ARIZONA STATE UNIVERSITY
CURRICULUM CHECKSHEET
B.S. CLINICAL LABORATORY SCIENCES
2003-2004

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 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 are:
   
   ASB 240  ASM 248  GPH 314  HST 460  REL 379
   ASB 326  BIO 311  HPS 322  HUM 420  REL 382
   ASB 353  ENG 312  HPS 330  MIC 394  REL 390
   ASB 462  GCU 344  HPS 331  PLB 320  REL 480
   
   ______ ______ ( )

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

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

#### FRESHMAN YEAR

<table>
<thead>
<tr>
<th>FALL SEMESTER</th>
<th>SPRING SEMESTER</th>
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<tbody>
<tr>
<td>ENG 101 English</td>
<td>ENG 102 English 3</td>
</tr>
<tr>
<td>CHM 113 General Chemistry</td>
<td>CHM 115 Gen Chem with Qual Anal 5</td>
</tr>
<tr>
<td>BIO 187 General Biology</td>
<td>BIO 188 General Biology 4</td>
</tr>
<tr>
<td>CLS 100 Intro to Clinical Lab Sciences</td>
<td>MAT 117 College Algebra 3</td>
</tr>
<tr>
<td>Humanities (HU) 3</td>
<td>MAT 117 College Algebra 3</td>
</tr>
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#### SOPHOMORE YEAR

<table>
<thead>
<tr>
<th>FALL SEMESTER</th>
<th>SPRING SEMESTER</th>
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<tbody>
<tr>
<td>CHM 231 Elem Organic Chemistry</td>
<td>Foreign Language 4</td>
</tr>
<tr>
<td>CHM 235 Elem Organic Chem Lab 1</td>
<td>BIO 360 Animal Physiology 3</td>
</tr>
<tr>
<td>MIC 205 Microbiology 3</td>
<td>Humanities 3</td>
</tr>
<tr>
<td>MIC 206 Microbiology Lab 1</td>
<td>Social Science 3</td>
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<tr>
<td>Humanities (HU) 3</td>
<td>Social Science 3</td>
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<tr>
<td>Social Science (SB) 3</td>
<td>Social Science 3</td>
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<tr>
<td>Social Science (SB) 3</td>
<td>Social Science 3</td>
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#### JUNIOR YEAR

<table>
<thead>
<tr>
<th>FALL SEMESTER</th>
<th>SPRING SEMESTER</th>
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<tbody>
<tr>
<td>BCH 361 Principles of Biochemistry 3</td>
<td>CLS 310** Prin of Clinical Chemistry 6</td>
</tr>
<tr>
<td>Humanities 3</td>
<td>CLS 320** Prin of Clinical Microbiology 6</td>
</tr>
<tr>
<td>Humanities or Social Science (HU or SB) 3</td>
<td>Bridge Course 3</td>
</tr>
<tr>
<td>Bridge Course 3</td>
<td>CS (Mathematical Studies Requirement) 3</td>
</tr>
<tr>
<td>CS (Mathematical Studies Requirement) 3</td>
<td>CLS 460** Prin of Clinical Laboratory Education 1</td>
</tr>
</tbody>
</table>

**COMMENT:** 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 Chemistry 4 |
| CLS 430** Prin of Clinical Hematology II / Hemostasis 3 | CLS 421** Adv Applic of Clinical Microbiology 4 |
| CLS 440** Prin of Clinical Immunology / Immunohematology 4 | CLS 431** Adv Applic of Clinical Hematology 4 |
| CLS 450** Prin of Clinical Lab Administration 2 | CLS 441** Adv Applic of Clinical Immunology / Immunohematology 3 |
| CLS 460** Prin of Clinical Laboratory Education 1 | **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 does NOT guarantee acceptance to this program.**

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