

ARIZONA STATE UNIVERSITY  
CURRICULUM CHECKSHEET

B.S. CLINICAL LABORATORY SCIENCES  
2006-2007

I. UNIVERSITY GENERAL STUDIES REQUIREMENTS

AGEC Certification       YES       NO

A single course may be used to satisfy one core area and a maximum of two awareness area requirements. A single course may be used to satisfy a maximum of two awareness area requirements. A single course cannot be used to satisfy two core areas of requirements, even if it is approved for more than one core area. Courses approved for meeting General Studies requirements are noted in the General Catalog, the course descriptions, and in the Schedule of Classes each academic term. Refer to the General Catalog for more information/explanation.

A. First-Year Composition (grade of "C" or higher is required):

ENG 101 and 102; or ENG 105; or ENG 107 and 108 for foreign students \_\_\_\_\_

B. Core Areas (35 hours)

1. Literacy and Critical Inquiry (L) (6 hrs) (3 hours upper division required)

L: \_\_\_\_\_ ( ) \_\_\_\_\_

L: CLS 450 (2 hrs) and CLS 460 (1 hr) (Upper Division courses in major) \_\_\_\_\_

2. Mathematical Studies (MA/CS) (6 hrs)

MA: Mathematics MAT 142 or higher  
\_\_\_\_\_ ( ) (grade of "C" or higher is required) \_\_\_\_\_

CS: Computer/Statistics/Quantitative Applications \_\_\_\_\_ ( ) \_\_\_\_\_

Humanities and Fine Arts (HU) and Social and Behavioral Sciences (SB): Fifteen hours, combined requirement - six hours in one area and nine hours in the other. Three hours must be upper division.

3. HU: Humanities and Fine Arts (6-9 hrs)

\_\_\_\_\_ ( ) \_\_\_\_\_

\_\_\_\_\_ ( ) \_\_\_\_\_

\_\_\_\_\_ ( ) \_\_\_\_\_

4. SB: Social and Behavioral Sciences (6-9 hrs)

\_\_\_\_\_ ( ) \_\_\_\_\_

\_\_\_\_\_ ( ) \_\_\_\_\_

\_\_\_\_\_ ( ) \_\_\_\_\_

5. Natural Sciences (SQ/SG) (8 hrs)

SQ: CHM 115      Gen Chem with Qual Anal (5) \_\_\_\_\_

SG: BIO 187      Gen Biology (4) \_\_\_\_\_

C. Awareness Areas:

1. Cultural Diversity in the United States

C: \_\_\_\_\_ ( ) \_\_\_\_\_

2. Global Awareness

G: \_\_\_\_\_ ( ) \_\_\_\_\_

3. Historical Awareness

H: \_\_\_\_\_ ( ) \_\_\_\_\_

**II. COLLEGE GRADUATION REQUIREMENTS:**

- A. 6 credits (two courses) of "Science and Society" courses \_\_\_\_\_  
\_\_\_\_\_ ( ) \_\_\_\_\_  
\_\_\_\_\_ ( ) \_\_\_\_\_
- B. MAT 142 or higher (with a grade of "C" or higher) \_\_\_\_\_

**III. MAJOR**

- A. Requirements: A grade of C or better must be achieved in all courses 300 level or higher to be counted for the major.

_____	CLS 100	Introduction to Clinical Laboratory Sciences (1)
_____	CLS 310	** Principles of Clinical Chemistry (6)
_____	CLS 320	** Principles of Clinical Microbiology (6)
_____	CLS 330	** Principles of Clinical Hematology I/Body Fluids (3)
_____	CLS 430	** Principles of Clinical Hematology II/Hemostasis (3)
_____	CLS 440	** Principles of Clinical Immunology / Immunohematology (4)
_____	CLS 411	** Advanced Applications of Clinical Chemistry (4)
_____	CLS 421	** Advanced Applications of Clinical Microbiology (4)
_____	CLS 431	** Advanced Applications of Clinical Hematology (4)
_____	CLS 441	** Advanced Applications of Clinical Immunology / Immunohematology (3)
_____	CLS 450	** Principles of Clinical Laboratory Administration (2)
_____	CLS 460	** Principles of Clinical Laboratory Education (1)

\*\* Registration for all CLS courses, with the exception of CLS 100, is dependent upon acceptance of the student into the accredited Clinical Laboratory Sciences Professional Study Program. It is the student's responsibility to make application. ASU does NOT guarantee acceptance to the Professional Study Program. If not accepted, the student can normally complete a B.S. in Microbiology or Biology in the same period of time required for the professional study program.

- B. Required Related Courses

_____	MIC 205	* Microbiology (3)
_____	MIC 206	* Microbiology Laboratory (1)
_____	CHM 231 & 235	Elementary Organic Chemistry (3) and Lab (1)
_____	BIO 360	** Animal Physiology (3)
_____	BCH 361	* Principles of Biochemistry (3)

\* These courses must have been completed within the seven years prior to admission to the Professional Study Program. See advisor for options. Minimum grade of C required for entrance into the Professional Study Program.

\*\* Minimum grade of C required for entrance into the Professional Study Program.

**IV. GENERAL ELECTIVES**

Students must consult the Clinical Laboratory Sciences advisor to select these courses.

\_\_\_\_\_ ( ) \_\_\_\_\_ ( ) \_\_\_\_\_ ( )  
\_\_\_\_\_ ( ) \_\_\_\_\_ ( ) \_\_\_\_\_ ( )

**V. ADDITIONAL UNIVERSITY DEGREE REQUIREMENTS**

- A. Minimum of 120 semester hours required.
- B. Minimum of 45 semester hours in upper division courses are required.
- C. Minimum Cumulative GPA must be 2.00 for courses taken at A.S.U.
- D. Minimum of 30 semester hours earned in resident credit courses at A.S.U. Main.

**Material in this checksheet is subject to change. Consult the Clinical Laboratory Sciences advisor for any changes.**

**ARIZONA STATE UNIVERSITY  
B.S. CLINICAL LABORATORY SCIENCES  
SUGGESTED SCHEDULE**

<b>FRESHMAN YEAR</b>							
<u>FALL SEMESTER</u>				<u>SPRING SEMESTER</u>			
ENG 101	English		3	ENG 102	English		3
MA	(MAT 142 or higher)		3	CHM 113	General Chemistry		4
BIO 187	General Biology		4	BIO 188	General Biology		4
CLS 100	Intro to Clinical Lab Sciences (Fall only)		1	Social and Behavioral Sciences (SB)			<u>3</u>
Humanities and Fine Arts (HU)			<u>3</u>				14
			14				
<b>SOPHOMORE YEAR</b>							
<u>FALL SEMESTER</u>				<u>SPRING SEMESTER</u>			
CHM 115	Gen Chem with Qual Anal		5	Elective			3
MIC 205	Microbiology		3	CHM 231	Elem Organic Chemistry		3
MIC 206	Microbiology Lab		1	CHM 235	Elem Organic Chem Lab		1
Humanities and Fine Arts (HU)			3	BIO 360	Animal Physiology		3
Social and Behavioral Sciences (SB)			<u>3</u>	CS (Mathematical Studies Requirement)			3
			15	CLAS Science and Society (upper division)			<u>3</u>
							16
<b>JUNIOR YEAR</b>							
<u>FALL SEMESTER</u> (9 credits upper division)				<u>SPRING SEMESTER</u> (12 credits upper division)			
BCH 361	Principles of Biochemistry		3	CLS 310**	Prin of Clinical Chemistry		6
CLAS Science and Society (upper division)			3	CLS 320**	Prin of Clinical Microbiology		<u>6</u>
Humanities or Social Science (upper division HU or SB)			3				12
Literacy and Critical Inquiry (L)			3				
Two electives (3 credits each)			<u>6</u>				
			18				
<u>COMMENT:</u> Apply for Professional Study Program at beginning of Fall semester.							
<b>SENIOR YEAR</b> (32-34 credits upper division)							
Summer Sessions, Fall Semester, Spring Semester. The remainder of the CLS courses are offered during this 12 month period.							
CLS	Electives		4-6	CLS 411**	Adv Applic of Clin Chemistry		4
CLS 330**	Prin of Clin Hematology I / Body Fluids		3	CLS 421**	Adv Applic of Clin Microbiology		4
CLS 430**	Prin of Clin Hematology II / Hemostasis		3	CLS 431**	Adv Applic of Clin Hematology		4
CLS 440**	Prin of Clin Immuno/ Immunohem		4	CLS 441**	Adv Applic of Clin Immuno/ Immunohem		3
				CLS 450**	Prin of Clinical Lab Administration (L)		2
				CLS 460**	Prin of Clinical Laboratory Education (L)		1
** This is a 16 month Clinical Laboratory Sciences Professional Study Program. Summer sessions are included. Registration for all CLS courses, with the exception of CLS 100, is dependent upon acceptance of student into the Clinical Laboratory Sciences Professional Study Program. ASU <u>does NOT guarantee acceptance to this program.</u>							

Note: Awareness areas should be completed simultaneously with HU/SB requirements.

Summer and winter sessions are also available. Thus, students can complete some requirements during these sessions in their first two years.