## MA 403 Syllabus Fall 2017 **NC State University**

Instructor: Brenda Burns-Williams Office: 3242 SAS Hall Office Hours: By Appointment **Office Phone**: (I am rarely in the office, so the best way to contact me is by email) **Email:** bdburns@ncsu.edu (emails are answered several times each day between 8 am and 6 pm.)

**Text**: A concrete Introduction to Higher Algebra by Childs, Lindsay N., 3<sup>rd</sup> edition.

We will cover the following:

Chapters 1 – 4 (3 <sup>1</sup>/<sub>2</sub> Weeks) Numbers, Induction, Division Algorithm, Factorization

Chapters 5, 6, 8, 9 (3 <sup>1</sup>/<sub>2</sub> Weeks) Congruences, Rings, Fermat's Theorem, Euler's Theorem

Chapters 12-16 (3 <sup>1</sup>/<sub>2</sub> Weeks) Chinese remainder theorem, Matrices, Polynomials, Division Algorithm, Factorization

Chapters 18-20 (3 <sup>1</sup>/<sub>2</sub> Weeks) Factoring Polynomials over rational numbers, Binomial Theorem, congruence modulo a polynomial, Examples of finite fields

Tests/Exam: There will be three 1- hour exams on 9/15, 10/18, and 11/17.

Final Exam: Wednesday, Dec 13, 2017 from 1:00 - 4:00 pm

Grading policy: Each hour exam is worth 20%, homework/quizzes are 20% and the final exam is 20% of vour semester average.

Attendance: You are expected to attend all classes on time If you have to miss an exam for reasons of illness or some other excused absence, please contact me prior to the exam so we can arrange for a makeup. Test make-up policy is in accordance with the University policy

(http://www.ncsu.edu/policies/academic affairs/pols regs/REG205.00.4.php)

- All anticipated absences must be excused in advance of the test date. These include University duties or trips (certified by an appropriate faculty or staff member), required court attendance (certified by the Clerk of Court), or religious observances (certified by the Department of Parent and Family Services 515-2441). *Emergency absences must be reported within one week of returning to class and must be appropriately* documented. (illness by an attending physician or family emergencies by Parent and Family Services).

Students who miss a test and have a university-approved excuse must submit appropriate documentation for the absence within one week of returning to class.

Make-ups for oversleeping, car trouble, or any other excuse *not* approved by the university may ONLY be given ON THE DAY OF THE TEST!

Incomplete grades will be handled on an individual basis.

**Expectations:** It is my understanding and expectation that your signature on any exam or assignment means that you have neither given nor received any unauthorized aid. I expect all students to adhere to the University's regulations on academic integrity

(http://www.ncsu.edu/policies/student services/student discipline/POL11.35.1.php)

(i.e. No cheating or plagiarizing!). Talking or other disruptive behavior during a test or quiz will result in a student's paper being confiscated and the student receiving a 0 on the assignment. If evidence is present

that a student was cheating, the violation will be reported to the Office of Student Conduct for further action.

Students may discuss homework assignments with other students in this section of the class and with me, but no other persons. Students are expected to write up their assignments individually. Homework assignments will be due at the beginning of the class on the day due. No late homework will be accepted.

## DISABILTY SERVICES

Reasonable accommodations will be made for students with verifiable disabilities. In order to take advantage of available accommodations, students must register with Disability Services for Students at 1900 Student Health Center, Campus Box 7509, 515-7653. For more information on NC State's policy on working with students with disabilities, please see the Academic Accommodations for Students with Disabilities. Regulation (REG02.20.1). Students requesting special accommodations due to disabilities must have appropriate documentation from Disability Services (http://www.ncsu.edu/dss/) AND must meet with me to discuss accommodations **PRIOR** to a test or quiz date.