoming more and more difficult to find. We would be happy to see it more widely taught. It is a course that our students can use and seem to do well at. If macro-economics is allowed, surely micro-economics ought to be permitted as well. After some considerable discussion, it was also decided that it was appropriate to include five accounting classes and two music theory classes. The rationale for these decisions will be described later when the new list is discussed in detail.

In addition to the principles described above, a recent report prepared by the State Division of Community Colleges was consulted by our committee and two chairs from the mathematics discipline group who initially worked with the CWAC. This document contains the results of a survey which was circulated last Fall to all of the community colleges in the state. At every stage, we were eager to find classes that appear not only to meet our criteria but which also appear to accord with the decisions of other similar institutions throughout the state.

Appended below is the complete summary of the results of this State-wide survey which was circulated at the end of February of 2007. It is helpful to know that the procedures and courses used by most of the colleges appear to be consistent with what we currently do and with what we propose to do. As compared to what is being done elsewhere, the CWAC thinks that our procedure stands up well. Here is the state summary.

### **Substitute Courses for Students with Disabilities**

#### *Survey Summary*

Twenty-six Community Colleges participated in the survey. The purpose of this survey was to compile information regarding substitute courses for the general education math requirement for students with disabilities. This list will be shared among the postsecondary institutions in the state in an effort to ease the transition process for students with disabilities. Below is a summary of the findings.

#### **Courses allowed for the two general education Mathematics courses:**

- Most community colleges have a list of courses that are approved for substitution. These courses are generally in the area of Accounting, Economics, Computer Science, Philosophy, and Psychology.
- Community colleges that do not have a predetermined list of courses meet with the individual student to discuss his/her goals before deciding which courses will be taken as substitute courses.

#### **Order in which substitute courses must be taken:**

- Most community colleges do not require that courses be taken in any particular order unless there are prerequisites for the substitute course, in which case, the prerequisites must be completed first.
- Lake City Community College requires that students have a minimum GPA of 2.0 and 12 credits before requesting substitution.

**Institutional process for getting substitute courses approved:**

- Most institutions utilize committees that meet once a student has requested a substitution to determine if the course can be substituted.
- Other community colleges involve deans and department chairs to make decisions about course substitutions.
- At two of the colleges, final approval of substitute courses is made by the college’s Board of Directors.
- Almost all of these committees include a staff member from the student disability services office.

**Approval process for students:**

- Student must have a documented disability from a licensed practitioner.
- Student must submit a request in order to initiate approval process.
- Request is reviewed by appropriate staff member and/or committee.
- Some community colleges require that students attempt the course once before requesting substitution.

**Courses substituted OTHER than two general education math requirements:**

- Most requests for substitution have been made for speech and communication courses. These courses have been substituted with courses in subject areas such as literature, computer applications, and management.
- Some community colleges have allowed ENC 1101 and 1102 to be substituted with courses in humanities and business communications.
- Foreign language substitutions have been made with courses in a variety of subject areas, including humanities, literature, and history.

**List of Substitute Courses**

<i>Community College</i>	<i>Substitute Courses for 2 General education Math Requirements</i>
	It depends upon the student and his/her goals. In the past, two computer courses, a natural science, or something similar have been substituted in.
<i>Brevard Community College</i>	
<i>Broward Community College</i>	PHI1100, FIN1100, CGS1100, MTB1103
<i>Central Florida Community College</i>	CGS1100, MGF1107, PSY2010, STA2023, MAT0024C, MAT1033, MTB1103, PHI1100
<i>Chipola College</i>	ACG 2021, APA 1251, CGS 1060, CGS 1510, CGS 2930, CGS 1550, COP 2000, ECO 2013, ECO 2023, MGF 1106 (instructor consent required), PSC 1121 (instructor consent required), PSC 1121L, SPC 2050
<i>Daytona Beach Community College</i>	APA 1111, APA 1121, ACG 2071, ACG 2022, ECO 2013, ECO 2023, GEB 1011, QMB 1001, PHI 2001, PHI 2002, CGS 2100, BSC 1005C, ZOO 2010C/L, MET 2010, SPC 2600, ENC 1200 OST 2336
<i>Edison College</i>	CGS1100, PHI2100.
<i>Florida Community College at Jacksonville</i>	AST1002, CGS1100, CGS1570, CGS2542 (prerequisites are CGS1060 and CGS1570), FIN2100, ISC1001, MUT1001, OST1324, PHI2010, or any biological or physical

	science courses which are being used as an elective.
<i>Gulf Coast Community College</i>	Substitution for MGF 1106: CGS 1570 or EME 2040 Technology for Teachers. Substitution for MGF 1107:ECO 2013 or ECO 2023 or PHI 2600 or PHI 2002
<i>Indian River Community College</i>	CGS1100, CGS1060, PHI1103, CIS1000, COP2000
<i>Lake City Community College</i>	ACG 2021, COP 1000, ECO 2013, FIN 2001, MUT 1121 PHI 1100, PTN 1102
<i>Lake-Sumter Community College</i>	COP 1000, CTS 1262, COP 1822, ECO 2013, COP 2120, ECO 2023, COP 2121, ACG 2022, COP 2220, QMB 1001, COP 2222
<i>Manatee Community College</i>	CGS 1000,ACG 2021,ACG 2071,PHI 2100, QMB 1001, AST 1002 , ISC 1141C, PSC1121C
<i>Miami Dade College</i>	ACG 2110, CGS 1060, ECO 2013, FIN 2100, HUN 1201, MUT 1111, PHI 1100
<i>North Florida Community College</i>	philosophy, religion, ethics (abstract thought), computer applications and hardware (analytical), science (same department)
<i>Okaloosa-Walton College</i>	PHI 2010, PHI2600, CGS1100, ECO 2013, ECO2023
<i>Palm Beach Community College</i>	CGS1570, PSY2012, ECO2013, ECO2023, PHI1010, PHI1100
<i>Pasco-Hernando Community College</i>	Include, but not limited to: One each 1000 & 2000 level for AA; One 1000 OR 2000 level course for AS...as follows-AST 1002, BSC 1005,BSC 1020, BSC 1050, CGS 1060, CGS 1100, ANT 2000, BUL 2561., DEP 2004, OCE 2001, SOP 2772, Others as relevant to program of study
<i>Pensacola Junior College</i>	CGS 1570,PHI 2100
<i>Polk Community College</i>	CGS1061C Intro to Computer for MGF1106, CGS1100 Business Application for MGF1107
<i>Santa Fe Community College</i>	(Courses with a * are frequently selected) ACG2001, ACG2011, ACG2450, *CGS1000, CGS1101, ECO2013, ECO2023, MTB1310, *MAT0024, *MAT1033, MTB1103, *REA2205, and *science courses.
<i>Seminole Community College</i>	ACG 2021C, ACG 2071 , CET 1486C, CGS 1060C, CGS 2100C, CGS 2108C, CGS 2540C, COP 1000, ECO 2013, EGS 1111C, ETD 1320C, FIN 2100, GRA 2101, QMB 1001
<i>South Florida Community College</i>	Courses are determined by the students` declared major
<i>St. Petersburg College</i>	No specific list - substitution is determined by the committee and based on the student's program, etc. Some of the substitutions made in 2005-2006 include: CGS 1000, CGS 1100, GEB 1011, ISC 1141
<i>Tallahassee Community College</i>	OST1324, CGS1060, EME2040, MAT1033, All general education science courses
<i>Valencia Community College</i>	ACG 2021, MGF 1106, MGF 1107, PHI 1100, CGS 2100, CGS 2510, AST 1002, FIN 2100, ECO 1000, ECO2013, ECO1000, ECO2023, MUM 2XXX, HUN 100, HUN 2202, HLP 1081, SBM 1000, GLY 1001, GLY 2010C, GLY 2100C, GEB 1011, APA 1111, BSC 1050, PCB 1440, BSC 1005, BSC 1010C, BSC 1011C, BSC 1026, BOT 2010C, MCB 2010C, PHI 2600, PHI 2604, EME 2040, MET 1023, OCE 1001, PCB 2304

END OF STATE SUMMARY

It will be noted from the State summary that there is a wide variety of courses that are used at various institutions. Our committee is of the opinion that the approach taken in the past by this

institution is the correct one. Thus, in recommending courses that can be used, we reiterate the belief that our students are best served by choosing courses which can be demonstrated to include some of the skills inherent to the learning of mathematics. Thus, logic, ordering, the use of numbers, reasoning, deduction, and abstract reasoning are all skills that we would potentially look for when making choices for substitute courses. Some of the courses we have chosen actually included a good deal of mathematics. This is because many of the students who qualify for course substitution manage to pass two or even all three prep math courses. Since other students cannot, because of their disability, get beyond MAT0002, we must also be certain that there are courses included on the list that do not require a high level of numeracy. A couple of institutions in the state essentially allow the substitution by any natural science course for either math course. We believe this goes too far and our math consultants particularly expressed concern that all natural science courses do not involve a sufficient quantity of math-like learning. Instead they focus on memory and observation. Clearly one of the principles that all who have worked on this project espouse is choosing courses that mimic math competencies. However, we as a committee also wanted to use our experience to try to acquire a broad enough range of courses to allow students with a variety of learning disabilities or math-limiting functions to be able to find courses that are relevant and that test their abilities rather than their disabilities. There are actually three institutions on the list who appear to allow any science course to substitute for any math course. While speculation is futile, the committee decided that part of the reason relates to how science and math are perceived by those working with students with disabilities. Obviously, the most mathematically relevant science subjects are quite beyond any who seek course subs in math. Thus, advanced physics is just not an option and some of the more quantitative engineering courses will not work either. In fact, it may be worth noting that in a huge proportion of cases where students are approved for course substitutions, it is their impaired ability to analyze and reason that stands out the most. For those students, logic and critical thinking are extremely difficult and the rote learning inherent in some natural science courses is easier for them to handle. We would argue that any science course that is well taught must encourage students to practice both inductive and deductive reasoning and ought as well to encourage logical speculation based on evidence. In addition, biology and astronomy both involve measurement, comparison, and actually require at least arithmetical computation at various stages. After consultation with the mathematics discipline at their meeting in September, we are adding PHY 1004 which is an introductory course in physics which only requires intermediate algebra. For some of our students whose mathematics disability does not operate at lower levels, this may prove to be a viable course.

Our current list is far too restrictive and only includes 7 options. Below is the proposed list of course substitutions. Below the list you will find some additional analysis of those courses that are included.

**COURSE SUBSTITUTION LIST  
FOR  
MATHEMATICS Spring 2007**

**CGS 1060 INTRODUCTION TO MICROCOMPUTER USAGE**

**EME 2040 INTRODUCTION TO EDUCATIONAL TECHNOLOGY**

**ACG 2001 PRINCIPLES OF ACCOUNTING 1**

**ACG 2011 PRINCIPLES OF ACCOUNTING 2**

**ACG 2021 FINANCIAL ACCOUNTING**

**ACG 2100 INTERMEDIATE ACCOUNTING 1**

**ACG 2110 INTERMEDIATE ACCOUNTING 2**

**ECO 2013 PRINCIPLES OF ECONOMICS (Macro)**

**ECO 2023 PRINCIPLES OF ECONOMICS (Micro)**

**FIN 2100 PERSONAL FINANCE**

**GEB 1011 PRINCIPLES OF BUSINESS**

**PHI 1100 INTRODUCTION TO LOGIC**

**PHI 2010 INTRODUCTION TO PHILOSOPHY**

**PHI 2604 CRITICAL THINKING AND ETHICS**

**AST 1002 DESCRIPTIVE ASTRONOMY**

**BSC 1005 GENERAL EDUCATION BIOLOGY**

**HUN 1201 ESSENTIALS OF HUMAN NUTRITION**

**PHY 1004 INTRODUCTORY PHYSICS**

**MUT 1001 MUSIC THEORY**

**MUT 1111 MUSIC THEORY**

(For students who have passed MAT1033, there is a possibility that they can pass all math courses necessary for graduation by following the suggestions made in the second paragraph on page 9 of this document.)

Our old list had seven options while the new **SUBSTITUTION LIST** has twenty. Three are natural science options: descriptive astronomy, Introductory Physics, and biology. All of these options involve the exercise of the scientific method and include many other mathematics-like components. The nutrition course from our original list is retained and has several applied mathematics components that make it a good option for our list. We have included two business courses: Principles of Business and Personal Finance. Each of these has quantitative components as well as the requirement of comparison and analysis, all three of which are mathematical skills. We have also made Micro-economics available as well as Macro, this seems reasonable. It is arguable that micro has a larger math component than macro does. Virtually all the institutions in the state that listed economics as an option included both courses. We have added two courses in the humanities area, Introduction to Philosophy and Critical Thinking and Ethics. Both focus on reasoning, analysis and comparison which are all valid mathematical skills. They join the Introduction to Logic course which was on our old list but which many of our students found very difficult. We have added one course in educational technology which is an appropriate complement to CGS 1060 from our original list. We now allow any of five accounting courses. Included are the first and second parts of Principles of Accounting, the first half and the second half of the Intermediate Accounting course. Also, for those who are good at arithmetic, we have included financial accounting which is, essentially, the two halves of intermediate accounting as a single course. We have retained the more arduous intermediate music theory course which some of our hardier music majors may be able to handle but have added the very first theory course which we believe more of our music majors will be able to complete successfully.

It is our belief that this selection of courses represents a reasonable and more logical approach to course substitution for mathematics. The range of courses is broader which allows individuals with different sorts of learning dysfunction to choose courses which test their abilities rather than their disability. We believe that we have also added courses to the list which are more widely available on small and large campuses alike. Finally, we believe that the adoption of this new list will represent a codification of the specific courses in our list and also of the principles at the heart of the selection process. At the end of the day, it is important that all involved in this process recognize that course substitutions are a last resort. ACCESS Services does everything in our power to enable students to pass courses. We provide students with extra time for taking tests; we provide students with tutorial assistance which supplements that available in Math Labs; and we encourage professors to consider modifications to their course work for our students which might allow them to pass math courses. A blind student, for instance, might be allowed to handle graphs in a different way or might substitute another skill. The point is that our goal is to make it possible for students to complete their requirements without substitution. Our process for substitution is deliberate and careful and requires that students prove beyond a reasonable doubt that they have tried to complete their mathematics requirements and that they have a disability which clearly makes mathematics an issue.

After considerable discussion with the mathematics discipline, it was clear that we would all prefer to see as many students as possible get as far as possible in mathematics study. So, for those students who are able to pass MAT 1033, we will be specifically recommending that they try MGF 1107 and then MGF 1106, rather than the more traditional MAC 1105. We in Access also agreed to look hard at Business Statistics, QMB 2100 for those who may need Statistics. As a Business course, it has less rigorous mathematics. There are also some plans to make

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Geometry for Educators (MTG 2204) countable for CLAST purposes. It might, then, represent a viable option for some of our students.

On the other hand, the availability of course substitution enables students who have worked hard and who have a valid disability to earn the degrees they deserve. Our committee believes that, with the approval of this new list, our procedure will afford our students an appropriate and deserved set of options which will allow them to graduate successfully from Miami Dade College.

We would like to thank Virginia Puckett, Jermaine Brown, and those present at the Mathematics Discipline meeting for providing valuable input from the mathematics side. Their input has helped us to make our process better. At our meeting on October 11<sup>th</sup> 2007 the College-Wide Access Committee (CWAC) endorsed the contents of this paper and agreed to send forward the document and the proposed course substitution list it contains. The CWAC, the Deans of Students and the Academic Affairs group have now all approved our recommendations which are now ready to go to CASCC.