

**Template for CAA students earning an AS degree
who are interested in Chemistry
at Winston-Salem State University**

Part I: Complete the AS degree within the NCCCS as outlined.

Any program/major courses that satisfy the Universal General Education Transfer Component will be noted in the column "Required or Preferred by Major" up to the limits of each category.

Universal General Education Transfer Component (UGETC)

| The following <u>two</u> English composition courses are required. | | | | | | | |
|--|-------------------------|--------------|----------------|------------------------------|--------------|--------------------------------|--------------------|
| English Composition (6 SCH) | | | | | | | |
| Prefix | Course Name | Credit Hours | Pre-requisites | University Course Equivalent | Credit Hours | Required or Preferred by Major | Notes |
| ENG 111 | Expository Writing | 3 | None | ENG 1301 | 3 | | |
| ENG 112 | Argument-Based Research | 3 | ENG 111 | ELEC 1100 | 3 | | Counts as GE hours |
| Total Credit Hours Required | | 6 | | | 6 | | |

| Students will select <u>two</u> courses from at least two different disciplines: | | | | | | | |
|--|------------------------|--------------|----------------|------------------------------|--------------|--------------------------------|------------------|
| Humanities/Fine Arts (6 SCH) | | | | | | | |
| Prefix | Course Name | Credit Hours | Pre-requisites | University Course Equivalent | Credit Hours | Required or Preferred by Major | Notes |
| ART 111 | Art Appreciation | 3 | None | ART 1301 | 3 | | |
| ART 114 | Art History Survey I | 3 | None | ART 2301 | 3 | | |
| ART 115 | Art History Survey II | 3 | None | ART 2302 | 3 | | |
| COM 231 | Public Speaking | 3 | None | SPH 2341 | 3 | | |
| ENG 231 | American Literature I | 3 | None | ENG 2313 | 3 | | |
| ENG 232 | American Literature II | 3 | None | ENG 2314 | 3 | | |
| MUS 110 | Music Appreciation | 3 | None | MUS 1301 | 3 | | |
| MUS 112 | Introduction to Jazz | 3 | None | ELEC 1000 | 3 | | Counts as GE AOK |
| PHI 215 | Philosophical Issues | 3 | ENG 111 | PHI 2301 | 3 | | |
| PHI 240 | Introduction to Ethics | 3 | ENG 111 | PHI 2302 | 3 | | |
| Total Credit Hours Required | | 6 | | | 6 | | |

Social /Behavioral Science (6 SCH)

Students will select two courses from at least two different disciplines:

| Prefix | Course Name | Credit Hours | Pre-requisites | University Course Equivalent | Credit Hours | Required or Preferred by Major | Notes |
|---------|------------------------------|--------------|----------------|------------------------------|--------------|--------------------------------|-------|
| ECO 251 | Principles of Microeconomics | 3 | None | ECO 2311 | 3 | | |
| ECO 252 | Principles of Macroeconomics | 3 | None | ECO 2312 | 3 | | |
| HIS 111 | World Civilizations I | 3 | None | HIS 1301 | 3 | | |
| HIS 112 | World Civilizations II | 3 | None | HIS 1302 | 3 | | |
| HIS 131 | American History I | 3 | None | HIS 2306 | 3 | | |
| HIS 132 | American History II | 3 | None | HIS 2307 | 3 | | |
| PSY 150 | General Psychology | 3 | None | PSY 2301 | 3 | | |
| POL 120 | American Government | 3 | None | POS 2311 | 3 | | |
| SOC 210 | Introduction to Sociology | 3 | None | SOC 2301 | 3 | | |

Total Credit Hours Required**6****6****Mathematics (8 SCH)**

Students will select two courses from the following:

| Prefix | Course Name | Credit Hours | Pre-requisites | University Course Equivalent | Credit Hours | Required or Preferred by Major | Notes |
|----------|--------------------------|--------------|----------------|------------------------------|--------------|--------------------------------|-------|
| MAT 171 | Precalculus Algebra | 4 | None | MAT 1312 | 3 | | |
| MAT 172 | Precalculus Trigonometry | 4 | MAT 171 | MAT 1312 | 3 | | |
| MAT 152 | Statistical Methods I | 4 | None | MAT 2326 | 3 | x | |
| MATH 263 | Brief Calculus | 4 | MAT 171 | MAT 2333 | 3 | | |
| MATH 271 | Calculus I | 4 | MAT 172 | MAT 2317 | 3 | x | |

Total Credit Hours Required**8****6****Natural Sciences (8 SCH)**

Students will select 8 SHS from the following courses:

| Prefix | Course Name | Credit Hours | Pre-requisites | University Course Equivalent | Credit Hours | Required or Preferred by Major | Notes |
|-------------|-------------------------------|--------------|----------------|------------------------------|--------------|--------------------------------|-------|
| AST 151/151 | General Astronomy I and lab I | | None | PHS 4111 | 4 | | |
| BIO 110 | Principles of Biology | 4 | None | BIO 1301/1101 | 4 | | |

| | | | | | | | |
|-------------|----------------------------|---|-------------------------------|---------------|---|---|---|
| BIO 111 | General Biology I | 4 | None | BIO 1313/1113 | 4 | x | must take both BIO 111 and BIO 112 |
| BIO 112 | General Biology II | 4 | BIO 111 | BIO 1314/1114 | 4 | | must take both BIO 111 and BIO 112 |
| CHM 151 | General Chemistry I | 4 | None | CHE 1313+1113 | 4 | x | must take both CHM 151 and CHM 152 |
| CHM 152 | General Chemistry II | 4 | CHM 151 | CHE 1314+1114 | 4 | x | must take both CHM 151 and CHM 152 |
| GEL 111 | Introduction Geology | 4 | None | ELEC 1100 | 4 | | Counts as GE AOK |
| PHY 110/110 | Conceptual Physics and Lab | 4 | None | ELEC 1100 | 4 | | Counts as GE AOK, must take lab with course |
| PHY 151 | College Physics I | 4 | MAT 171 | PHY 1321+1121 | 4 | x | must take PHY 151 and PHY 152 |
| PHY 152 | College Physics II | 4 | PHY 151 | PHY 1322+1122 | 4 | x | must take PHY 151 and PHY 152 |
| PHY 251 | General Physics I | 4 | MAT 271 | PHY 2331+2131 | 4 | | must take PHY 251 and PHY 252 |
| PHY 252 | General Physics II | 4 | MAT 272 <u>and</u> PHY 251 | PHY 2332+2132 | 4 | | must take PHY 251 and PHY 252 |

Total Credit Hours Required

8

8

Total UGETC Hours

34

34

General Education Courses (11-12 SHC) : These courses must be classified as UGETC or general education within

| Prefix | Course Name | Credit Hours | Pre-requisites | University Course Equivalent | Credit Hours | Category | Notes |
|---------|----------------------|--------------|----------------|------------------------------|--------------|----------|-------|
| CHM 152 | General Chemistry II | 4 | CHM 151 | CHE 1314+1114 | 4 | | |
| PHY 151 | College Physics I | 4 | MAT 171 | PHY 1321+1121 | 4 | | |
| PHY 152 | College Physics II | 4 | PHY 151 | PHY 1322+1122 | 4 | | |

Total Credit Hours Required

11-12

12

Total General Education Hours Required

45

45

AD HOURS (14-15 SHC): These courses must be classified as pre-major, elective or general education

| Prefix | Course Name | Credit Hours | Pre-requisites | University Course Equivalent | Credit Hours | Category | Notes |
|---------|----------------------------|--------------|----------------|------------------------------|--------------|----------|-----------------|
| ACA 122 | College Transfer Success | 1 | None | UNI 001 | 1 | GEC | required by CAA |
| MAT 272 | Calculus II | | | MAT 2318 | 3 | | |
| CHM 251 | Organic Chemistry I | 4 | | CHE 2326 + 2126 | 4 | | |
| CHM 252 | Organic Chemistry II | 4 | | CHE 2327 + 2127 | 4 | | |
| | Take 2 hours of GE courses | | | | | | |

Other Required Hours (15-16 SCH) 14-15 14

Total Semester Credit Hours in Program: 60

Part II: Complete one of the Degree Plans

BS Chemistry

Semester 5

| | |
|--------------------------------------|----|
| CHE 2321 - Quantitative Analysis | 3 |
| CHE 2121 - Quantitative Analysis Lab | 1 |
| CHE 3/4000 Elective | 3 |
| Elective | 4 |
| Elective | 4 |
| | 14 |

Semester 6

| | |
|--------------------------------------|----|
| CHE 3322 - Instrumental Analysis | 3 |
| CHE 3222 - Instrumental Analysis Lab | 2 |
| MAT 2318 Calculus II | 3 |
| Elective | 4 |
| Elective | 4 |
| | 16 |

Semester 7

| | |
|-------------------------------------|---|
| CHE 3311 - Physical Chemistry I | 3 |
| CHE 3111 - Physical Chemistry I Lab | 1 |

| | |
|----------|----|
| Elective | 3 |
| Elective | 3 |
| Elective | 4 |
| | 14 |

Semeste 8

| | |
|---------------------------|----|
| CHE 4241 – Senior Seminar | 2 |
| CHE 3/4000 Elective | 3 |
| Elective | 3 |
| Elective | 4 |
| Elective | 4 |
| | 16 |