

**ARIZONA STATE UNIVERSITY
CURRICULUM CHECKSHEET**

**B.S. CLINICAL LABORATORY SCIENCES
2004-2005**

I. UNIVERSITY GENERAL STUDIES REQUIREMENTS

AGEC Certification G YES G 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 117 or higher (required for CLS majors)
_____ () (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: You cannot cross-list (double count) courses from the College Graduation Requirements (Humanities, Social and Behavioral Sciences and Natural Sciences and Mathematics areas) with the University General Studies Requirements (HU, SB, SQ and SG areas). The Bridge course requirement cannot be double counted to fill any other CLAS graduation requirement or the HU, SB, SQ or SG portions of the University General Studies requirement.

A. Second Language: Completion of second language course work at the intermediate level (202 or equivalent for most, see catalog for greater specification), or a foreign language course at the 300 level or higher taught in the foreign language and having 202 or its equivalent as a prerequisite, or completion of secondary education at a school in which the language of instruction is not English, or completion of SHS 202 American Sign Language IV or its equivalent. (grade of “C” or higher is required in each course specified above)

_____ () _____

_____ () _____

B. Humanities (two courses of at least 3 semester hours each at the 300 level or higher):
Course prefixes: AFH, CSH, ENG, HUM, PHI, HPS, REL, WSH, Department of Languages & Literatures - literature course at the 300 level or higher.

1. _____ () (upper division) _____

2. _____ () (upper division) _____

C. Social and Behavioral Sciences (two courses of at least 3 semester hours each at the 300 level or higher):
Course prefixes: AFS, ASB, CSS, ECN, GCU, HST, POS, PGS, SOC, WST

1. _____ () (upper division) _____

2. _____ () (upper division) _____

D. Bridge Course: One course of at least three hours from currently approved bridge courses. Examples from ASU Main are:

ASB 240	ASB 462	GPH 314	HST 460	REL 382
ASB 326	BIO 311	HPS 322	HUM 420	REL 390
ASB 353	ENG 312	HPS 330	PLB 320	REL 480
(East also)	GCU 344	HPS 331	REL 379	MIC 394 (Disease & AIDS in America)

_____ () _____

E. Natural Sciences and Mathematics (two courses of at least 3 semester hours each)
These requirements are fulfilled in Major Required Related Courses.

F. MAT 117 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

- Minimum of 120 semester hours required.
- Minimum of 45 semester hours in upper division courses are required.
- Minimum Cumulative GPA must be 2.00 for courses taken at A.S.U.
- 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**

FRESHMAN YEAR			
<u>FALL SEMESTER</u>		<u>SPRING SEMESTER</u>	
ENG 101 English	3	ENG 102 English	
CHM 113 General Chemistry	4	CHM 115 Gen Chem with Qual Anal	
BIO 187 General Biology	4	BIO 188 General Biology	
CLS 100 Intro to Clinical Lab Sciences	1	MAT 117 College Algebra	
Humanities (HU)	<u>3</u>		
	15		
SOPHOMORE YEAR			
<u>FALL SEMESTER</u>		<u>SPRING SEMESTER</u>	
CHM 231 Elem Organic Chemistry	3	Foreign Language	
CHM 235 Elem Organic Chem Lab	1	BIO 360 Animal Physiology	
MIC 205 Microbiology	3	Humanities	
MIC 206 Microbiology Lab	1	Social Science	
Humanities (HU)	3	Social Science	
Social Science (SB)	3		
Social Science (SB)	<u>3</u>		
	17		
JUNIOR YEAR			
<u>FALL SEMESTER</u>		<u>SPRING SEMESTER</u>	
BCH 361 Principles of Biochemistry	3	CLS 310** Prin of Clinical Chemistry	
Humanities	3	CLS 320** Prin of Clinical Microbiology	
Humanities or Social Science (HU or SB)	3		
Bridge Course	3		
CS (Mathematical Studies Requirement)	<u>3</u>		
	15		
<u>COMMENT:</u> Apply for Professional Study Program at beginning of Fall semester.			
SENIOR YEAR			
Summer Sessions, Fall Semester, Spring Semester. The remainder of the CLS courses are offered during this 12 month period.			
CLS 330** Prin of Clinical Hematology I / Body Fluids	3	CLS 411** Adv Applic of Clinical Chemist	
CLS 430** Prin of Clinical Hematology II / Hemostasis	3	CLS 421** Adv Applic of Clinical	
CLS 440** Prin of Clinical Immunology / Immunohematology	4		
CLS 450** Prin of Clinical Lab Administration	2		
** This is a 16 month Clinical Laboratory Science Professional Study Program. Summer session is 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</u> to this program.			