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 _______ _______ (     ) ________ _______

3. 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 182 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 requirements for the University or College.

A. **Second Language:** Completion of foreign 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 (literature courses only), HUM, PHI, HPS, REL, WSH, Department of Languages & Literatures - FLA 150 or any literature or "civilization" 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, HIS, POS, PGS, SOC, WST (except for WST 413, 464 and 470)

   1. _____ _____  ( ) (upper division)
   2. _____ _____  ( ) (upper division)

D. **Bridge Course:** One course of at least three hours from currently approved bridge courses. See flyer in SS 111 for updated list. Examples are:

   BIO 311  GPH 314  GPH 405  REL 379  REL 390
   ENG 312  GCU 344  PLB 320  REL 382  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.
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 (4)
- _____ 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</td>
</tr>
<tr>
<td>CHM 113 General Chemistry</td>
<td>CHM 115 Gen Chem with Qual Anal</td>
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<tr>
<td>BIO 181 General Biology</td>
<td>BIO 182 General Biology</td>
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<tr>
<td>CLS 100 Intro to Clinical Lab Sciences</td>
<td>MAT 117 College Algebra</td>
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<td>Humanities</td>
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### SOPHOMORE YEAR

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<thead>
<tr>
<th>FALL SEMESTER</th>
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<tbody>
<tr>
<td>CHM 231 Elem Organic Chemistry</td>
<td>Foreign Language</td>
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<tr>
<td>CHM 235 Elem Organic Chem Lab</td>
<td>BIO 360 Animal Physiology</td>
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<tr>
<td>MIC 205 Microbiology</td>
<td>Humanities</td>
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<td>MIC 206 Microbiology Lab</td>
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### JUNIOR YEAR

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<th>FALL SEMESTER</th>
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<tr>
<td>BCH 361 Principles of Biochemistry</td>
<td>CLS 310** Prin of Clinical Chemistry</td>
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<tr>
<td>Humanities</td>
<td>CLS 320** Prin of Clinical Microbiology</td>
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<tr>
<td>Humanities</td>
<td>CLS 311** Adv Applic of Clinical Chemistry</td>
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<tr>
<td>Social Science</td>
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</tr>
<tr>
<td>CS (Mathematical Studies Requirement)</td>
<td>CLS 411** Adv Applic of Clinical Immunology</td>
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**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 | CLS 411** Adv Applic of Clinical Chemistry | 3 |
| CLS 430** Prin of Clinical Hematology II / Hemostasis | CLS 412** Adv Applic of Clinical Microbiology | 3 |
| CLS 440** Prin of Clinical Immunology / Immunohematology | CLS 431** Adv Applic of Clinical Hematology | 4 |
| CLS 450** Prin of Clinical Lab Administration | CLS 441** Adv Applic of Clinical Immunology / Immunohematology | 3 |
| | CLS 460** Prin of Clinical Laboratory Education | 4 |

** 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.