

Biology Major				
Biology Core Courses (all Biology major tracks)				
Year 1: BIOL 195: Investigating Biology (or BIOL 205 for transfers who've taken intro. biology) BIOL 210: Cells and Systems (Spring) CHEM 121 and CHEM 122: General Chemistry I & II Year 2: BIOL 220: Ecology and Evolution (Fall) BIOL 230: Genes and Genomes (Spring) BIOL 240: Biostatistics (2 credits, Spring)				
Choose from five Biology tracks:				
BS - Biological Science	BS - Biomedical Sciences	BS - Biology Education	BA - Health Professions	BA - Biology Professions
Prepare for <i>any</i> life-science career or graduate school	Tailored for MD, DDS, DVM, PA professional programs	Prepare for middle-school/high-school teaching in Biology	Tailored for PT, nursing, pharmacy, optometry, OT, etc.	Combine Biology with a second major
Three advanced electives CHEM 251 & 252: Organic CHEM 310: Analysis PHYS 131 & 132: Physics MATH 151: Calculus Enrichment course	Two advanced electives BIOL 201 & 202: A&P BCHM 365: Biochemistry CHEM 251 & 252: Organic PHYS 131 & 132: Physics MATH 151: Calculus Health elective	Three advanced electives PHYS 131: Physics MATH 151: Calculus SCIE 141: Earth Science PSYC 100: Psychology EDUC 101, 200, 290, 322, 330 360, 390, 403, 411, 446, 490 Student teaching	Two advanced electives BIOL 201 & 202: A&P CHEM 251 & 252: Organic or PHYS 131 & 132: Physics Health elective	Two advanced electives Second major
Capstone Research and Seminar				
Research: BIOL 400: Capstone course and independent research lab (choose topic of interest; 2 credits) Summer or academic-year research with faculty or off-campus is encouraged Seminar: BIOL 290: watch & critique seminars (0 credit) BIOL 390: Career Preparation seminar (2 credits, Fall; sophomore year preferred) BIOL 490: present research (1 credit)				

Advanced Elective Options	
BIOL 310: Animal Biology BIOL 315: Animal Physiology BIOL 317: Animal Behavior BIOL 320: Plant Growth & Function BIOL 325: Plant Interactions in a Changing World BIOL 330: Evolution	BIOL 340: Infectious Disease BIOL 350: Conservation Ecology BIOL 360: Molecular Biology of Cancer BIOL 370: Mechanisms of Development BCHM 365: Biochemistry NEUR 310: Molecular Neuroscience

Biochemistry Major	
Biochemistry Core Courses (BS and BA tracks)	
Year 1: BIOL 195: Investigating Biology (or BIOL 205) BIOL 210: Cells and Systems (Spring) CHEM 121 and CHEM 122: General Chemistry I & II Year 2: CHEM 310: Chemical Analysis (Fall) BIOL 230: Genes and Genomes (Spring)	
Choose from two Biochemistry tracks:	
Bachelor of Arts (BA)	Bachelor of Science (BS)
Prepare for careers involving biochemistry or molecular biology or for MD, DDS, PA programs	Additional advanced electives allow more specialized preparation
CHEM 251 and 252: Organic Chemistry CHEM 310: Chemical Analysis CHEM 340: Thermodynamics or CHEM 345: Quantum BIOL 360: Molecular Biology of Cancer BCHM 365: Biochemistry PHYS 131 and 132: Physics I & II MATH 151: Calculus I	CHEM 251 and 252: Organic Chemistry CHEM 310: Chemical Analysis CHEM 340: Thermodynamics or CHEM 345: Quantum BIOL 360: Molecular Biology of Cancer BCHM 365: Biochemistry PHYS 131 and 132: Physics I & II MATH 151: Calculus I Twelve credits of advanced BIOL & CHEM electives
Capstone Research and Seminar	
Capstone & Research: BCHM 400: Capstone research (choose topic) and BCHM 465: Advanced topics (2 cr ea) Summer or academic-year research with faculty or off-campus is encouraged Seminar: CHEM 391, CHEM 392, and CHEM 493 (1 credit each) or BIOL 290 (0 credit), BIOL 390 (2 credit), and BIOL 490 (1 credit)	

Advanced Elective Options	
BIOL 242: Bioinformatics (1 cr) BIOL 315: Animal Physiology BIOL 320: Plant Growth & Function BIOL 330: Evolution BIOL 340: Infectious Disease BIOL 370: Mechanisms of Development	CHEM 311: Separation Methods (2 cr) CHEM 312: Spectrometry & Spectroscopy (2 cr) CHEM 313: Materials & Surface Anal (2 cr) CHEM 315: Spectral Interpretation (2 cr) CHEM 340: Thermodynamics & Kinetics CHEM 345: Quantum Chem & Spectroscopy CHEM 401: Advanced Inorganic CHEM 451: Advanced Organic CHEM 455: Organometallic

More details and sample four-year plans at www.nccbiology.com

