BCB Course Checklist

I. Required Pre-Requisites

Biological Sciences
- BSCI 1510 & 1510 L (Introduction to Biological Sciences) Fall (1st or 2nd)
- BSCI 1511 & 1511L or 1512L Spring

Chemistry
- CHEM 2221 & 2221L (Organic Chemistry)  
  PREQ: CHEM 1602  
  Fall (1st or 2nd)
- CHEM 2222 & 2222L Spring

Physics
- PHYS 1501 or 1601 and 1501L or 1601L  
  PREQ: MATH 1300  
  Fall (3rd)
- PHYS 1502 or 1602 and 1502L or 1602L Spring
  *1600 courses are engineering

Mathematics
- MATH 1200 or 1300 (Single Variable Calculus) Fall (1st or 2nd)
- MATH 1201 or 1301 Spring

II. Foundational Classes for all BCB students

- BSCI 2520 Biochemistry [3]  
  PREQ: CHEM 2221 or 2221 and BSCI 1510 or CHBE 2150 F / S (3rd)
- CHEM 3310 Biophysical Chemistry [3]  
  PREQ: PHYS 1501 or 1601 and MATH 1201 or 1301 Spring (3rd/4th)
- CHEM 3710 Bioorganic Chemistry [3]  
  PREQ: CHEM 2222 or 2212 (BSCI 1510 advised) Fall (3rd/4th)
- BCB 4965 Advanced Integrated Lab [3]  
  PRE or CoREQ: CHEM 3710 / BSCI 2520  
  Two semesters of BCB 4999 Honors can be used to replace BCB 4965 Fall (4th)

III. General Electives [6 credits]

Course #1 ____________________________
Course #2 ____________________________

(a second semester of BCB 3201 can be used to replace one General Elective)
IV. Biochemistry Track

REQUIRED: [6]

______ BSCI 4265 Biochemistry II [3]  
  
  **PREQ:** CHEM 2221 & BSCI 2520  
  
  Spring (3rd or 4th)

______ BCB 3201 Independent Laboratory Research [2]  
  
  **PREQ:** CHEM 1602 & BSCI 1510  
  
  F/S

CHOOSE 3 [9]

______ BSCI 2201 Introduction to Cell Biology [3]  
  
  **PREQ:** CHEM 2221 & BSCI 1510  
  
  Spring

______ BSCI 2210 Principles of Genetics [3]  
  
  **PREQ:** BSCI 1511  
  
  F/S

______ CHEM 2100 Analytical Chemistry [3]  
  (lab not required) **Advised:** CHEM 1602  
  
  Fall (2nd or 3rd)

______ CHEM 4720 Drug Design & Development  
  **PREQ:** BSCI 2520 or CHEM 3710  
  
  Spring (3rd or 4th)

______ BCB 4320 Advanced Chemical Biology [3]  
  
  **PREQ:** CHEM 3710  
  
  Spring (4th)

V. Chemical Biology Track

REQUIRED: [5]

______ BCB 2101 Chemical Biology Focus [1]  
  
  **PREQ:** CHEM 2221 & BSCI 1510  
  
  Fall (3rd or 4th)  
  
  offered odd # years

______ CHEM 2100 Analytical Chemistry [3]  
  **Advised:** CHEM 1602  
  
  CHEM 2100L Analytical Chemistry Lab [1]  
  
  Fall (2nd or 3rd)

CHOOSE 2 [6]

______ BCB 4320 Advanced Chemical Biology [3]  
  
  Spring (4th)

______ BSCI 4265 Biochemistry II [3]  
  
  Spring (3rd or 4th)

______ CHEM 4720 Drug Design & Development [3]  
  
  Spring (3rd or 4th)

CHOOSE 1 [3]

______ BCB 4966 Advanced Integrated Lab [3]  
  
  **PREQ:** BCB 4965 or instructor permission  
  
  Spring (4th)

______ BCB 3201 Independent Laboratory Research [3]  
  
  F/S