

Advisor: _____

Name: _____

Date admitted into Major: _____

Transfer credits: _____

**BACHELOR OF ARTS
CHEMISTRY**

GENERAL EDUCATION CORE REQUIREMENTS

Competencies			
<input type="checkbox"/>	Basic College Math		
<input type="checkbox"/>	Reading Comprehension		
<input type="checkbox"/>	Computer Literacy		
ENG	101	Composition I	3 _____
ENG	102	Composition II	3 _____
SPC	101	(Public Speaking)	3 _____
SMS	_____	(Health)	3 _____
SMS	_____	(Activity)	.5 _____
SMS	_____	(Activity)	.5 _____
Distribution Sequences (18-20 credits)			
*	PHS	211A or 221	Physics I 4 _____
*	PHS	212A or 222	Physics II 4 _____
	HIS	101	World History I 3 _____
	HIS	102	World History II 3 _____
	_____	_____ (Literature I)	3 _____
	_____	_____ (Literature II)	3 _____
Distribution Electives (15 credits)			
Among the distribution electives, the student must earn at least 3 but no more than 9 additional semester hours in each of the three divisions.			
Humanities (Division I)			
_____	_____	_____	_____
_____	_____	_____	_____
Science/Mathematics (Division II)			
*	MAT	220	Calculus I 4 _____
*	MAT	221	Calculus II 4 _____
*/+	ITC	100	Computers and their Uses 3 _____
Social Sciences (Division III)			
_____	_____	_____	_____
_____	_____	_____	_____
(Note: Courses allowable as distribution electives are marked DI, DII, or DIII in the College Catalog.)			
QUANTITATIVE (Q)	_____	DIVERSITY (V)	_____
		WRITING (W)	_____

COURSES IN MAJOR (40 credits total)

Freshman Year			
CHE	130	General Chemistry I	4 _____
CHE	212	Organic Chemistry I	4 _____
Sophomore Year			
CHE	213	Organic Chemistry II	4 _____
CHE	231	Quantitative General Chemistry	4 _____
CHE	309	Biochemistry	4 _____
Junior Year			
CHE	308	Descriptive Inorganic Chemistry	3 _____
CHE	321	Quantitative Analysis	4 _____
CHE	341	Physical Chemistry I	4 _____
CHE	342	Physical Chemistry II	4 _____
Senior Year			
CHE	422	Instrumental Analysis	4 _____
CHE	560	Chemistry Seminar	1 _____

MINOR: _____ (15-18 credits total)

_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

‡ FREE ELECTIVES (0 credit minimum)

May be necessary to take additional credits to attain the minimum 120 credits required for graduation.

_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

FOREIGN LANGUAGE (0-12 credits total)

_____	_____	3 _____
_____	_____	3 _____
_____	_____	3 _____
_____	_____	3 _____

- * These are **required** support courses which may also be used to satisfy the indicated Distribution requirements. A student may choose to fulfill Distribution requirements with courses other than the ones listed, but these listed courses must still be taken.
- Note: If a course is used to satisfy two or more requirements, (for example, a support course and a distribution elective), the credits are counted in only one place. Using a course to satisfy more than one requirement does **not** reduce the total credits required for graduation.
- + ITC 100 is required of students who did not pass the computer literacy test and must be taken in the first semester of the freshman year or the transfer year.
- ‡ It is strongly recommended that students elect additional biology, chemistry, mathematics, physics and computer science courses.

LEVEL I TO BE COMPLETED IN THE FIRST 30 CREDITS LEVEL II TO BE COMPLETED IN THE FIRST 53 CREDITS LEVEL III TO BE COMPLETED BEFORE GRADUATION

Exceptions in the timing of courses will be made for transfer students.

Total minimum credits for graduation: 120

Effective: 9/09

Advisor: _____

Name: _____

Date admitted into Major: _____

Transfer credits: _____

**BACHELOR OF SCIENCE
CHEMISTRY**

GENERAL EDUCATION CORE REQUIREMENTS

Competencies			
<input type="checkbox"/>	Basic College Math		
<input type="checkbox"/>	Reading Comprehension		
<input type="checkbox"/>	Computer Literacy		
ENG	101	Composition I	3 _____
ENG	102	Composition II	3 _____
SPC	101	(Public Speaking)	3 _____
SMS	_____	(Health)	3 _____
SMS	_____	(Activity)	.5 _____
SMS	_____	(Activity)	.5 _____
Distribution Sequences (18-20 credits)			
*	PHS	211A or 221	Physics I 4 _____
*	PHS	212A or 222	Physics II 4 _____
	HIS	101	World History I 3 _____
	HIS	102	World History II 3 _____
	_____	_____	(Literature I) 3 _____
	_____	_____	(Literature II) 3 _____
Distribution Electives (15 credits)			
Among the distribution electives, the student must earn at least 3 but no more than 9 additional semester hours in each of the three divisions.			
Humanities (Division I)			
_____	_____	_____	_____
_____	_____	_____	_____
Science/Mathematics (Division II)			
*	MAT	220	Calculus I 4 _____
*	MAT	221	Calculus II 4 _____
*/+	ITC	100	Computers and their Uses 3 _____
Social Sciences (Division III)			
_____	_____	_____	_____
_____	_____	_____	_____
(Note: Courses allowable as distribution electives are marked DI, DII, or DIII in the College Catalog.)			
QUANTITATIVE (Q)	_____	DIVERSITY (V)	_____ WRITING (W) _____

COURSES IN MAJOR (47 credits total)

Freshman Year			
CHE	130	General Chemistry I	4 _____
CHE	212	Organic Chemistry I	4 _____
Sophomore Year			
CHE	213	Organic Chemistry II	4 _____
CHE	231	Quantitative General Chemistry	4 _____
CHE	309	Biochemistry	4 _____
Junior Year			
CHE	308	Descriptive Inorganic Chemistry	3 _____
CHE	321	Quantitative Analysis	4 _____
CHE	340	Techniques in Inorganic and Organic Synthesis	4 _____
CHE	341	Physical Chemistry I	4 _____
CHE	342	Physical Chemistry II	4 _____
Senior Year			
CHE	422	Instrumental Analysis	4 _____
CHE	441	Advanced Inorganic Chemistry	
		OR	
CHE	442	Physical Organic Chemistry	3 _____
CHE	560	Chemistry Seminar	1 _____
‡ FREE ELECTIVES (23 credit minimum)			
May be necessary to take additional credits to attain the minimum 120 credits required for graduation.			
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

* These are **required** support courses which may also be used to satisfy the indicated Distribution requirements. A student may choose to fulfill Distribution requirements with courses other than the ones listed, but these listed courses must still be taken.

Note: If a course is used to satisfy two or more requirements, (for example, a support course and a distribution elective), the credits are counted in only one place. Using a course to satisfy more than one requirement does **not** reduce the total credits required for graduation.

+ ITC 100 is required of students who did not pass the Computer Literacy Test and must be taken in the first semester of the Freshman year or the transfer year

‡ It is strongly recommended that students elect a minor in mathematics, physics, biology, or computer science.

LEVEL I TO BE COMPLETED IN THE FIRST 30 CREDITS LEVEL II TO BE COMPLETED IN THE FIRST 53 CREDITS LEVEL III TO BE COMPLETED BEFORE GRADUATION

Exceptions in the timing of courses will be made for transfer students.

Total minimum credits for graduation: 120

Effective: 9/09

Advisor: _____

Name: _____

Date admitted into Major: _____

Transfer credits: _____

**BACHELOR OF SCIENCE
CHEMISTRY
BIOCHEMISTRY CONCENTRATION**

GENERAL EDUCATION CORE REQUIREMENTS

Competencies			
<input type="checkbox"/>	Basic College Math		
<input type="checkbox"/>	Reading Comprehension		
<input type="checkbox"/>	Computer Literacy		
ENG	101	Composition I	3 _____
ENG	102	Composition II	3 _____
SPC	101	(Public Speaking)	3 _____
SMS	_____	(Health)	3 _____
SMS	_____	(Activity)	.5 _____
SMS	_____	(Activity)	.5 _____
Distribution Sequences (18-20 credits)			
*	PHS	211A or 221 Physics I	4 _____
*	PHS	212A or 222 Physics II	4 _____
	HIS	101 World History I	3 _____
	HIS	102 World History II	3 _____
	_____	_____ (Literature I)	3 _____
	_____	_____ (Literature II)	3 _____
Distribution Electives (15 credits)			
Among the distribution electives, the student must earn at least 3 but no more than 9 additional semester hours in each of the three divisions.			
Humanities (Division I)			
_____	_____	_____	_____
_____	_____	_____	_____
Science/Mathematics (Division II)			
*	MAT	220 Calculus I	4 _____
*	MAT	221 Calculus II	4 _____
*/+	ITC	100 Computers and their Uses	3 _____
Social Sciences (Division III)			
_____	_____	_____	_____
_____	_____	_____	_____
(Note: Courses allowable as distribution electives are marked DI, DII, or DIII in the College Catalog.)			
QUANTITATIVE (Q)	_____	DIVERSITY (V)	_____
		WRITING (W)	_____

COURSES IN MAJOR (41 credits total)

Freshman Year			
CHE	130	General Chemistry I	4 _____
CHE	212	Organic Chemistry I	4 _____
Sophomore Year			
CHE	213	Organic Chemistry II	4 _____
CHE	231	Quantitative General Chemistry	4 _____
CHE	309	Biochemistry	4 _____
Junior Year			
CHE	321	Quantitative Analysis	4 _____
CHE	340	Techniques in Inorganic & Organic Synth.	4 _____
CHE	341	Physical Chemistry I	4 _____
CHE	342	Physical Chemistry II	4 _____
CHE	422	Instrumental Analysis	4 _____
Senior Year			
CHE	560	Chemistry Seminar	1 _____
SUPPORT COURSES (16 credits total)			
BIO	132	Introduction to Cells	4 _____
BIO	212	Cell Biology	4 _____
BIO	409	Biological Chemistry	4 _____
and one of the following:			
BIO	402	Genetics	
BIO	405	General Physiology	
BIO	406	Microbiology	
BIO	411	Immunology	4 _____
‡ FREE ELECTIVES (13 credit minimum)			
May be necessary to take additional credits to attain the minimum 120 credits required for graduation.			
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

* These are **required** support courses which may also be used to satisfy the indicated Distribution requirements. A student may choose to fulfill Distribution requirements with courses other than the ones listed, but these listed courses must still be taken.
 Note: If a course is used to satisfy two or more requirements, (for example, a support course and a distribution elective), the credits are counted in only one place. Using a course to satisfy more than one requirement does **not** reduce the total credits required for graduation.
 + ITC 100 is required of students who did not pass the Computer Literacy Test and must be taken in the first semester of the Freshman year or the transfer year.
 ‡ It is strongly recommended that students elect additional mathematics, physics, biology and computer science courses.

LEVEL I TO BE COMPLETED IN THE FIRST 30 CREDITS LEVEL II TO BE COMPLETED IN THE FIRST 53 CREDITS LEVEL III TO BE COMPLETED BEFORE GRADUATION

Exceptions in the timing of courses will be made for transfer students.

Total minimum credits for graduation: 120

Effective: 9/09

Salem State College

Advisor: _____

Name: _____

Date admitted into Major: _____

Transfer credits: _____

**BACHELOR OF SCIENCE
CHEMISTRY
(ACS APPROVED)**

GENERAL EDUCATION CORE REQUIREMENTS

Competencies			
<input type="checkbox"/>	Basic College Math		
<input type="checkbox"/>	Reading Comprehension		
<input type="checkbox"/>	Computer Literacy		
ENG	101	Composition I	3 _____
ENG	102	Composition II	3 _____
SPC	101	(Public Speaking)	3 _____
SMS	_____	(Health)	3 _____
SMS	_____	(Activity)	.5 _____
SMS	_____	(Activity)	.5 _____
Distribution Sequences (18-20 credits)			
*	PHS	211A or 221	Physics I 4 _____
*	PHS	212A or 222	Physics II 4 _____
	HIS	101	World History I 3 _____
	HIS	102	World History II 3 _____
	_____	_____ (Literature I)	3 _____
	_____	_____ (Literature II)	3 _____
Distribution Electives (15 credits)			
Among the distribution electives, the student must earn at least 3 but no more than 9 additional semester hours in each of the three divisions.			
Humanities (Division I)			
_____	_____	_____	_____
_____	_____	_____	_____
Science/Mathematics (Division II)			
*	MAT	220	Calculus I 4 _____
*	MAT	221	Calculus II 4 _____
*/+	ITC	100	Computers and their Uses 3 _____
Social Sciences (Division III)			
_____	_____	_____	_____
_____	_____	_____	_____
(Note: Courses allowable as distribution electives are marked DI, DII, or DIII in the College Catalog.)			
QUANTITATIVE (Q)	_____	DIVERSITY (V)	_____
		WRITING (W)	_____

COURSES IN MAJOR (53 credits total)

Freshman Year			
CHE	130	General Chemistry I	4 _____
CHE	212	Organic Chemistry I	4 _____
Sophomore Year			
CHE	213	Organic Chemistry II	4 _____
CHE	231	Quantitative General Chemistry	4 _____
CHE	309	Biochemistry	4 _____
Junior Year			
CHE	308	Descriptive Inorganic Chemistry	3 _____
CHE	321	Quantitative Analysis	4 _____
CHE	340	Techniques in Inorganic & Organic Synthesis	4 _____
CHE	341	Physical Chemistry I	4 _____
CHE	342	Physical Chemistry II	4 _____
CHE	422	Instrumental Analysis	4 _____
Senior Year			
CHE	441	Advanced Inorganic Chemistry	3 _____
CHE	442	Physical Organic Chemistry	3 _____
CHE	560	Chemistry Seminar	1 _____
CHE	572	Chemistry Research I	3 _____
SUPPORT COURSE (4 credits total)			
PHS	311	General Physics III	4 _____

‡ FREE ELECTIVES (13 credit minimum)

May be necessary to take additional credits to attain the minimum 120 credits required for graduation.

_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

* These are **required** support courses which may also be used to satisfy the indicated Distribution requirements. A student may choose to fulfill Distribution requirements with courses other than the ones listed, but these listed courses must still be taken. Note: If a course is used to satisfy two or more requirements, (for example, a support course and a distribution elective), the credits are counted in only one place. Using a course to satisfy more than one requirement does **not** reduce the total credits required for graduation.

+ ITC 100 is required of students who did not pass the Computer Literacy Test and must be taken in the first semester of the Freshman year or the transfer year.

‡ It is strongly recommended that students elect additional biology, mathematics, physics and computer science courses.

LEVEL I TO BE COMPLETED IN THE FIRST 30 CREDITS LEVEL II TO BE COMPLETED IN THE FIRST 53 CREDITS LEVEL III TO BE COMPLETED BEFORE GRADUATION

Exceptions in the timing of courses will be made for transfer students.

Total minimum credits for graduation: 120

Effective: 9/09