College Algebra      MA 131         3 credit hours    Fall 2008

Instructor: __________________________ Title:_____________________________________
Office Location: ______________________Office Phone: _____________________________
Email: ______________________________Office Hours:______________________________

Date: August 13, 2008

**PREREQUISITE:** MA 113 or an appropriate score on the placement test or an appropriate SAT/ACT score.


**COURSE DESCRIPTION:** Emphasis is on a skills approach to college algebra. Topics include: operations with polynomial and rational expressions; factoring algebraic expressions; functions and functional notation; domains and ranges of functions; graphs of functions and relations; linear, quadratic, and rational functions; operations with functions; inverse functions; absolute value and radical functions; exponential and logarithmic properties, functions and equations; systems of equations and inequalities; applications (such as modeling, exponential/logarithmic growth & decay, etc.). Emphasis is placed on learning to read the language of mathematics in addition to the use of technology. Some sections may require the use of graphing calculators. MA 131 is not open to students with credit in MA135.

**COURSE GOAL:** The goal of this course is to provide students with a solid mathematical foundation in the development of critical and analytical skills, thus providing students with insight into mathematical abstraction and structure. Another goal is to provide problem-solving abilities needed for formal education and for their lives as educated adults. Emphasis will be placed on algebraic concepts, as well as reading and writing the language of mathematics and use of technology in mathematics.

**BETHUNE-COOKMAN UNIVERSITY MISSION STATEMENT:**
The mission is to serve in the Christian tradition the educational social, and cultural needs of its students—traditional and nontraditional—and to develop in them the desire and capacity for continuous intellectual and professional growth, leadership and service to others. Institutional priorities in the mission of the College are teaching, research, community service and commitment to moral and personal values.
IMPACT ON B-CU MISSION AND INSTITUTIONAL STUDENT LEARNING OUTCOMES (ISLOs)
Through the attainment of the Course Student Learning Objectives (CSLOs), students will acquire knowledge, skills and competencies outlined in the Institutional Student Learning Outcomes (ISLOs), School Student Learning Outcomes, (SSLOs) and Program Student Learning Outcomes (PSLOs). The Course Student Learning Objectives fully support the University Mission and Core Values as stated in the Strategic Plan, as well as the School Goals.

The Institutional Student Learning Outcomes (ISLOs) include the following:
1. Complex cognitive skills
2. Practical knowledge and competency
3. Appreciation of human differences and commonalities
4. Integrated sense of identity and civic responsibility

FRESHMAN COLLEGE SCHOOL STUDENT LEARNING OUTCOMES (SSLOs) ADDRESSED IN THE COURSE OBJECTIVES

Upon completing Freshman College courses, freshmen will apply quantitative reasoning through the application of knowledge, skills, and competencies when solving math and real life problems with satisfactory performance on tests, quizzes, exams, and/or other assessments.

MATH AREA PROGRAM STUDENT LEARNING OUTCOMES (PSLOs) ADDRESSED IN THE COURSE OBJECTIVES

1. Upon completing Freshman College courses, the student will be able to interpret mathematical models such as formulas, graphs, tables, and schematics and draw inferences from them when solving math and/or real life problems with satisfactory performance on tests, quizzes, exams, and/or other assessments.
2. Upon completing Freshman College courses, the student will be able to represent mathematical information symbolically, visually, numerically, and verbally when solving math and/or real life problems with satisfactory performance on tests, quizzes, exams, and/or other assessments.
3. Upon completing Freshman College courses, the student will be able to use a variety of mathematical methods (algebraic, geometric and/or statistical methods, utilizing technology when appropriate) when solving math and/or real life problems with satisfactory performance on tests, quizzes, exams, and/or other assessments.

ACADEMIC AFFAIRS VISION:
Students will graduate B-CU as transformative leaders with complex cognitive skills; practical knowledge and competency; an appreciation of human differences; and an integrated sense of identity and civic responsibility that prepares them to live successfully within a multicultural and global community.
COURSE STUDENT LEARNING OBJECTIVES AND MEASUREMENTS

1. The Freshman College Algebra student will demonstrate knowledge of the fundamental concepts of algebra when determining characteristics and properties of relations and functions by performing algebraic processes on course work and exams. PSLO 1, 2, 3 (exam question/problem demo)

2. The Freshman College Algebra student will demonstrate the ability to solve and graph a variety of equations, inequalities, relations and functions on course work and exams.

3. The Freshman College Algebra student will demonstrate understanding of the concepts of this course by applying knowledge of given functions to real world problems (such as quadratic modeling or exponential growth and decay problems) on course work and exams.

METHODS OF INSTRUCTION:
Instructors will use a variety of instructional methods including interactive classroom exercises, small group activities, class discussion, and short lectures.

REQUIREMENTS OF THE COURSE:
1. Each student must have the required textbook and a graphing calculator.
2. All students are required to attend each class punctually and to remain in class until dismissed by the instructor. Regular attendance is essential for student success in mathematics courses, and 3 or more absences may result in a failing grade. Excused absences include those absences incurred by the student’s participation in college or class-sponsored activities. Absences due to illness will be excused only with proof of illness with official documentation from physician or verifiable authority. All excuses must be immediately presented to the instructor when the student returns to class. Each student is responsible for informing teacher(s) of impending absence(s) from class when the student has such information. All students must complete all make up work within 48 hours after returning to class. The student is responsible for all notes, assignments, and announcements given in class whether or not the student is present.
3. Students will use standard English (written & spoken) in class.
4. Students will keep a notebook consisting of all class notes, assignments, and assessments and will bring it with them to their scheduled classes.
5. Cell phones are strictly prohibited in the classroom. Use of a cell phone in any aspect may result in the student being removed from the room, marked absent, and a grade of zero given for class work or assessments.
6. Students will complete all assignments given by the instructor no later than the assignment due date. No late assignments will be accepted. If a student misses a class, the student is responsible for obtaining the exact assignment from the instructor or a classmate.
7. Charges of cheating on lessons, tests or examinations are subject to disciplinary action by the faculty and administration. (B-CU Catalog pg. 61)

TECHNOLOGY REQUIREMENTS:
This course requires a TI 84 or TI 83 plus graphing calculator to be used at the discretion of the classroom teacher. Tutorial software is provided with the book.

ASSESSMENT AND GRADES:
The possible grades for this course are: A, B, C, D, F, and I.
Grades of A, B, or C indicate that the student has successfully completed the course by having the
appropriate average as indicated below.
Grades of D or F indicate that the student has not successfully completed the course and that THE COURSE MUST BE REPEATED (as stated in the college catalog).
A Grade of F indicates that the student has not successfully completed the course OR HAS EXCESSIVE ABSENCES.
The “I” grade is only given to a student who maintains a passing grade on their completed coursework but has extraordinary circumstances which prevents the student from completing all of the course work. This grade is only given through special permission of the instructor and department coordinator. NOTE: The grade of “I” will automatically change to “F” if it is not removed within the first six (6) weeks of the following semester.

**POINT DISTRIBUTION:**
Final Exit Examination 20% 200 Points
Midterm 10% 100 Points
Tests 40% 400 Points
Homework 10% 100 Points
Attendance 10% 100 Points
Class work/Quizzes 10% 100 Points
Total 100% 1,000 Points

**GRADING SCALE:** The following grading scale will be observed:
90 - 100% or 900 – 1000 POINTS A
80 - 89% or 800 – 899 POINTS B
70 - 79% or 700 - 799 POINTS C
60 - 69% or 600 - 699 POINTS D
0 - 59% or 0 - 599 POINTS F

**TOPICAL OUTLINE TEMPLATE**
***See individual instructors’ supplementary outlines for detailed information about courses reflecting specific learning community themes and assignments and plans unique to individual sections. The course will include two library research assignments.

**INCOMPLETE POLICY**
In the event of an extreme and unavoidable circumstance that would inhibit the student from successful completion of the course, a student may request to be given an incomplete by the instructor upon approval of the area coordinator. The instructor and the area coordinator reserve the right to deny a student’s request for an incomplete. Prior to receiving an incomplete the student must have a passing grade in the course. Students who request an incomplete must have official documentation to support the request. Examples of official documentation include proof of illness from a physician or verifiable authority, death certificates or obituaries, military activation letters on government letterhead. **Students will not be granted an incomplete for the following reasons:** failure to take the exam at the appropriately scheduled time or location or unsatisfactory performance on an exam. Upon receiving an incomplete, it is the student’s responsibility to complete all assignments and tests agreed upon by the student and the instructor before the removal of incomplete deadline set by the registrar. Failure to complete any assignment will result in the failing grade in the course.

**ACADEMIC HONESTY**
Students must submit their own work, and they must acknowledge any outside help they had in preparing an assignment. If anyone copies or paraphrases the words of another writer without
acknowledgement or submits another person’s work as his or her own, that person is guilty of plagiarism. Evidence of cheating or plagiarism will result in the student receiving a grade of “0” for the work and may result in an “F” for the course. Plagiarism and cheating are major violations of the Student Code of Conduct and may result in the student’s indefinite suspension from the college.

CLAST POLICY
Students must demonstrate appropriate communication skills prior to enrolling in senior seminar. Students who pass 3 parts of the CLAST (excluding math) or obtain a 2.5 GPA in English (EN 131 and EN 132) and reading (RE 260) will be allowed to enroll in their respective senior seminar courses. Transfer students who have passed the 3 CLAST communication tests, satisfied current exemptions or having an AA degree, will not be required to take RE 260 or the CLAST prior to enrolling in senior seminar. Under documented and extenuating circumstances, students may petition the CLAST Review Committee for exemptions from this policy. (OAA Revised May 29, 2008).