

**COURSE NUMBER, TITLE**      MAT 104, College Algebra.

### **COURSE TEXT**

Paul Sisson.      College Algebra – a concise approach.      First Edition.      Hawkes Learning systems 2012.  
**ISBN #: Software Only:** 978-0-918091-59-8;      Software and Textbook Bundle: 978-1-935782-04-9;  
**Software and eBook Bundle:** 978-1-935782-36-0

### **COURSE DESCRIPTION**

Review of the fundamentals of algebra; linear and quadratic equations and inequalities; functions and graphs; systems of equations and inequalities; exponential and logarithmic functions; and theory of equations. A student who has earned credit in MAT 106 cannot receive credit for this course. Prerequisite: 2 years of high school algebra or equivalent. ( 3 credit hours )

### **GENERAL COURSE OBJECTIVES (GOALS)**

Students will demonstrate active engagement in their learning experience by interacting with the Hawkes Learning Systems Course Management system software to demonstrate “Mastery” learning of the material in completing homework assignments, and to take quizzes and tests.

### **GENERAL EDUCATION COMPETENCIES**

Students will demonstrate competency in:

- GE 1. **Critical and Creative Thinking** – Developing sound analytical and reasoning skills and the ability to use them to think critically, solve problems, analyze logically and quantitatively, and effectively respond to change.
- GE 2. **Communication** – Developing skills to communicate effectively through reading, writing, speaking, and listening.
- GE 3. **Quantitative Skills**- Developing enhanced abilities for symbolic and numeric reasoning.

### **SPECIFIC OBJECTIVES**

Upon completion of the course, the student will be able to:

1. Simplify algebraic expressions.
2. Solve linear equations.
3. Solve quadratic equations.
4. Solve inequalities.
5. Solve applied problems.
6. Describe and define a function.
7. Find the equation of a linear function satisfying given conditions.
8. Identify the domain and range.
9. Find the intercepts of an equation or graph.
10. Sketch the graph of a function.
11. Verify that a function has an inverse and compute the inverse of a function.
12. Simplify exponential and logarithmic expressions and solve equations.
13. Solve systems of linear equations.

### **MAJOR STUDENT ACTIVITIES**

1. Regular and punctual class attendance as determined by the regulations of the University and the Department.
2. Students must complete homework by due dates as assigned through the HLS software.
3. Students will take weekly quizzes in the math lab using the HLS software.
4. Students will take four pre-announced tests in the math lab during the semester.
5. Students may prepare for the pre-announced tests by taking the practice tests until they can pass them without notes.
  - A minimum score is required on the practice test before being able to take the actual test.
6. Students must take a comprehensive final exam as scheduled at the end of the semester.
7. Students must spend at least 1 hour per week in a math lab setting.\*

### **EVALUATION AND GRADING**

1. **Homework** will be assigned (online using the Hawkes Learning Systems Course Management System software\*) upon completion of each lesson and must be completed by the assigned due date to get full credit.

**Late homework penalties** will be assessed as follows:

- 25% for homework 1 days late;
- 50% for homework 2-3 days late;
- 75% for homework 4 days late;
- 100% for homework more than 4 days late.

2. **Weekly quizzes** will be scheduled for the math lab\* (based on homework assignments).
3. **Four scheduled tests** will be given during the semester. Tests are administered online in the math lab using the Hawkes Learning Systems Course Management System software. You must submit to having the **memory reset** before using a **graphing calculator**.
4. A **comprehensive final exam** will be given as scheduled by the university on **December 8, 2014**.

The **final grade** will be calculated as follows: **homework 20%; quizzes 5%; Four scheduled tests 50%; and the final exam 25%**. i.e., **20/100; 5/100; 50/100; and 25/100**.

**There will be No Extra Credit or “make-up” work to improve your grade.**

**Grades will be assigned according to the following scale:**

A ( 90 – 100 )      B ( 80 – 89 )      C ( 70 – 79 )      D ( 60 – 69 )      F ( Below 60 )

**Graduating seniors should notify the instructor as soon as possible of their status as seniors.**

### **PRESENTATION METHODS**

1. Lecture with demonstration 85%.
2. Learning by solving problems during class to include small group work 10%.
3. Class discussion and questions and answer period at beginning of class 5%.
4. Hawkes video and practice problems.

### **ACADEMIC HONESTY POLICY**

**Cheating and plagiarism are not tolerated.** If it is established that a violation has occurred, the instructor may determine the penalty, or he/she may report the offense to the department chair and dean of the school. The usual penalty involves a grade of zero on the test, examination or paper in question.

### **AMERICANS WITH DISABILITIES ACT**

Delta State University is committed to a policy of equal employment and educational opportunity. Delta State University does not discriminate on the basis of race, color, religion, national origin, sex, age, disability, or veteran status. This policy extends to all programs and activities supported by the University. The Office of Disability Services is available for students who require academic accommodations due to any physical, psychological, or learning disability. Any student with a clinically diagnosed disability who desires accommodation under this Act should contact Dr. Richard Houston in the Office of Disability Services at 846-4690.

### **ADDITIONAL COURSE-SPECIFIC RULES, POLICIES, EXPECTATIONS**

1. **Prompt and regular** attendance is necessary for success in this course. To receive credit in this course, a student must attend a minimum of 75% of the class meetings. Classes meeting three times per week will be allowed **11** absences, **excused and unexcused**. Those meeting two times per week will be allowed **7** absences. **Absences will begin to accrue the first official day that this class meets, regardless of when you actually enroll in the class.**
2. If a student is tardy for class, it is the student's responsibility to request that the faculty member change the recorded absence to a tardy. **This must be done on the day the tardy occurs.** A maximum of 3 tardies will be allowed. Each additional tardy will be recorded as an unexcused absence.

### **CLASSROOM POLICIES AND MAKE-UP TESTS**

1. **Please turn off cell phones and listening devices and store them out of sight upon entering the classroom. Do not check messages or send text messages during class; you will be asked to leave. If you are seen using a cell phone during a test, I will assume you are cheating. You are not allowed to use cell phone calculators.**
2. Do not sleep during class.
3. Do not bring guests, including children, to class.
4. **Come to class on time.**
5. Do not ask to leave class early. Schedule all appointments at times that do not conflict with class time.
6. Calculator use is permitted during all classes and tests.
7. **Take earphones and listening devices out of your ears upon entering the classroom.**
8. Scheduled tests will be announced about a week prior to the actual test dates.
9. Be sure to **show all work on tests**. No partial credit will be given if the work is not shown in detail.
10. Come to my office for help during scheduled office hours. No appointment is necessary. It is extremely important that you understand the material and are able to complete the homework assignments for each class prior to the next class. Tutoring may be available in the Student Union bldg. rm. 311/331.

11. You must expect to practice assigned problems until you understand them. HLS is a good tool for this purpose.
12. **Make-up tests will be given only to those students presenting a written excuse**, acceptable by the university. **Any absence from scheduled work must be covered by a written excuse by the Vice President for Academic Affairs, the Student Health Service, or a doctor before the student is allowed to make up that missed work.** All make-up work must be completed within three days of returning to class. Any exception to this rule must be arranged before the work is missed.
13. Buy a scientific or graphing calculator and learn how to use it. **BRING YOUR CALCULATOR TO CLASS EVERY DAY. DO NOT ASK TO BORROW MY CALCULATOR!!!**

### IMPORTANT DATES

**January 26, 2015** is the last day that a course may be added to your schedule; this includes changes from one section to another within the same course. Those who plan to **audit** this course, must make the change by **January 26, 2015**. Students who remain in the course **after January 27, 2015**, and then elect to drop the course will receive a grade of **W if passing or F if failing** the course at the time of the drop. The withdrawal process is not complete until the drop slip has been signed by all designated parties and the completed form has been turned in to the Registrar's office. **The last day to drop a class is May 1, 2015.** The **comprehensive final exam\*** will be given on **Monday, May 4, 2015 at 8:00 am (places to be announced).**

Free tutoring will be available in the Academic Support Lab for students who need help outside of class. It is located in the H. L. Nowell Student building, room 311/331. Contact Doug Johnson at 846-4654 for hours. There may be a tutor in the math department also.

<b>Martin Luther King Holiday</b>	<b>January 19, 2015</b>
<b>Mid-term grades Reported</b>	<b>March 3, 2015</b>
<b>Spring Break</b>	<b>March 9–13, 2015</b>
<b>Good Friday</b>	<b>April 13, 2015</b>
<b>Final Exams</b>	<b>May 5 - 9, 2015</b>
<b>Spring Commencement</b>	<b>May 9, 2015</b>

### OFFICE HOURS

Monday	Tuesday	Wednesday	Thursday	Friday	Location
8:00 – 9:00	10:00 – 10:50	8:00 – 9:00	10:00 – 10:50	8:00 – 9:00	EW 358*
1:00 – 2:00		1:00 – 2:00			EW 358*
5:00 – 7:00	5:30 – 6:00*		5:30 – 6:00*		BR 284 or BR 173

*Other Times by Appointment*

**Computer labs (tests):** BR 173 and EW 238

### Mandatory Weekly Lab Attendance

**Broom Hall Lab** (BR 202) **3:00 – 5:00 every Tuesday afternoon**

**Nursing Lab** (room 140) **2:00 – 5:00 every Wednesday afternoon** (The nursing lab has 50 computer stations in study carrels. The best way for students to enter the building and access the lab is through the entrance on Oak Street. When using the Oak Street entrance, proceed straight ahead. The lab is on the left after going through the last interior doorway, but don't go too far and go outside.)

### TUTORING SERVICE

Free tutoring will be available in the Academic Support Lab for students who need help outside of class. It is located in the H. L. Nowell Student building, room 311/331. Contact Doug Johnson at 846-4654 for hours. There may be a tutor in the math department also.

**Web Site for a list of video clips related to the main topics in college algebra**

<http://www.deltastate.edu/college-of-arts-and-sciences/mathematics/mat104/>

### Things to Remember

1. Makeup tests will be given on Mondays at 5:00 only (official excuse must have been shown to instructor prior to this occurrence).
2. **If you do not take your test on the first scheduled test day, your grade will be zero until the test is taken.**
3. Check Hawkes (email, Dashboard et al.) every day to keep up with homework, quizzes and other assignments.