

## PROGRAM SUMMARY

- **Credit Hours:** 120 hours
- **Concentrations:** Statistics
- **Declaring the Major:** Minimum GPA of 2.0 required; no pre-requisite courses; change of major form accepted year-round; orientation/advising session required after declaration
- **Advising (For the Major):** Required on admission to the major, at the end of the fourth semester, and before the beginning of the senior year. Recommended more frequently. Assigned advisors available by appointment
- **Advising (For General Education):** By Mathematics Department advisors or by CLAS advising center
- **Minimum Grades/GPA:** GPA of at least 2.0 in all the MATH, STAT, and OPRS courses taken and GPA of at least 2.0 in all MATH, STAT, and OPRS courses at the 2000 level and above.
- **Teacher Licensure:** YES in MATH, requires specified coursework in Mathematics and Mathematics Education and a minor in Secondary Education
- **Evening Classes Available:** YES (with proper planning can be completed at night)
- **Weekend Classes Available:** NO
- **Other Information:** Departmental Honors, Internships, Co-ops
- **Contact(s):** Dr. Kim Harris, Undergraduate Coordinator [mkharris@uncc.edu](mailto:mkharris@uncc.edu)

## PROGRAM REQUIREMENTS

MATH offers the BS degree with the option of choosing the Statistics concentration. Students who want to teach high school level mathematics would complete the BA or BS program and the minor in secondary education. The BS degree is a *relatively structured* program. The program requires four semesters of calculus that must be taken in order. A grade of at least a C in each of the first three courses is required to progress to the next calculus course. Students are also required to take Linear Algebra, Differential Equations, Modern Algebra, Math Awareness Seminar, and the Senior Project. A course in computer programming and six additional upper-level MATH, OPRS, or STAT courses are also required. Two of these upper-level courses must be two semesters of Advanced Calculus, and one of the courses must be an advanced course in another branch of mathematics. Students who take Calculus I in their freshman year and begin their major as sophomores can complete the degree on time ***if they consult regularly with their advisors.*** Students are required to complete either a formal minor or 18 credit hours of *related work* (in consultation with their advisor).

Areas	Credit Hours	Description
<b>Pre-Major/ Prerequisites</b>	-	
<b>Major</b>	40-43	Hours vary depending on concentration. Required courses in the major will satisfy General Education requirements for Mathematics & Logical Reasoning, Writing Intensive course in the discipline, and Oral Communication.
<b>General Education (not satisfied by other major requirements)</b>	31	The number of hours reflects the general education coursework required outside the major.
<b>Related Work</b>	21	ITCS 1212 + L (3 hours) The requirement for Related Work can be completed with a minor from another department or with 18 hours of approved courses with a common theme. Related work that is not an official minor must be approved by the student's advisor.
<b>Foreign Language</b>	0-8	Proficiency in a foreign language can be demonstrated by successful completion of FORL 1202, a placement test given by the Department of Languages and Culture Studies, or three years of high school courses in the SAME language
<b>Science</b>	4	BS students must take an additional science course with a lab for a total of 11 hours in science.
<b>Electives</b>	16-24	As needed to complete 120 hours total.
<b>Total Credit Hours</b>	120	

## SUGGESTED PLAN OF STUDY – B.S. IN MATHEMATICS

### Freshman Year

Course Number	Course Title	Credit Hours	General Education	W/O Course	Notes
<i>Fall Semester</i>					
MATH 1241	Calculus I	3	X		An appropriate eligibility level of math placement is required to begin in MATH 1241.
UWRT 1101	Writing and Inquiry in Academic Contexts I	3	X		
LBST 110X	The Arts and Society	3	X		Chosen from LBST 1101, 1102, 1103, 1104, 1105
XXXX 1201	Foreign Language	4			
XXXX XXXX	Elective	3			
<i>Spring Semester</i>					
MATH 1242	Calculus II	3	X		Grade of C or better in MATH 1241 is required
UWRT 1102	Writing and Inquiry in Academic Contexts II	3	X		
XXXX XXXX	Social Science	3	X		Chosen from ANTH 1101, ECON 1101 or 2101, GEOG 1105, POLS 1110, SOCY 1101
XXXX 1202	Foreign Language	4			
XXXX XXXX	Elective	3			

32 Credit Hours for Year

### Sophomore Year

Course Number	Course Title	Credit Hours	General Education	W/O Course	Notes
<i>Fall Semester</i>					
MATH 2241	Calculus III	3			Grade of C or better in MATH 1242 is required.
MATH 2164	Linear Algebra	3			
LBST 2101	Western Cultural and Historical Awareness	3	X		
ITCS 1212+L	Introduction to Computer Science	3			Class and lab must be taken concurrently.
XXXX XXXX	Related Work or Minor	3			
MATH 3688	Math Awareness Seminar	0			This course is only offered in the fall semester.
<i>Spring Semester</i>					
MATH 2242	Calculus IV	3			Grade of C or better in MATH 2241 is required.
MATH 2171	Differential Equations	3			
LBST 2102	Global and Intercultural Connections	3	X		
LBST 221X	Ethical and Cultural Critique	3	X		Chosen from LBST 2211, 2212, 2213, 2214, 2215
XXXX XXXX	Related Work or Minor	3			

30 Credit Hours for Year

### Junior Year

Course Number	Course Title	Credit Hours	General Education	W/O Course	Notes
<i>Fall Semester</i>					
MATH 3163	Modern Algebra	3	X	W	
MATH 3XXX	Upper-Level Math Elective (MATH, STAT, or OPRS)	3			Must be 3000-level or above
XXXX XXXX	Science w/ Lab	4	X		Chosen from list of approved courses.
XXXX XXXX	Related Work or Minor	3			
XXXX XXXX	Elective	3			
<i>Spring Semester</i>					
MATH 3XXX	Upper-Level Math Elective	3			Must be chosen from STAT 3123, MATH 4163, MATH4164, MATH 4181
XXXX XXXX	Writing Intensive Course	3	X	W	
XXXX XXXX	Science	3	X		
XXXX XXXX	Related Work or Minor	3			
XXXX XXXX	Science w/ Lab	4			Required for BS degree.

32 Credit Hours for Year

### Senior Year

Course Number	Course Title	Credit Hours	General Education	W/O Course	Notes
<i>Fall Semester</i>					
MATH 3141	Advanced Calculus of One Variable	3			
MATH 3XXX	Upper-Level Math Elective (MATH, STAT, or OPRS)	3			Must be 3000-level or above
XXXX XXXX	Related Work or Minor	3			
XXXX XXXX	Electives	6			
<i>Spring Semester</i>					
MATH 3142	Advanced Calculus of Several Variables	3			
MATH 3XXX	Upper-Level Math Elective (MATH, STAT, or OPRS)	3			Must be 3000-level or above
MATH 3689	Mathematics Project Seminar	1	X	O	
XXXX XXXX	Related Work or Minor	3			
XXXX XXXX	Electives	1			

26 Credit Hours for Year

## ADVISING RESOURCES

- General Education Requirements for ALL Students: [ucol.uncc.edu/general-education](http://ucol.uncc.edu/general-education)
- Undergraduate Catalog: [catalog.uncc.edu](http://catalog.uncc.edu)
- Central Advising website: [advising.uncc.edu](http://advising.uncc.edu)
- College of Liberal Arts & Sciences advising website: [clas.uncc.edu/students/Advising-News/](http://clas.uncc.edu/students/Advising-News/)
- University Advising Center website: [advisingcenter.uncc.edu](http://advisingcenter.uncc.edu)

## SUGGESTED PLAN OF STUDY – B.S. IN MATHEMATICS, CONCENTRATION: STATISTICS

### Freshman Year

Course Number	Course Title	Credit Hours	General Education	W/O Course	Notes
<i>Fall Semester</i>					
MATH 1241	Calculus I	3	X		An appropriate eligibility level of math placement is required to begin in MATH 1241.
UWRT 1101	Writing and Inquiry in Academic Contexts I	3	X		
LBST 110X	The Arts and Society	3	X		Chosen from LBST 1101, 1102, 1103, 1104, 1105
XXXX 1201	Foreign Language	4			
XXXX XXXX	Elective	3			
<i>Spring Semester</i>					
MATH 1242	Calculus II	3	X		Grade of C or better in MATH 1241 is required
UWRT 1102	Writing and Inquiry in Academic Contexts II	3	X		
XXXX XXXX	Social Science	3	X		Chosen from ANTH 1101, ECON 1101 or 2101, GEOG 1105, POLS 1110, SOCY 1101
XXXX 1202	Foreign Language	4			
XXXX XXXX	Elective	3			

**32 Credit Hours for Year**

### Sophomore Year

Course Number	Course Title	Credit Hours	General Education	W/O Course	Notes
<i>Fall Semester</i>					
MATH 2241	Calculus III	3			Grade of C or better in MATH 1242 is required.
STAT 2122	Introduction to Probability and Statistics	3			
LBST 2101	Western Cultural and Historical Awareness	3	X		
ITCS 1212+L	Introduction to Computer Science	3			Class and lab must be taken concurrently.
XXXX XXXX	Related Work or Minor	3			
MATH 3688	Math Awareness Seminar	0			This course is only offered in the fall semester.
<i>Spring Semester</i>					
MATH 2242	Calculus IV	3			Grade of C or better in MATH 2241 is required.
STAT 3110	Applied Regression	3	X	W	
LBST 2102	Global and Intercultural Awareness	3	X		
LBST 221X	Ethical and Cultural Critique	3	X		Chosen from LBST 2211, 2212, 2213, 2214, 2215
XXXX XXXX	Related Work or Minor	3			

**30 Credit Hours for Year**

### Junior Year

Course Number	Course Title	Credit Hours	General Education	W/O Course	Notes
<i>Fall Semester</i>					
STAT 3122	Probability and Statistics I	3			
MATH 2164	Linear Algebra	3			
XXXX XXXX	Writing Intensive Course	3	X	W	
XXXX XXXX	Science	3	X		Chosen from list of approved courses.
XXXX XXXX	Related Work or Minor	3			
<i>Spring Semester</i>					
STAT 3XXX	Upper-Level STAT Course	3			Chosen from STAT 3140, 3150, 3160, and 4116.
STAT 3123	Probability and Statistics II	3			
XXXX XXXX	Science w/ Lab	4	X		
XXXX XXXX	Related Work or Minor	3			
XXXX XXXX	Elective	3			

**31 Credit Hours for Year**

### Senior Year

Course Number	Course Title	Credit Hours	General Education	W/O Course	Notes
<i>Fall Semester</i>					
MATH 3141	Advanced Calculus of One Variable	3			
STAT 3XXX	Upper-Level STAT Course	3			Chosen from STAT 3140, 3150, 3160, and 4116.
XXXX XXXX	Related Work or Minor	3			
XXXX XXXX	Electives	6			
<i>Spring Semester</i>					
STAT 3XXX	Upper-Level STAT Course	3			Chosen from STAT 3140, 3150, 3160, and 4116.
MATH 3689	Mathematics Project Seminar	1	X	O	
XXXX XXXX	Related Work or Minor	3			
XXXX XXXX	Electives	5			

**27 Credit Hours for Year**

## ADVISING RESOURCES

- General Education Requirements for ALL Students: [ucol.uncc.edu/general-education](http://ucol.uncc.edu/general-education)
- Undergraduate Catalog: [catalog.uncc.edu](http://catalog.uncc.edu)
- Central Advising website: [advising.uncc.edu](http://advising.uncc.edu)
- College of Liberal Arts & Sciences advising website: [clas.uncc.edu/students/Advising-News/](http://clas.uncc.edu/students/Advising-News/)
- University Advising Center website: [advisingcenter.uncc.edu](http://advisingcenter.uncc.edu)