

Course Information

Course Title	SCHC 351: Mathematics for Shakespeare
Instructor	Michael Gavin
Location	Honors Residence Hall, B112
Meeting Times	MW, 2:20 pm - 3:35 pm
Office	Humanities Office Building, Room 404
Office Hours	TTh, 3:00 pm to 4:00 pm and by appointment
Email	mgavin@mailbox.sc.edu

Course Description

With the public release of digital versions of major authors like William Shakespeare, as well as with the availability of large-scale datasets like *Early English Books Online*, it's now possible to study early modern literature and history using quantitative methods.

Researchers have used computers to measure the social networks of Shakespeare’s tragedies, to show how the English language changed over the sixteenth and seventeenth centuries, and to map the landscapes of fictional worlds. In this course, students will learn how to perform this kind of research, with special emphasis on the basic principles of literary mathematics. We’ll survey concepts from set theory, point-set topology, statistics, matrix and linear algebra, and graph theory, showing in each case how their mathematical principles inform research design in the study of literature.

Learning Outcomes

The goals of this course are to introduce students to the foundational practices of quantitative literary analysis and to teach them how to apply statistical methods effectively and creatively across research domains. In support of these goals, during the semester students will:

- 1. Describe properties of literary works using mathematical expressions;
- 2. Explain how mathematical structures can be used to study literature;
- 3. Analyze and interpret literary works using quantitative methods.

Course Requirements

Graded Assignments	Weight

Participation & Daily Assignments	20%
Reports (20% each)	80%

Grade scale

90-99 = A; 87-89 = B+; 80-86 = B; 77-79 = C+; 70-76 = C; 67-69 = D+; 60-66 = D; 0-59 = F

Participation & Daily Assignments

Before each class, students will be required to complete readings and other small assignments. In most cases, students will be asked to post a short contribution to the course's discussion board, usually no later than noon on the day of class. Instructions for each day will be provided on Blackboard under the module for each course unit.

Reports

Reports should succinctly (1,000 to 1,200 words) describe students' statistical work. Each report should include four main sections: introduction, data & methods, analysis, and conclusion. All reports should be turned in to Blackboard, where further assignment details are provided.

Required Textbook

There is no required textbook for this course. All required readings will be posted to Blackboard.

Course Policies

Course Modality and COVID Statement

This course meets in a traditional, face-to-face modality. Students are expected to follow all guidelines and protocols determined by the University for classroom safety. The [Current COVID Guidelines](#) are subject to change and can be found online.

Attendance and Participation

Attendance is required. In accordance with the [University attendance policy](#), absences will be excused for military service, religious observance, university-sponsored activities, and illness, as well as other reasons specified in the policy. To request an excuse, you must send an email to me, as soon as possible, stating the date and reason of your absence. At my discretion, documentation may be required.

You may have up to three (3) unexcused absences without incurring penalty. For every unexcused absence after the third, your final grade will be reduced by 5%, which equals about half a letter grade. If during the semester you find that you are unable to attend class regularly, you should consider dropping the course to avoid failing.

Late Work

Assignments must be turned in on time. If you miss a class for any reason (whether excused or unexcused) you are still responsible for completing all in-class writing assignments. Those assignments will be posted to Blackboard and must be submitted as soon as possible. Work submitted late without an excuse, or

not turned in promptly upon your return, will be penalized appropriately.

The final date to submit assignments is Monday, December 6. There are no incompletes in English 101 or 102. Assignments turned in after the final date risk receiving a grade of zero. If you fail to complete assignments necessary to pass the course before this date, or if you fail the course for some other reason, you should request a [Hardship Withdrawal](#) or [Grade Forgiveness](#).

Technology

This course will make extensive use of computer technology, and it is expected that all students will bring a laptop to class. If this is not possible for you (for whatever reason) let me know and we will arrange accommodation.

Academic Honesty

The University's policies of academic honesty bar you from presenting another person's work or ideas as your own, allowing someone to write an assignment for you, or failing to properly acknowledge source materials. First-Year English policy also prohibits you from recycling work—that is, from turning in a paper you also submitted for credit in another class. The University takes violations of these policies seriously. In most cases, a plagiarized or recycled assignment will receive a grade of zero.

Equity and Accommodation

In this course, I abide by the University policy that prohibits discrimination based on "educational or employment

opportunities or decisions on the basis of personal characteristics that are not relevant to an individual's abilities." Such characteristics include age, race, color, sex and sexual orientation, as well as religion, national origin, and disability status.

In keeping with the University's commitment to non-discrimination and accessibility, I will be happy to provide reasonable accommodation for students with documented disabilities. If you have a disability that requires accommodation, contact the Student Disability Services office at 803-777-6142 or visit [their website](#) as soon as possible and let me know what you need.