Syllabus
MA419 and MA519  Polynomial Expansions
Spring Term, 2019

Instructor: Laura Stansell   Email: stansell@uab.edu
Course Coordinator and Introductory Math Curriculum Director
UAB Department of Mathematics

Office: room 495B, Campbell Hall
Office hours:  Tuesdays (in HHB202) and Thursdays (in CH495B) from 9am to 10am

WITHDRAWAL - The last day to drop this course without the payment of full tuition and fees is January 14, 2019. The last day to withdraw from this course with a grade of W is March 1, 2019.

NOTE: For Course Syllabi posted prior to the beginning of the term, the Course Instructor reserves the right to make changes prior to or during the term. The Course Instructor will notify students, via email or Canvas Announcement, when changes are made in the requirements and/or grading of the course.

Class Meetings: Thursdays, 5pm to 7:30pm in EB134. Students are expected to arrive promptly at 5pm for each class meeting in order to receive credit for the class activities. Since class participation is a significant percent of your grade, punctuality is expected. If you commute to campus, leave time for unexpected parking and traffic delays when planning your trip to campus. In the event a student arrives after 5pm (5:01pm is late), partial credit for the class meeting grade may be awarded at the instructor’s discretion.

Proposed list of Topics (subject to change based on course progress):
- binomial expansions of real and complex binomials
- coefficients of expanded terms
- expansions with non-whole number exponents
- applications of binomial expansions
- convergence of an expansion
- roots of numbers
- finding roots with expansions
- polynomial expansions of expressions with more than two terms
- methods for determining pi
- determining pi by series expansions
- Taylor polynomials and series

Text: none required. Notebook required.

Each Thursday meeting will usually include a small number of exercises and group activities, and each student will receive a class meeting grade based upon the work submitted at the end of the meeting. Exercises and activities must be completed and submitted on the day of class. No make-ups are given for missed meetings and assignments/activities. However, your lowest class meeting grade will be dropped.
before your exercise grade is calculated for the semester. So you can miss one class meeting without impacting your grade. Students will work in groups each class meeting.

**Homework:** Homework may be assigned periodically. The homework grade will be included in the class meeting grade for the date on which the homework is submitted and due. **Late work is not accepted.**

Your Final course grade will be determined as follows:
Class meeting grade average: 50% of final grade
Mid-term test: 25% of final grade
Final test: 25% of final grade

**Graduate Students:** The standards for graduate students in the course are higher than the standards for undergraduates. The course will include more advanced work for graduate students. Each graduate student should meet with me at the beginning of the semester to discuss the additional work required for the graduate students enrolled in the course.

Day of Mid-term test: Thursday, February 21
Day of End-term test: Thursday, April 18

**DSS Accessibility Statement:** UAB is committed to providing an accessible learning experience for all students. If you are a student with a disability that qualifies under Americans with Disabilities Act (ADA) and Section 504 of the Rehabilitation Act, and you require accommodations, please contact Disability Support Services for information on accommodations, registration and procedures. Requests for reasonable accommodations involve an interactive process and consist of a collaborative effort among the student, DSS, faculty and staff. If you are registered with Disability Support Services, please contact DSS to discuss accommodations that may be necessary in this course. If you have a disability but have not contacted Disability Support Services, please call 934-4205 or visit http://www.uab.edu/dss or Hill Student Center Suite 409.

**Title IX Statement:** The University of Alabama at Birmingham is committed to providing an environment that is free from sexual misconduct, which includes gender-based assault, harassment, exploitation, dating and domestic violence, stalking, as well as discrimination based on sex, sexual orientation, gender identity, and gender expression. If you have experienced any of the aforementioned conduct we encourage you to report the incident. UAB provides several avenues for reporting. For more information about Title IX, policy, reporting, protections, resources and supports, please visit http://www.uab.edu/titleix for UAB’s Title IX Policy, UAB’s Equal Opportunity, Anti-Harassment Policy and Duty to Report and Non-Retaliation Policy.