

## Bachelor of Science in Chemistry Chemistry Major Advising Worksheets<sup>\$</sup>

### General Studies for B.S. degree:

#### COMMUNICATION: (6-9 total)

(grade of C or better):

- |       |            |                 |
|-------|------------|-----------------|
| 3 ___ | ENG 101    | Col. Comp. I    |
|       | <b>AND</b> |                 |
| 3 ___ | ENG 102    | Col. Comp. II   |
|       | <b>OR</b>  |                 |
| 3 ___ | ENG 103    | Adv. Col. Comp. |
| 3 ___ | COM 101*   | Fund. Of Com.   |

#### ANALYSIS: (20-21 total)

(choose one from each block as directed):

##### *Quantitative:*

- |       |          |                |
|-------|----------|----------------|
| 3 ___ | MATH 102 | Nature of Math |
| 3 ___ | MATH 140 | Coll. Alg.     |
| 3 ___ | MATH 145 | PreCal         |
| 3 ___ | MATH 160 | Intro to stats |
| 5 ___ | MATH 210 | Calc I         |

##### *Scientific: (one from each)*

###### Life Sciences:

- |       |             |                |
|-------|-------------|----------------|
| 4 ___ | BIO 105&106 | Non-majors     |
| 4 ___ | BIO 124&125 | Bio Principles |

###### Physical Sciences:

- |       |              |                |
|-------|--------------|----------------|
| 4 ___ | CHEM 100&101 | Found. Of Chem |
| 4 ___ | CHEM 110&111 | Gen. Chem I    |
| 4 ___ | PHYS 101&110 | Elem. Phys     |
| 4 ___ | PHYS 190&191 | Phys. World    |
| 4 ___ | PHYS 345&346 | Earth & Space  |

##### *Critical Reading: (one course)*

- |       |             |                |
|-------|-------------|----------------|
| 3 ___ | ENG 200-400 | Any literature |
|-------|-------------|----------------|

##### *Economics/Finance: (one course)*

- |       |          |                 |
|-------|----------|-----------------|
| 3 ___ | ECON 103 | Prin. Microeco. |
| 3 ___ | ECON 104 |                 |
| 3 ___ | FIN 131  | Fin. Literacy   |

##### *Logic/Critical Assessment: (one course)*

- |       |              |                 |
|-------|--------------|-----------------|
| 3 ___ | PSYC 101     | Intro. to Psyc. |
| 3 ___ | PHIL 100-400 | Any             |
| 3 ___ | LING 150     | Intro to Ling.  |

#### SELF AND CULTURAL

#### AWARENESS: (17-18 total)

##### *Fine Arts (one course):*

- |       |         |                      |
|-------|---------|----------------------|
| 3 ___ | FA 101  | FA as human exp.     |
| 3 ___ | ART 140 | Apr. of art major    |
| 3 ___ | ART 340 | Hist of west. Art I  |
| 3 ___ | ART 341 | Hist of west. Art II |
| 3 ___ | ART 343 | Surv. non-west. Art  |

- |       |         |                    |
|-------|---------|--------------------|
| 3 ___ | MUS 130 | Music Appreciation |
| 3 ___ | MUS 132 | Jazz Appreciation  |
| 3 ___ | MUS 133 | Rock Appreciation  |

- |       |         |                  |
|-------|---------|------------------|
| 3 ___ | THE 100 | Theater Apprec.  |
| 3 ___ | THE 300 | Hist. of theater |

##### *Perceptions and Cultures:*

*one course from 4 groupings:*

- |       |          |                 |
|-------|----------|-----------------|
| 3 ___ | GEO 205  | Intro. To Geo.  |
| 3 ___ | GEO 206  | World Geo.      |
| 3 ___ | POLS 101 | Pol. and Gov.   |
| 3 ___ | POLS 201 | Nat'l Gov       |
| 3 ___ | SOC 150  | Basic soc.      |
| 3 ___ | SWK 201  | Cult. Awareness |
| 3 ___ | REL XXX  | any             |
| 3 ___ | SPAN XXX | any             |
| 3 ___ | FREN XXX | any             |
| 3 ___ | SPA 252  |                 |
| 3 ___ | HE 250   |                 |

*one course from following:*

- |       |          |                 |
|-------|----------|-----------------|
| 3 ___ | HIST 103 | Hist. of Civ I  |
| 3 ___ | HIST 104 | Hist. of Civ II |
| 3 ___ | HIST 210 | US to 1865      |
| 3 ___ | HIST 211 | US since 1865   |

\*COM 101 is required of all students; General Studies English may be completed by successfully passing ENG 101 and ENG 102 OR ENG 103 only. Entrance to ENG 103 is based on ACT/SAT test scores.

**Required courses in Sciences and Mathematics**

**CHEMISTRY: (38 total)**

3	_____	CHEM 112	Gen. Chem. II
1	_____	CHEM 113	Gen. Chem. II lab
3	_____	CHEM 320	Analytical Chem.
1	_____	CHEM 321	Analytical Chem. Lab
3	_____	CHEM 340	Org. Chem. I
1	_____	CHEM 341	Org. Chem. I lab
3	_____	CHEM 342	Org. Chem. II
1	_____	CHEM 343	Org. Chem. II lab
3	_____	CHEM 400	Inorg. Chem.
3	_____	CHEM 420	Instrumental
1	_____	CHEM 421	Instrumental Lab
4	_____	CHEM 464	Phys. Chem. I
1	_____	CHEM 465	Phys. Chem. I lab
4	_____	CHEM 466	Phys. Chem. II
1	_____	CHEM 467	Phys. Chem. II lab
3	_____	CHEM 480	Biochem. I
1	_____	CHEM 481	Biochem. I lab
1	_____	CHEM 485	Chem. Capstone

**PHYSICS: (8 total)**

3	_____	PHYS 101	Elem. Phys. I
1	_____	PHYS 110	Elem. Phys. I lab
3	_____	PHYS 102	Elem. Phys. II
1	_____	PHYS 111	Elem. Phys. II lab

**MATHEMATICS: (8 total)**

4	_____	MATH 210	Calc. & Ana. Geo. I
4	_____	MATH 211	Calc. & Ana. Geo. II

**CHEMISTRY ELECTIVES: (9-18 total)\***

Choose any CHEM 300-400 course – as per advisor

_____	_____	CHEM
_____	_____	CHEM
_____	_____	CHEM
_____	_____	CHEM
_____	_____	CHEM

**RESTRICTIVE ELECTIVES (0-12)\***

BIO 300 level course(s) or above

MATH 212, any 300 level course(s) or above

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

\*Chemistry and Restrictive electives must total at least 18 hours

- CHEM 110/111 must be taken as part of General studies
- 120 credit hours are required to graduate from West Liberty with a B.S.; 40 of those hours must be 300-400 level courses.
- The Chemistry major requires at least a “C” in each required math and science course within the program.
- <sup>s</sup>These worksheets are to be used as a guide. Each student is responsible for their curriculum and meeting the requirements for graduation as stipulated in the college catalog.
- Courses may not be offered every semester and/or year; please consult with your Chemistry advisor for sequencing.