



B.S. in Biology
General Track
BIOLBS-BIOLGN.2014 (mrs 996)
60 credits, incl. 9 GE credits

Effective Date: 04/2014

Name of Student:		
Student ID #:		Graduation Date
Home Country:	<input type="checkbox"/> IWORK	
Advisor:	Name	Date

Science Core **15 Credits**

Course #	Title	Hr.	Prerequisites	Offered	Sem.	Grade
BIOL 112	Biology for Majors (GenEd)	3		F,W,S		
CHEM 105/L	General Chemistry I/Lab (GenEd -3)	4	MATH 110 or equivalent	W,S		/
CHEM 106/L	General Chemistry II/Lab	4	CHEM 105/L	F,S		/
BIOL 265/L	Molecular & Cell Biology	4	BIOL 112, CHEM 105/L	F,W,S		/

General Biology Core **20 Credits**

BIOL 201/L	General Botany/Lab	4	BIOL 112	W		/
BIOL 206/L	General Zoology/Lab	4	BIOL 112	S		/
BIOL 220/L	Microbiology/Lab	4	¾ Science Core	F,W		
BIOL 376/L	Genetics/Lab	4	¾ Science Core	F,S		
BIOL 491L	Research & Thesis (GenEd)	1	BIOL 112, CHEM 105/L	F,W,S		
BIOL 492L	Research & Thesis (GenEd)	1	BIOL 491L	F,W,S		
BIOL 493L	Research & Thesis (GenEd)	1	BIOL 492L	F,W,S		
BIOL 494L	Research & Thesis (GenEd)	1	BIOL 493L	F,W,S		

Chemistry Requirements **8 Credits**

CHEM 251/L	Organic Chemistry I/Lab	4	CHEM 106/L	W		/
CHEM 252/L	Organic Chemistry II/Lab	4	CHEM 251/L	S		/

Recommended Electives **17 Credits**

Students must complete a minimum of 13 credits from the 300 & 400 levels to end with total of 17 elective credits.

BIOL 204/L	Pacific Natural History/Lab	4	BIOL 112	S		/
BIOL 212/L	Marine Biology/Lab	4	BIOL 112	S		/
BIOL 222/L	Marine Microbiology	4	BIOL 265/L	W		
BIOL 248/L	Conservation Biology/Lab	4	BIOL 112	F-even		/
BIOL 260/L	Elementary Human Anatomy/Lab	3	BIOL 112, CHEM 105/L	W		/
BIOL 261/L	Elementary Human Physiology/Lab	4	BIOL 112, CHEM 105/L	F		/

Minimum: 13 Credits in 300-400 Level

BIOL 300/L	Animal Behavior	4	¾ Science Core	F		
BIOL 320/L	Pathogenic Microbiology/Lab	4	Science Core and BIOL 220/L	S-even		/
BIOL 330/L	Bioinformatics/Lab	4	BIOL 112, CHEM 105/L, BIOL 265/L	S-odd		/
BIOL 340	Biostatistics	3	BIOL 112, CHEM 105/L	S		
BIOL 350/L	General Ecology/Lab	4	BIOL 112, CHEM 105/L	F-odd		/
BIOL 374	Evolution & Human Prehistory	3	BIOL 112	W		
BIOL 383/L	Histology & Dev. Biology/Lab	4	BIOL 112, CHEM 105/L	W		/
BIOL 390R	Special Topics in Biology	Variable	½ Science Core	Variable		
BIOL 412/L	Marine Ecology/Lab	4	BIOL 112, CHEM 105/L, BIOL 212/L	S		/
BIOL 441/L	Molecular Biology/Lab	4	Science Core	W		/
BIOL 442/L	Advanced Cellular Biology/Lab	4	Science Core	S		/
BIOL 445/L	Immunology	4	Science Core	F		/
BIOL 460	Advanced Human Anatomy	3	Permission of Instructor	F		
BIOL 465/L	Principles of Physiology/Lab	4	Science Core	W		/
CHEM 381/L	Biochemistry/Lab	4	CHEM 252/L, BIOL 265/L	F,W		/

Total Credits Mapped for Graduation:

**Even-year or Odd-year listing of Winter courses determined by course start-date.*

- To graduate with a major in Biology, a student cannot have a grade lower than C- in a major course.
 - Only one major course can be repeated* without department permission. If after a repeat the achieved grade is still lower than C-, a student will not be able to continue in the Biology major.
 - If a second or third major course is failed, a repeat* may be permitted only with authorization from the Department Chair, or the Department Chair and the Dean respectively.
 - Students with four or more major courses failed will not be able to continue in the Biology major.
- * Repeat because of a grade lower than C-

The terms of this MRS will be honored by the Department and University within the next 8 years. If courses cease to be offered, options for substitution will be provided.



B.S. in Biology
Biomedical Sciences Track
BIOLBS-BIOLPP.2014 (mrs 1012)
60 credits, incl. 9 GE credits

Effective Date: 04/ 2014

Name of Student:		
Student ID #:		Graduation Date
Home Country:	<input type="checkbox"/> IWORK	
Advisor:	Name	Date

Science Core **15 Credits**

Course #	Title	Hr.	Prerequisites	Offered	Sem.	Grade
BIOL 112	Biology for Majors (GenEd)	3		F,W,S		
CHEM 105/L	General Chemistry I/Lab (GenEd)	4	MATH 110 or equivalent	W,S		/
CHEM 106/L	General Chemistry II/Lab	4	CHEM 105/L	F,S		/
BIOL 265/L	Molecular & Cell Biology	4	BIOL 112, CHEM 105/L	F,W,S		/

Biology Core **12 Credits**

BIOL 220/L	Microbiology/Lab	4	¾ Science Core	F,W		/
BIOL 376/L	Genetics/Lab	4	¾ Science Core	F,S		/
BIOL 491L	Research & Thesis (GenEd)	1	BIOL 112, CHEM 105/L	F,W,S		
BIOL 492L	Research & Thesis (GenEd)	1	BIOL 491L	F,W,S		
BIOL 493L	Research & Thesis (GenEd)	1	BIOL 492L	F,W,S		
BIOL 494L	Research & Thesis (GenEd)	1	BIOL 493L	F,W,S		

Biomedical Sciences Emphasis Requirements **7 Credits**

BIOL 260/L	Elementary Human Anatomy/Lab	3	BIOL 112, CHEM 105/L	W		
BIOL 261/L or BIOL 465/L	Elementary Human Physiology/Lab Principles of Physiology/Lab	4	BIOL 112, CHEM 105/L Science Core	F W		

Biology Electives **18 Credits**

No double dipping allowed.

BIOL 261/L	Elementary Human Physiology/Lab	4	BIOL 112, CHEM 105/L	F		
BIOL 320/L	Pathogenic Microbiology/Lab	4	Science Core and BIOL 220/L	S-even		
BIOL 330/L	Bioinformatics/Lab	4	BIOL 112, CHEM 105/L and BIOL 265/L	S-odd		/
BIOL 340	Biostatistics	3	BIOL 112, CHEM 105/L	S		
BIOL 350/L	General Ecology/Lab	4	BIOL 112, CHEM 105/L	F-odd		/
BIOL 374	Evolution & Human Prehistory	3	BIOL 112	W		
BIOL 383/L	Histology & Dev. Biology/Lab	4	BIOL 112, CHEM 105/L	W		/
BIOL 390R	Special Topics in Biology	Variable	½ Science Core	Variable		
BIOL 441/L	Advanced Molecular Biology/Lab	4	Science Core	W		/
BIOL 442/L	Advanced Cellular Biology/Lab	4	Science Core	S		/
BIOL 445/L	Immunology/Lab	4	Science Core	F		/
BIOL 460	Advanced Human Anatomy	3	Permission of Instructor	F		
BIOL 465/L	Principles of Physiology/Lab	4	Science Core	W		/
CHEM 381/L	Biochemistry/Lab	4	CHEM 252/L, BIOL 265/L	F,W		/

Required Chemistry **8 Credits**

CHEM 251/L	Organic Chemistry I/Lab	4	CHEM 106/L	W		/
CHEM 252/L	Organic Chemistry II/Lab	4	CHEM 251/L	S		/

Recommended for Graduate School Pre-requisites and Entrance Exams Preparation

MATH 112	Calculus (GenEd)	5	MATH 111	F,W,S		/
PHYS 121/L	General Physics I/Lab (GenEd)	4	MATH 111 and 112	F,S		/
PHYS 122/L	General Physics II/Lab	4	PHYS 121/L	F,S		/
PHYS 221/L	General Physics III/Lab	4	PHYS 121/L	W		/

Total Credits Mapped for Graduation:

**Even-year or Odd-year listing of Winter courses determined by course start-date.*

- To graduate with a major in Biology, a student cannot have a grade lower than C- in a major course.
 - Only one major course can be repeated* without department permission. If after a repeat the achieved grade is still lower than C-, a student will not be able to continue in the Biology major.
 - If a second or third major course is failed, a repeat* may be permitted only with authorization from the Department Chair, or the Department Chair and the Dean respectively.
 - Students with four or more major courses failed will not be able to continue in the Biology major.
- * Repeat because of a grade lower than C-

The terms of this MRS will be honored by the Department and University within the next 8 years. If courses cease to be offered, options for substitution will be provided.



B.S. in Biology
Marine Track
BIOLBS-BIOLMR.2014 (mrs 1005)
60 credits, incl. 9 GE credits

Effective Date: 04/ 2014

Name of Student:		
Student ID #:		Graduation Date
Home Country:	<input type="checkbox"/> IWORK	
Advisor:	Name	Date

Science Core **15 Credits**

Course #	Title	Hr.	Prerequisites	Offered	Sem.	Grade
BIOL 112	Biology for Majors (GenEd)	3		F,W,S		
CHEM 105/L	General Chemistry I/Lab (GenEd - 3)	4	MATH 110 or equivalent	W,S		/
CHEM 106/L	General Chemistry II/Lab	4	CHEM 105/L	S,F		/
BIOL 265/L	Molecular & Cell Biology	4	BIOL 112, CHEM 105/L	F,W,S		/

Biology Core **16 Credits**

BIOL 201/L	General Botany/Lab	4	BIOL 112	W		/
BIOL 206/L	General Zoology/Lab	4	BIOL 112	S		/
BIOL 376/L	Genetics/Lab	4	¼ Science Core	F,S		
BIOL 491L	Research & Thesis (GenEd)	1	BIOL 112, CHEM 105/L	F,W,S		
BIOL 492L	Research & Thesis (GenEd)	1	BIOL 491L	F,W,S		
BIOL 493L	Research & Thesis (GenEd)	1	BIOL 492L	F,W,S		
BIOL 494L	Research & Thesis (GenEd)	1	BIOL 493L	F,W,S		

Chemistry Requirements **8 Credits**

CHEM 251/L	Organic Chemistry I/Lab	4	CHEM 106/L	W		
CHEM 252/L	Organic Chemistry II/Lab	4	CHEM 251/L	S		

Marine Emphasis Requirement **12 Credits**

BIOL 212/L	Marine Biology/Lab	4	BIOL 112	S		
BIOL 222/L	Marine Microbiology	4	BIOL 265/L	W		
BIOL 412/L	Marine Ecology	4	½ Science Core & BIOL 212/L	S		

Marine Emphasis Electives **9 Credits**

Students must complete a total of 9 Emphasis Elective credits, with a minimum of 6 credits from the 300 & 400 levels. Only one Physical Science course (either CHEM 381/L or OCEN 201) will be accepted as fulfilling Marine Biology Emphasis Elective requirements..

BIOL 204/L	Pacific Natural History/Lab	4	BIOL 112	S		
BIOL 248/L	Conservation Biology/Lab	4	BIOL 112	F-even		/
BIOL 261/L	Elementary Human Physiology/Lab	4	BIOL 112, CHEM 105/L	F		/
OCEN 201 or CHEM 381/L	Oceanography and Marine Science	3	Any college-level natural science course (CHEM, BIOL, PHYS, PHSC, GEOL or ASTR) CHEM 252/L and BIOL 265/L	F,S		
	Biochemistry I			F,W		
BIOL 300/L	Animal Behavior	4	¼ Science Core	F		
BIOL 330/L	Bioinformatics/Lab	4	BIOL 112, CHEM 105/L and BIOL 265/L	S-odd		/
BIOL 340	Biostatistics	3	BIOL 112, CHEM 105/L	S		
BIOL 350/L	General Ecology/Lab	4	BIOL 112, CHEM 105/L	F-odd		/
BIOL 374	Evolution & Human Prehistory	3	BIOL 112	W		
BIOL 390R	Special Topics in Biology	Varies	½ Science Core	Variable		
BIOL 465/L	Principles of Physiology/Lab	4	Science Core	W		/

Total Credits Mapped for Graduation:

*Even-year or Odd-year listing of Winter courses determined by course start-date.
 No credit of less than C- in any BIOL/CHEM course is counted toward graduation