

## Academic Advisement Report

UGRD.USCNC.BIOLBS.BF  
Undergraduate Career  
College of Science Program  
Biology Major (BS)  
Bioinformatics Specialization  
Requirement Term: Fall 2013

### Undergraduate Graduation Requirements

(RG511)

All course work and requirements for this degree must be completed prior to the date the degree is awarded. The University of Arizona requirements to follow in this audit are required for graduation and awarding of the degree.

#### Curriculum:

1. The University of Arizona and the Arizona Board of Regents have sole discretion over all curricula changes.
2. Courses, programs & requirements may be suspended, deleted, restricted, or changed in any manner, at any time.
3. Students must remain currently informed about all policies & other info that bears on completing a degree.

#### Required Units:

Additional units will be required to complete this degree if a student:

- A) is admitted to the UA with deficiencies;
- B) changes his/her academic plan(s);
- C) fails to meet minimum course/plan requirements;
- D) ineffectively plans or fails to execute a course of study that leads directly to degree completion; or
- E) is completing more than one baccalaureate degree. Completing a second bachelor's degree at The University of Arizona requires no fewer than 30 units in addition to the units required for the first degree, and all requirements for the second degree must be met.

The following requirements must be met for graduation.

#### Units Required and Cumulative GPA

(R2903/L10)

120 units are required at a 2.0 GPA. View the pdf report grid for units earned toward this degree and cumulative GPA.

Completing a second bachelor's degree at The University of Arizona requires no fewer than 30 units in addition to the units required for the first degree, and all requirements for the second degree must be met.

#### Upper Division Units

(R538/L40)

**Not Satisfied:** A minimum of 42 units of upper-division credit are required for this degree.

· **Units:** 42.00 required, 0.00 completed, 42.00 needed

#### Units in Residence

(R538/L60)

**Not Satisfied:** A minimum of 30 units in residence at The University of Arizona (excluding correspondence credit and credit by exam) is required.

· **Units:** 30.00 required, 0.00 completed, 30.00 needed

#### Final Units in Residence

(R538/L70)

A minimum of 18 of the final 30 units taken toward degree requirements must be in residence at The University of Arizona. Consult with your academic advisor if you plan to use transfer credits to fulfill your degree requirements.

#### Correspondence and/or Exam Credit Limit

(R2075/L10)

**Satisfied:** A maximum of 60 units of Correspondence Credit and/or Exam Credit may apply toward graduation.

Non Degree Seeking Limit

(R838/L10)

A maximum of 15 units completed as a non-degree seeking student may be used for fulfilling undergraduate degree requirements.

Units exceeding this limit (shown below) must be subtracted from the units required towards the degree and graduation requirements.

Community College Limit

(R1227/L10)

**Not Satisfied:** A maximum of 64 units of community college course work may apply toward graduation. A minimum of 56 units of course work must be completed at a 4-year institution, military institution, or as test credit.

· **Units:** 56.00 required, 0.00 completed, 56.00 needed

Success Course Limit

(R3297/L25)

**Satisfied:** No more than 3 units will apply toward a student's graduation requirements.

All Success courses taken can be seen below. Success Course units exceeding the 3 unit maximum must be subtracted from the total units, residency requirements and cumulative grade point average.

PE Activity Course Limit

(R3297/L25)

**Satisfied:** No more than 3 units will apply toward a student's graduation requirements.

All PE activity courses taken can be seen below. PE Activity units exceeding the 3 unit maximum must be subtracted from the total units, residency requirements and cumulative grade point average.

**Foundation Mathematics**

(RG1434)

**Not Satisfied:** Foundation Mathematics

GE Substantial Math Strand

(R2612)

**Not Satisfied:** Math GE

GE Substantial Math Strand

(R2612/L10)

**Not Satisfied:** Complete 1 course from MATH 122B,124,125,129,223 TO 499.

Not from: MATH 197A, 199, 199H, 294A, 299, 299H, 301, 302A, 302B, 397A, 399, 399H, 481.

· **Units:** 2.67 required, 0.00 completed, 2.67 needed

Term	Subject	Catalog Nbr	Course Title	Grade	Units	RptCd	RqDes	Type

**Courses Available**

MATH 122B, MATH 124, MATH 125, MATH 125-CC, MATH 129, MATH 129-CC, MATH 215, MATH 223, MATH 223-CC, MATH 250A, MATH 254, MATH 254-CC

**Undergraduate General Education and Foundation Requirements**

(RG507)

**Overall Requirement Not Satisfied:** Undergraduate General Education and Foundation Requirements

**Foundation Composition**

(R532)

**Not Satisfied:** Select from 1 of the 3 following options:

1. First and Second Semester Composition OR
2. Honors Composition with grade of C or higher OR
3. Honors Composition with a grade of D and Second Semester Composition.

Please note: Students who earn a grade of D in Honors Composition may choose to repeat the course in order to earn a higher grade to satisfy the requirement. Please consult with your major advisor.

Mid-Career Writing Assessment - Complete 2nd semester English Composition with a B grade or higher. Students who do not earn a grade of B or better in 2nd semester English Composition must also satisfy a college or department writing requirement. Consult your major advisor if you do not earn a grade of B in 2nd semester English Composition.

**Option 1: First Semester Composition**

(R532/L10)

**Not Satisfied:** Complete 1 course

· **Courses:** 1.00 required, 0.00 completed, 1.00 needed

Term	Subject	Catalog Nbr	Course Title	Grade	Units	RptCd	RqDes	Type

**Courses Available**

ENGL 101, ENGL 101A, ENGL 103H, ENGL 107, ENGL 107A

**AND Option 1: Second Semester Composition**

(R532/L20)

**Not Satisfied:** AND Complete 1 course

· **Courses:** 1.00 required, 0.00 completed, 1.00 needed

Term	Subject	Catalog Nbr	Course Title	Grade	Units	RptCd	RqDes	Type

**Courses Available**

ENGL 102, ENGL 104H, ENGL 108

**OR Option 2: Honors Composition**

(R532/L30)

**Not Satisfied:** OR Complete 1 course with a C or better.

· **Courses:** 1.00 required, 0.00 completed, 1.00 needed

Term	Subject	Catalog Nbr	Course Title	Grade	Units	RptCd	RqDes	Type
	ENGL	109H						

**Courses Available**

ENGL 109H

**Foundation Second Language - Second Semester Proficiency** (R521)

**Not Satisfied:** Credit will not be given for a course at an equivalent or lower level than prior language credit earned. Course must be taken for a grade, not as pass/fail. Third semester or higher courses used to fulfill this requirement may also be used to fulfill other requirements. A grade of C or higher is required in the course that satisfies the second language requirement.

Demonstrate second semester proficiency in a second language by completing a sequence of courses through a second semester or higher level or by passing a language proficiency examination at the second semester level or higher.

**Second Semester Language Course**

(R521/L10)

**Not Satisfied:** Complete 1 course.

Not from: FREN 325, 393, 399, 399H, 414, 448, 453, HIST 465D, ITAL 330A, 330B, 330C, 330D, 399, 399H, SPAN 397W, 406A, 414, 423A, 423B, 465C, 465D, TTE 414.

- **Courses:** 1.00 required, 0.00 completed, 1.00 needed
- **GPA:** 2.000 required, 0.000 completed

Term	Subject	Catalog Nbr	Course Title	Grade	Units	RptCd	RqDes	Type

**Courses Available**

AIS 104B, AIS 307B, ARB 102, CHN 102, CHN 102-CC, CHN 102-SA, CRL 102, CRL 197A, FREN 102, FREN 102-CC, FREN 102-SA, FREN 112, GER 102, GER 102-CC, GRK 102, GRK 102-SA, GRK 104, ITAL 102, ITAL 102-CC, ITAL 102-SA, ITAL 102Z, ITAL 102Z-SA, JPN 102, JUS 103B, LAT 102, LAT 102-SA, LING 104B, LING 307B, MENA 103B, PORT 102, PRS 102, RSSS 101B, RSSS 101B-CC, RSSS 101B-SA, SERP 370B, SPAN 102, SPAN 102-CC, SPAN 102-SA, SPAN 103, TURK 102

**General Education Tier I** (R522)

**Overall Requirement Not Satisfied:** Complete 2 courses in each of the following areas.

**Tier I Individuals & Societies**

(R522/L10)

**Not Satisfied:** Fulfillment of Individuals and Societies requires completion of two distinctly numbered courses (e.g., INDV 101 & 103 or PSY 150A1 & ANTH 150B1 or PSY 150A1 & INDV 103).

Only one course may be completed from the 150A options OR INDV 101. Only one course may be completed from the 150B options OR INDV 102. Only one course may be completed from the 150C options OR INDV 103.

INDV 101 = 150A#  
 INDV 102 = 150B#  
 INDV 103 = 150C#

- **Courses:** 2.00 required, 0.00 completed, 2.00 needed

Term	Subject	Catalog Nbr	Course Title	Grade	Units	RptCd	RqDes	Type

**Courses Available**

(\*\*\*) (###), ANTH 150B1, ANTH 150B1-SA, ART 150B1, ART 150B1-SA, ART 150B2, EDP 150B1, EDP 150B1-SA, ENGL 150B1, ENGL 150B1-SA, FSHD 150B1, GEOG 150B1, GEOG 150B1-SA, GER 150B1, GER 150B1-SA, GWS

150B1, GWS 150B1-SA, GWS 150B2, GWS 150B2-SA, GWS 150B3, GWS 150B3-SA, GWS 150B4, GWS 150B4-SA, HNRS 150B1, HNRS 150B1-SA, HNRS 150B2, IRLS 150B1, LAR 150B1, LAR 150B1-SA, LAS 150B1, LAS 150B1-SA, MAS 150B1, MAS 150B2, MIS 150B1, MIS 150B1-SA, PA 150B1, PA 150B1-SA, PE 150B1, PE 150B1-SA, PHIL 150B1, PHIL 150B1-SA, POL 150B1, POL 150B1-SA, RCSC 150B1, RCSC 150B1-SA, RCSC 150B2, RCSC 150B2-SA, RSSS 150B1, RSSS 150B1-SA, SOC 150B1, SOC 150B1-SA, SOC 150B2, SOC 150B2-SA, AED 150A1, AED 150A1-SA, ANTH 150A1, ANTH 150A1-SA, ART 150A1, ART 150A1-SA, HWRS 150A1, LING 150A1, LING 150A1-SA, MIS 150A1, MIS 150A1-SA, PHIL 150A1, PHIL 150A1-SA, POL 150A1, POL 150A1-SA, PSY 150A1, PSY 150A1-SA, AED 150C1, AREC 150C1, AREC 150C1-SA, AREC 150C2, AREC 150C2-SA, ECON 150C1, ECON 150C1-SA, GEOG 150C1, GEOG 150C1-SA, HIST 150C1, HIST 150C1-SA, HIST 150C2, HIST 150C2-SA, HIST 150C3, HIST 150C3-SA, HIST 150C4, HIST 150C4-CC, HIST 150C4-SA, HIST 150C5, HIST 150C5-CC, HIST 150C5-SA, HIST 150C6, HIST 150C6-SA, JOUR 150C1, JOUR 150C1-SA, MAS 150C1, MAS 150C1-SA, MENA 150C1, MENA 150C1-SA, PHIL 150C1, PHIL 150C1-SA, PLP 150C1, PLP 150C1-SA, POL 150C1, POL 150C1-SA, POL 150C2, POL 150C2-SA, POL 150C3, SOC 150C1, SOC 150C1-SA, SOC 150C2, SOC 150C2-SA

**Tier I Traditions & Cultures**

(R522/L30)

**Not Satisfied:** Fulfillment of Traditions and Cultures requires completion of two distinctly numbered courses (e.g., TRAD 102 & 104 or AFAS 160C2 & RSSS 160C1 or TRAD 101 & RSSS 160C1).

Only one course may be completed from the 160A options OR TRAD 101. Only one course may be completed from the 160B options OR TRAD 102. Only one course may be completed from the 160C options OR TRAD 103. Only one course may be completed from the 160D options OR TRAD 104.

TRAD 101 = 160A#  
 TRAD 102 = 160B#  
 TRAD 103 = 160C#  
 TRAD 104 = 160D#

· **Courses:** 2.00 required, 0.00 completed, 2.00 needed

Term	Subject	Catalog Nbr	Course Title	Grade	Units	RptCd	RqDes	Type

**Courses Available**

(\*\*\*) (###), AFAS 160A1, AFAS 160A1-SA, AFAS 160A2, AFAS 160A2-SA, AIS 160A1, AIS 160A1-SA, ANTH 160A1, ANTH 160A1-SA, EAS 160A1, EAS 160A1-SA, EAS 160A2, EAS 160A2-SA, EAS 160A3, EAS 160A3-SA, EAS 160A4, EAS 160A4-SA, EAS 160A5, EAS 160A5-SA, ENGL 160A1, ENGL 160A1-SA, FREN 160A1, FREN 160A1-SA, HIST 160A1, HIST 160A1-CC, HIST 160A1-SA, MAS 160A1, MAS 160A1-SA, MENA 160A1, MENA 160A1-SA, MENA 160A2, MENA 160A2-SA, MENA 160A3, MENA 160A3-SA, POL 160A1, POL 160A1-SA, CLAS 160B1, CLAS 160B1-SA, DNC 160B1, DNC 160B1-SA, ENGL 160B1, ENGL 160B1-SA, HIST 160B1, HIST 160B1-SA, HIST 160B2, HIST 160B2-SA, ITAL 160B1, ITAL 160B1-SA, POL 160B1, POL 160B1-SA, ARC 160C1, ARC 160C1-SA, DNC 160C1, DNC 160C1-SA, ENGL 160C1, ENGL 160C1-SA, GER 160C1, GER 160C1-SA, GWS 160C1, GWS 160C1-SA, HIST 160C1, HIST 160C1-SA, POL 160C1, POL 160C1-SA, RSSS 160C1, RSSS 160C1-SA, SPAN 160C1, SPAN 160C1-SA, AFAS 160D1, AFAS 160D1-SA, ANTH 160D1, ANTH 160D1-SA, ANTH 160D2, ANTH 160D2-SA, ANTH 160D3, ANTH 160D3-SA, ARC 160D1, ARC 160D1-SA, ART 160D1, ART 160D1-SA, ART 160D2, ART 160D2-SA, ART 160D3, ART 160D3-SA, CLAS 160D1, CLAS 160D1-SA, CLAS 160D2, CLAS 160D2-SA, CLAS 160D3, CLAS 160D3-SA, ENGL 160D1, ENGL 160D1-SA, ENTO 160D1, ENTO 160D1-SA, GER 160D1, GER 160D1-SA, HNRS 160D1, HNRS 160D1-SA, HNRS 160D2, JUN 160D1, JUN 160D1-SA, MUS 160D1, PHIL 160D1, PHIL 160D1-SA, PHIL 160D2, PHIL 160D2-SA, PHIL 160D3, PHIL 160D3-SA, POL 160D1, POL 160D1-SA, RELI 160D1, RELI 160D1-SA, RELI 160D2, RELI 160D2-SA, RELI 160D3, RELI 160D3-SA, RNR 160D1, RNR 160D1-SA, RSSS 160D1, SPAN 160D1, SPAN 160D1-SA, TAR 160D1, VSC 160D1, VSC 160D1-SA

**General Education Tier II**

(R528)

**Overall Requirement Not Satisfied:** Complete 1 course from each of the following areas.

**Tier II Arts**

(R528/L10)

**Not Satisfied:** Complete 3 units.

· **Units:** 3.00 required, 0.00 completed, 3.00 needed

Term	Subject	Catalog Nbr	Course Title	Grade	Units	RptCd	RqDes	Type

### Courses Available

AFAS 371, ARC 325, ARE 130, ARH 201, ARH 202, ARH 202-SA, ARH 203, ARH 312, ARH 314, ARH 314-SA, ARH 315, ARH 315-SA, ARH 316A, ARH 316A-SA, ARH 316B, ARH 319, ARH 320, ARH 321, ARH 322, ARH 324, ARH 325, ARH 329, ART 203, ART 242, ART 329, ART 358, CLAS 329, DNC 100, DNC 112A, DNC 112B, DNC 112C, DNC 143, DNC 144A, DNC 144B, DNC 144C, DNC 152A, DNC 152B, DNC 152C, DNC 175, DNC 176A, DNC 176B, DNC 177C, DNC 177D, DNC 200, DNC 276A, ENGL 201, ENGL 201-SA, ENGL 209, ENGL 210, ENGL 300, ENGL 300-SA, FTV 252, FTV 375, HNRS 203H, HNRS 218, HNRS 295B, ISTA 301, JPN 245, LAS 322, LAS 337, MAS 337, MUS 100, MUS 100-CC, MUS 101A, MUS 107, MUS 107-CC, MUS 108, MUS 108-CC, MUS 109, MUS 206, MUS 231, MUS 328, MUS 334, MUS 334-CC, MUS 337, MUS 344, MUS 360, TAR 100, TAR 103, (\*\*\*) (###)

### Tier II Humanities

(R528/L20)

**Not Satisfied:** Prerequisite course work in Tier 1 Traditions and Cultures (TRAD) must be completed prior to taking. If LAT 201 or 202 are used to fulfill Foundation Second Language Proficiency, they cannot be used to fulfill Tier II Humanities.

· **Courses:** 1.00 required, 0.00 completed, 1.00 needed

Term	Subject	Catalog Nbr	Course Title	Grade	Units	RptCd	RqDes	Type

### Courses Available

AFAS 200, AFAS 222, AFAS 224, AFAS 230, AFAS 245, AFAS 245-CC, AFAS 249, AFAS 255, AFAS 315, AFAS 320, AFAS 342, AFAS 365, AFAS 373, AFAS 381, ANTH 222, ANTH 300, ARH 300, ARH 329, ART 329, CHN 245, CLAS 220, CLAS 221, CLAS 221-SA, CLAS 260, CLAS 300, CLAS 300-SA, CLAS 329, CLAS 335, CLAS 342, CLAS 346, ENGL 220A, ENGL 220B, ENGL 230, ENGL 231, ENGL 245, ENGL 245-CC, ENGL 260, ENGL 260-SA, ENGL 265, ENGL 265-CC, ENGL 267, ENGL 267-SA, ENGL 280, ENGL 342, ENGL 375, ENGR 317, FREN 245, FREN 245-CC, FREN 249, FREN 280, FREN 282, FREN 282-CC, FREN 283, FREN 283-CC, FREN 284, FREN 284-CC, FREN 373, FREN 375, FTV 325, GER 273, GER 275, GER 276, GER 278, GER 325, GER 373, GER 375, GER 376, GER 379, GWS 200, GWS 317, GWS 330, GWS 342, GWS 373, HIST 224, HIST 247, HIST 277A, HIST 277B, HIST 278, HIST 372A, HIST 372B, HNRS 200, HNRS 208-SA, HNRS 208H, HNRS 209, HNRS 212, ITAL 230, ITAL 230-SA, ITAL 240, ITAL 250A, ITAL 250B, ITAL 250C, ITAL 250D, ITAL 330B, JPN 220, JPN 311, JUS 301, JUS 325, JUS 372A, JUS 372B, JUS 376, LAT 201, LAT 201-SA, LAT 202, LAT 202-SA, MENA 277A, MENA 277B, MENA 372A, MENA 372B, PHIL 210, PHIL 213, PHIL 220, PHIL 222, PHIL 260, PHIL 261, PHIL 262, PHIL 325, PHIL 325-SA, PHIL 330, RELI 210, RELI 220, RELI 220A, RELI 220B, RELI 250, RELI 255, RELI 277A, RELI 300, RELI 304, RELI 372A, RELI 372B, RELI 379, RELI 381, RELI 385, RSSS 210, RSSS 304, RSSS 340, RSSS 345, RSSS 350, SPAN 210, SPAN 210-SA, (\*\*\*) (###)

### Tier II Individual & Societies

(R528/L30)

**Not Satisfied:** Prerequisite course work in Tier 1 Individuals and Societies (INDV) must be completed prior to taking.

· **Courses:** 1.00 required, 0.00 completed, 1.00 needed

Term	Subject	Catalog Nbr	Course Title	Grade	Units	RptCd	RqDes	Type

### Courses Available

AED 210, AED 309, AED 408, AFAS 220, AFAS 220-CC, AFAS 223, AFAS 260, AFAS 340, AFAS 444, AGTM 380, AIS 210, AIS 346, AIS 347, ANTH 202, ANTH 203, ANTH 307, ANTH 314, ANTH 316, ANTH 320, ANTH 330, ANTH 346, ANTH 346-CC, ANTH 347, ANTH 347-CC, ANTH 380, ANTV 307, AREC 350, CLAS 240, CLAS 305, CLAS 305-SA, CLAS 306, CLAS 306-SA, CLAS 362, CPH 387, CPH 444, ECON 200, ECON 200-CC, ECON 201A, ECON 201A-CC, ECON 205, EDL 200, EDP 200, FCSC 302, FSHD 200, FSHD 347, GEOG 205, GEOG 210, GEOG 210-CC, GEOG 250, GEOG 251, GEOG 251-CC, GEOG 256, GEOG 270, GEOG 367, GEOG 380, GER 274, GER 274-SA, GWS 240,

GWS 328, GWS 362, HED 350, HIST 246, HIST 370A, HIST 370B, HNRS 204H, HNRS 205H, HNRS 206H, HNRS 207H, HNRS 217, ISTA 263, ITAL 330D, JOUR 305, JUS 370A, JUS 370A-CC, JUS 370B, JUS 370B-CC, LAR 350, LAS 204, LAS 251, LING 210, LING 211, LING 330, LRC 204, LRC 239, MAS 265, MAS 365, MENA 251, MENA 330, MENA 334, NESV 334, NURS 310, PA 205, PA 250, PA 323, PE 240, PHIL 205, PHIL 211, PHIL 223, PHIL 233, PHIL 241, PHIL 246, PHIL 250, PHIL 264, PHIL 323, PHIL 345, PHIL 346, PHIL 347, PHIL 348, PLG 202, PLG 211, PLG 256, POL 201, POL 201-CC, POL 201-SA, POL 202, POL 202-CC, POL 202-SA, POL 203, POL 204, POL 204-CC, POL 250, PSY 200, PSY 240, PSY 240-CC, PSY 241, PSY 277, PSY 345, PSY 346, PSY 347, PSY 348, PSY 461A, RCSC 204, RELI 233, RELI 305, RELI 306, RELI 334, RELI 370A, RELI 370B, RELV 334, RNR 256, RSSS 275, RSSS 315, RSSS 328, SERP 200, SLHS 255, SLHS 310, SOC 220, SOC 260, SOC 260-CC, SOC 260-SA, SOC 280, SOC 357, SOC 367, TTE 200, (\*\*\*) (####)

### Diversity Emphasis Course

(R531)

**Not Satisfied:** One course must be taken that focuses on Gender, Race, Class, Ethnicity, Sexual Orientation or Non-Western Area Studies.

Courses used to fulfill this requirement may also be used to fulfill other requirements.

### Diversity Emphasis Course

(R531/L10)

**Not Satisfied:** General Education Diversity Emphasis Course: Gender, Race, Class, Ethnicity, Sexual Orientation or Non-Western Area Studies.

· **Courses:** 1.00 required, 0.00 completed, 1.00 needed

Term	Subject	Catalog Nbr	Course Title	Grade	Units	RptCd	RqDes	Type

### Courses Available

AED 408, AFAS 160A1, AFAS 160A1-SA, AFAS 160A2, AFAS 160A2-SA, AFAS 220, AFAS 220-CC, AFAS 222, AFAS 223, AFAS 230, AFAS 245, AFAS 245-CC, AFAS 249, AFAS 255, AFAS 260, AFAS 302, AFAS 304A, AFAS 304A-SA, AFAS 304B, AFAS 306, AFAS 310, AFAS 311D, AFAS 314, AFAS 315, AFAS 330, AFAS 330-CC, AFAS 340, AFAS 342, AFAS 365, AFAS 371, AFAS 373, AFAS 381, AFAS 444, AFAS 467, AFAS 468, AIS 160A1, AIS 160A1-SA, AIS 210, AIS 346, AIS 347, AIS 467, ANTH 150A1, ANTH 150A1-SA, ANTH 160A1, ANTH 160A1-SA, ANTH 202, ANTH 203, ANTH 222, ANTH 307, ANTH 314, ANTH 316, ANTH 320, ANTH 330, ANTH 346, ANTH 346-CC, ANTH 347, ANTH 347-CC, ANTH 375, ANTH 402, ANTH 450, ANTH 467, ANTV 307, ANTV 375, ARH 203, CHN 245, CHN 251, CHN 275, CHN 276, CHN 276-CC, CHN 331, CHN 340, CHN 341, CHN 419, CHN 420, CHN 429, CHN 468, CHN 475D, CHN 475E, CHN 482, CHN 483, CHN 483-SA, CLAS 362, CPH 387, CPH 444, DNC 177C, DNC 177D, EAS 130, EAS 130-CC, EAS 160A1, EAS 160A1-SA, EAS 160A2, EAS 160A2-SA, EAS 160A3, EAS 160A3-SA, EAS 160A4, EAS 160A4-SA, EAS 160A5, EAS 160A5-SA, EAS 333, EAS 350, EAS 484A, EAS 484B, EAS 489, EAS 496C, ENGL 160A1, ENGL 160A1-SA, ENGL 230, ENGL 245, ENGL 245-CC, ENGL 342, ENGL 429, FREN 160A1, FREN 160A1-SA, FREN 245, FREN 245-CC, FREN 249, FREN 373, FTV 251, GEOG 205, GEOG 210, GEOG 210-CC, GEOG 251, GEOG 251-CC, GEOG 311D, GEOG 311E, GER 274, GER 274-SA, GER 278, GER 373, GER 376, GWS 200, GWS 240, GWS 253, GWS 254, GWS 254-CC, GWS 306, GWS 324, GWS 328, GWS 330, GWS 335, GWS 335-CC, GWS 342, GWS 362, GWS 373, GWS 402, GWS 427, GWS 448, GWS 459, GWS 468, GWS 489, HIST 160A1, HIST 160A1-CC, HIST 160A1-SA, HIST 253, HIST 253-CC, HIST 254, HIST 254-CC, HIST 272, HIST 275, HIST 276, HIST 277A, HIST 278, HIST 306, HIST 370A, HIST 370B, HIST 372A, HIST 372B, HIST 475D, HIST 475E, HIST 482, HIST 489, HNRS 204H, ITAL 330B, ITAL 330D, JPN 220, JPN 245, JPN 272, JPN 304, JPN 310, JPN 311, JPN 396H, JPN 402, JPN 411, JPN 412, JPN 446A, JPN 446B, JPN 447A, JPN 447B, JPN 485, JPN 486, JPN 489, JPN 495B, JPN 495B-SA, JPN 496A, JPN 496A-SA, JPN 496C, JPN 496C-SA, JUS 325, JUS 370A, JUS 370A-CC, JUS 370B, JUS 370B-CC, JUS 372A, JUS 372B, JUS 376, LAS 251, LAS 310, LAS 337, LAS 362, LING 210, LING 304, LING 330, LING 402, LING 411, LING 412, LING 419, LING 420, LING 496C, MAS 160A1, MAS 160A1-SA, MAS 265, MAS 330, MAS 330-CC, MAS 332, MAS 332-CC, MAS 337, MAS 365, MAS 467, MENA 160A1, MENA 160A1-SA, MENA 160A2, MENA 160A2-SA, MENA 160A3, MENA 160A3-SA, MENA 251, MENA 277A, MENA 311E, MENA 330, MENA 334, MENA 372A, MENA 372B, MENA 375, MENA 375-SA, MIS 150B1, MIS 150B1-SA, MUS 109, MUS 334, MUS 334-CC, MUS 337, MUS 344, NES 441, NESV 334, NESV 375, PHIL 222, PHIL 223, PHIL 325, PHIL 325-SA, PHIL 330, POL 160A1, POL 160A1-SA, POL 330, POL 330-CC, POL 332, POL 332-CC, POL 335, POL 335-CC, POL 441, POL 464, POL 464-SA, POL 468, POL 476, RELI 130, RELI 210, RELI 220, RELI 277A, RELI 324, RELI 331, RELI 333, RELI 334, RELI 350, RELI 370A, RELI 370B, RELI 372A, RELI 372B, RELI 381, RELI 483, RELI 484A, RELI 484B, RELI 485, RELI 486, RELI 489, RELV 334, RSSS 315, RSSS 328, RSSS 350, SOC 220, SOC 222, SOC 260, SOC 260-CC, SOC 260-SA, SOC 280, SOC 324, SOC 324-CC, SOC 325, SOC 357, SOC 362, SOC 362-CC, SOC 427, SOC 432, SOC 448, SOC 448-CC, SOC 450, SOC 450-CC, SOC 459, SOC 459-CC, SOC 459-SA, SOC 467, SPAN 210, SPAN 210-SA

### Additional Coursework

(RG521)

Courses listed in this section may include general elective credits, UA courses and transferable courses from other institutions.

Consult with your advisor to determine if courses listed in this section may be used to fulfill a requirement or sub-requirement in your degree program.

Courses taken for Pass/Fail option can only count as elective credit. They cannot fulfill any General Education, Major, or Minor requirements.

### BS in Biology

(RG826)

**Overall Requirement Not Satisfied:** Bachelor of Science in Biology

### Science Foundation Courses Chemistry Requirement

(R1302)

**Overall Requirement Not Satisfied:** Complete 2 semesters of Introductory Chemistry and 2 semesters of Organic Chemistry.

#### 1. First Semester Introductory Chemistry

(R1302/L10)

**Not Satisfied:** Complete Chem 151

· **Courses:** 1.00 required, 0.00 completed, 1.00 needed

Term	Subject	Catalog Nbr	Course Title	Grade	Units	RptCd	RqDes	Type

#### Courses Available

CHEM 151, .

#### OR 1. First Semester Introductory Chemistry

(R1302/L20)

**Not Satisfied:** Complete CHEM 103A and 104A

· **Courses:** 2.00 required, 0.00 completed, 2.00 needed

Term	Subject	Catalog Nbr	Course Title	Grade	Units	RptCd	RqDes	Type

#### Courses Available

CHEM 103A, CHEM 103A-CC, CHEM 104A

#### OR 1. First Semester Introductory Chemistry

(R1302/L30)

**Not Satisfied:** Complete CHEM 105A and 106A

· **Courses:** 2.00 required, 0.00 completed, 2.00 needed

Term	Subject	Catalog Nbr	Course Title	Grade	Units	RptCd	RqDes	Type
	CHEM	105A						
	CHEM	106A						

#### Courses Available

CHEM 105A, CHEM 106A



2. Second Semester Introductory Chemistry

(R1302/L40)

**Not Satisfied:** Complete CHEM 152

 · **Courses:** 1.00 required, 0.00 completed, 1.00 needed

Term	Subject	Catalog Nbr	Course Title	Grade	Units	RptCd	RqDes	Type

**Courses Available**

CHEM 152, .

OR 2. Second Semester Introductory Chemistry

(R1302/L50)

**Not Satisfied:** Complete CHEM 103B and 104B

 · **Courses:** 2.00 required, 0.00 completed, 2.00 needed

Term	Subject	Catalog Nbr	Course Title	Grade	Units	RptCd	RqDes	Type

**Courses Available**

CHEM 103B, CHEM 103B-CC, CHEM 104B

OR 2. Second Semester Introductory Chemistry

(R1302/L60)

**Not Satisfied:** Complete CHEM 105B and 106B

 · **Courses:** 2.00 required, 0.00 completed, 2.00 needed

Term	Subject	Catalog Nbr	Course Title	Grade	Units	RptCd	RqDes	Type
	CHEM	105B						
	CHEM	106B						

**Courses Available**

CHEM 105B, CHEM 106B

3. First Semester Organic Chemistry

(R1302/L70)

**Not Satisfied:** Complete CHEM 241A and 243A

 · **Courses:** 2.00 required, 0.00 completed, 2.00 needed

Term	Subject	Catalog Nbr	Course Title	Grade	Units	RptCd	RqDes	Type

**Courses Available**

CHEM 241A, CHEM 243A, (\*\*\*) (###)

OR 3. First Semester Organic Chemistry

(R1302/L80)

**Not Satisfied:** Complete CHEM 242A and 244A

 · **Courses:** 2.00 required, 0.00 completed, 2.00 needed

Term	Subject	Catalog Nbr	Course Title	Grade	Units	RptCd	RqDes	Type
	CHEM	242A						
	CHEM	244A						

**Courses Available**

CHEM 242A, CHEM 244A

OR 3. First Semester Organic Chemistry

(R1302/L90)

**Not Satisfied:** Complete CHEM 246A and 247A

 · **Courses:** 2.00 required, 0.00 completed, 2.00 needed

Term	Subject	Catalog Nbr	Course Title	Grade	Units	RptCd	RqDes	Type
	CHEM	246A						
	CHEM	247A						

**Courses Available**

CHEM 246A, CHEM 247A

4. Second Semester Organic Chemistry

(R1302/L100)

**Not Satisfied:** Complete CHEM 241B and 243B

 · **Courses:** 2.00 required, 0.00 completed, 2.00 needed

Term	Subject	Catalog Nbr	Course Title	Grade	Units	RptCd	RqDes	Type

**Courses Available**

CHEM 241B, CHEM 243B, (\*\*\*) (###)

OR 4. Second Semester Organic Chemistry

(R1302/L110)

**Not Satisfied:** Complete CHEM 242B and 244B

 · **Courses:** 2.00 required, 0.00 completed, 2.00 needed

Term	Subject	Catalog Nbr	Course Title	Grade	Units	RptCd	RqDes	Type
	CHEM	242B						
	CHEM	244B						

**Courses Available**

CHEM 242B, CHEM 244B

OR 4. Second Semester Organic Chemistry

(R1302/L120)

**Not Satisfied:** Complete CHEM 246B and 247B

 · **Courses:** 2.00 required, 0.00 completed, 2.00 needed

Term	Subject	Catalog Nbr	Course Title	Grade	Units	RptCd	RqDes	Type
	CHEM	246B						
	CHEM	247B						

**Courses Available**

CHEM 246B, CHEM 247B

Science Foundation Physics and Math Requirement

(R1303)

**Overall Requirement Not Satisfied:** Science Foundation Physics and Math Requirement

1. Introductory Physics

(R1303/L10)

**Not Satisfied:** Complete 2 courses.

 · **Courses:** 2.00 required, 0.00 completed, 2.00 needed

Term	Subject	Catalog Nbr	Course Title	Grade	Units	RptCd	RqDes	Type
	PHYS	141						
	PHYS	241						

**Courses Available**

PHYS 141, PHYS 241

OR 1. Introductory Physics

(R1303/L20)

**Not Satisfied:** Complete 4 courses.

 · **Courses:** 4.00 required, 0.00 completed, 4.00 needed

Term	Subject	Catalog Nbr	Course Title	Grade	Units	RptCd	RqDes	Type

**Courses Available**

PHYS 102, PHYS 102-CC, PHYS 102-SA, PHYS 103, PHYS 103-CC, PHYS 181, PHYS 181-SA, PHYS 182

2. Calculus I

(R1303/L30)

**Not Satisfied:** Complete 1 course.

 · **Courses:** 1.00 required, 0.00 completed, 1.00 needed

Term	Subject	Catalog Nbr	Course Title	Grade	Units	RptCd	RqDes	Type

**Courses Available**

MATH 122B, MATH 124, MATH 125, MATH 125-CC

3. Calculus II

(R1303/L40)

**Not Satisfied:** Complete 1 course.

· **Courses:** 1.00 required, 0.00 completed, 1.00 needed

Term	Subject	Catalog Nbr	Course Title	Grade	Units	RptCd	RqDes	Type

**Courses Available**

MATH 129, MATH 129-CC

4. Statistics

(R1303/L45)

**Not Satisfied:** Complete 1 course.

· **Courses:** 1.00 required, 0.00 completed, 1.00 needed

Term	Subject	Catalog Nbr	Course Title	Grade	Units	RptCd	RqDes	Type

**Courses Available**

MATH 263, MATH 263-CC, MATH 363

5. Additional Math

(R1303/L50)

**Not Satisfied:** Complete 1 course.

· **Courses:** 1.00 required, 0.00 completed, 1.00 needed

Term	Subject	Catalog Nbr	Course Title	Grade	Units	RptCd	RqDes	Type

**Courses Available**

MATH 215, MATH 254, MATH 254-CC

Core Courses

(R1304)

**Overall Requirement Not Satisfied:** Core Courses

1. Introductory Biology I

(R1304/L5)

**Not Satisfied:** Complete 1 course.

· **Courses:** 1.00 required, 0.00 completed, 1.00 needed

Term	Subject	Catalog Nbr	Course Title	Grade	Units	RptCd	RqDes	Type

**Courses Available**

MCB 184, MCB 184

OR 1. Option II: Introductory Biology I

(R1304/L10)

**Not Satisfied:** Complete 2 courses.

· **Courses:** 2.00 required, 0.00 completed, 2.00 needed

Term	Subject	Catalog Nbr	Course Title	Grade	Units	RptCd	RqDes	Type

**Courses Available**

MCB 181L, MCB 181R, MCB 181R

2. Introductory Biology II

(R1304/L15)

**Not Satisfied:** Complete 1 course.

· **Courses:** 1.00 required, 0.00 completed, 1.00 needed

Term	Subject	Catalog Nbr	Course Title	Grade	Units	RptCd	RqDes	Type

OR 2. Option II: Introductory Biology II

(R1304/L20)

**Not Satisfied:** Complete 2 courses.

· **Courses:** 2.00 required, 0.00 completed, 2.00 needed

Term	Subject	Catalog Nbr	Course Title	Grade	Units	RptCd	RqDes	Type

**Courses Available**

ECOL 182L, ECOL 182R, ECOL 182R

3. Additional Courses

(R1304/L40)

**Not Satisfied:** Complete 3 courses.

· **Courses:** 3.00 required, 0.00 completed, 3.00 needed

Term	Subject	Catalog Nbr	Course Title	Grade	Units	RptCd	RqDes	Type

**Courses Available**

ECOL 302, ECOL 320, ECOL 320H, ECOL 335

**Option in Bioinformatics**

(RG837)

**Overall Requirement Not Satisfied:** Option in Bioinformatics

**Bioinformatics Option**

(R1333)

**Overall Requirement Not Satisfied:** Bioinformatics Option

**1. Organismal Biology**

(R1333/L10)

**Not Satisfied:** Complete 1 course

· **Courses:** 1.00 required, 0.00 completed, 1.00 needed

Term	Subject	Catalog Nbr	Course Title	Grade	Units	RptCd	RqDes	Type

**Courses Available**

BIOC 384, BIOC 462A

**2. Bioinformatics Core**

(R1333/L30)

**Not Satisfied:** Complete 2 courses.

· **Courses:** 2.00 required, 0.00 completed, 2.00 needed

Term	Subject	Catalog Nbr	Course Title	Grade	Units	RptCd	RqDes	Type

**Courses Available**

ECOL 426, ECOL 596U, EIS 596U, PLS 596U, RNR 596U

**3. Genomics**

(R1333/L40)

**Not Satisfied:** Complete 1 course.

· **Courses:** 1.00 required, 0.00 completed, 1.00 needed

Term	Subject	Catalog Nbr	Course Title	Grade	Units	RptCd	RqDes	Type

**Courses Available**

ECOL 326, ECOL 453

**4. Computer Science**

(R1333/L50)

**Not Satisfied:** Complete 2 courses.

· **Courses:** 2.00 required, 0.00 completed, 2.00 needed

Term	Subject	Catalog Nbr	Course Title	Grade	Units	RptCd	RqDes	Type
	CSC	127A						
	CSC	127B						

**Courses Available**

CSC 127A, CSC 127B

**5. Project in Bioinformatics/Genomics**

(R1333/L60)

**Not Satisfied:** Complete 1 course.

· **Courses:** 1.00 required, 0.00 completed, 1.00 needed

Term	Subject	Catalog Nbr	Course Title	Grade	Units	RptCd	RqDes	Type

**Courses Available**

ECOL 399, ECOL 498, ECOL 499

**6. Distributional Electives in Cellular/Molecular Biology**

(R1333/L70)

**Not Satisfied:** Complete 6 units.

· **Units:** 6.00 required, 0.00 completed, 6.00 needed

· **Courses:** 0.00 completed

Term	Subject	Catalog Nbr	Course Title	Grade	Units	RptCd	RqDes	Type

**Courses Available**

BME 484, ECOL 345, ECOL 428L, ECOL 428R, ECOL 440, MCB 305, MCB 315, MCB 407, MCB 410, MCB 411, MCB 416A, MCB 433, MCB 440, MCB 455, MCB 470, MCB 473, MCB 480, MCB 484, MIC 419, MIC 428L, MIC 428R, MIC 433, NROS 307, NROS 310, NROS 430, PLP 428L, PLP 428R, PLS 428L, PLS 428R, PLS 440, PSIO 303A, PSIO 303B, PSIO 484, SWES 428L, SWES 428R, VSC 419, VSC 428L, VSC 428R, VSC 433, ADVR 101

**7. Science and Society**

(R1333/L80)

**Not Satisfied:** Complete 1 course.

· **Courses:** 1.00 required, 0.00 completed, 1.00 needed

Term	Subject	Catalog Nbr	Course Title	Grade	Units	RptCd	RqDes	Type

**Courses Available**

ECOL 379, MCB 404, PA 321, PHIL 321, PSIO 411

**8. Writing Emphasis Course**

(R1333/L90)

**Not Satisfied:** At least 1 non-core course must be a writing emphasis course. Courses used to fulfill this requirement may also be used to fulfill other requirements.

- **Courses:** 1.00 required, 0.00 completed, 1.00 needed

Term	Subject	Catalog Nbr	Course Title	Grade	Units	RptCd	RqDes	Type

**Courses Available**

ECOL 330, ECOL 340, ECOL 379, ECOL 406R, ECOL 437, ECOL 438, ECOL 475, ECOL 482, ECOL 483, ECOL 484, ECOL 485, ECOL 487R, GEOG 438, GEOS 438, MCB 404, MCB 422, MCB 455, MCB 470, MCB 473, MIC 419, NROS 381, VSC 419

**Biology Bioinformatics Major Graduation Requirements**

(R1334)

**Overall Requirement Not Satisfied:** Biology Bioinformatics Major Graduation Requirements

**Mid Career Writing Assessment**

(R1334/L3)

**Not Satisfied:** Complete 2nd semester English Composition with a B grade or higher. Students who do not earn a grade of B or higher in 2nd semester English Composition must also satisfy a college or department writing requirement. Consult your major advisor if you do not earn a grade of B or higher in 2nd semester English Composition.

- **Courses:** 1.00 required, 0.00 completed, 1.00 needed

Term	Subject	Catalog Nbr	Course Title	Grade	Units	RptCd	RqDes	Type

**Major Units**

(R1334/L5)

**Not Satisfied:** A minimum of 35 units must be completed in the major.

- **Units:** 35.00 required, 0.00 completed, 35.00 needed

Term	Subject	Catalog Nbr	Course Title	Grade	Units	RptCd	RqDes	Type

**Major GPA**

(R1334/L10)

**Satisfied:** A minimum 2.0 GPA is required in the major coursework.

- **Units:** 0.00 completed
- **GPA:** 2.000 required, 0.000 completed



Major Residency

(R1334/L20)

**Not Satisfied:** A minimum of 18 units in the pre-major, supporting coursework, professional core, and/or major must be taken at the University of Arizona.

· **Units:** 18.00 required, 0.00 completed, 18.00 needed

Term	Subject	Catalog Nbr	Course Title	Grade	Units	RptCd	RqDes	Type

Minor Optional

(R1341)

**Satisfied:** A minor is optional for this major. Consult with your advisor to select a minor or discuss other options such as selecting a second major.