Biology B.A. Curri ULIN May         and method alloba access of alloba acce	Point Loma Nazaren	e University	L	L	.01		LO 2	LO 3	LO 4
August         Control         M         C         O         E           BID 2017/2011L         Cell Biology and Biochemistry         I	Biology B.A. Curriculum Map		unders science and the broad levels: (C), org ecologi	Students will demonstrate an understanding of the process of science, and of the concepts and theories of biology across a broad range of organizational levels: molecular (M), cellular (C), organismal (O), and ecological (E) (population,			life of the department in Biology/Chemistry clubs or in various positions of responsibility such as graders,	rationally defensible integration	entry to professional or graduate schools, or to science-
BID 010/20110       Cell Biology and Biochemistry       I       I       I       I         BID 0211/20111       Explored and Evolutionary Systems       I       I       I       I         BID 0212/20124       Organism Biology       I       I       I       I         BID 0212/20124       Organism Biology       I       I       I       I         BID 02012/20124       Organism Biology       I       I       I       I         BID 02012/20124       Organism Biology       I       I       I       I         BID 02012/20124       Organism Biology       I       I       I       I       I         BID 02012/20124       Reserch Methodology       I       I       I       I       I       I         BID 02012/20134       Reserch Methodology       I       I       I       I       I       II         BID 021/20141       Reference       I       I       I       IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	Course				-				
BIO 2011/2011         Ecological and Evolutionary Systems         IIII IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	LOWER-DIVISION		м	С	0	E			
Initial Control         Initial	BIO 2010/2010L	Cell Biology and Biochemistry	1	I				1	I
UPPER-Division REQUIREMENTS         M         C         O         E         O         D	BIO 2011/2011L	Ecological and Evolutionary Systems			I	Ι		I	I
Bio 3045/3045L     Genetics     D <td< td=""><td>BIO 2012/2012L</td><td>Organismal Biology</td><td></td><td></td><td>I</td><td></td><td></td><td></td><td>I</td></td<>	BIO 2012/2012L	Organismal Biology			I				I
D       D	UPPER-DIVISION I	REQUIREMENTS	м	С	0	E			
ID       D	BIO 3045/3045L	Genetics	D	D	D			D	D
Biology Seminar         M         D         M         M         M           UPPER-DIVISION EUETIVES (11 units)         M         C         O         E	BIO 3052	Research Methodology	D	D	D	D			D
UPPER-DIVISION ELECTIVES (11 units)     M     C     O     E       BI0 3012     Applied Plant Science     D     M     D     D     D     D       BI0 3015/3015L     Microbiology     D     D     D     D     D     D       BI0 3015/3015L     Microbiology     D     D     D     D     D     D       BI0 3023/3023L     Introduction to Oceanography     D     D     D     D     D       BI0 303/3033L     Marine Biology     D/M     D/M     D/M     D     D     D       BI0 303/3031L     Marine Biology     D/M     D/M     D/M     D     D     D       BI0 3050/3050L     Advanced Cell Biology     M     M     M     M     D     D       BI0 3080/3080L     Molecular Biology     D/M     M     M     M     D     D       BI0 4000/4000L     Developmental Biology     M     M     M     D     D/M     D/M       BI0 4001/4010L     Verterate Biology     D/M     M     M     D     D     D/M       BI0 4003/4020L     Advanced Human Physiology     D/M     D/M     D/M     D       BI0 4030/4030L     Advanced Biochemistry     M     M     M     M </td <td>BIO 3063/3063L</td> <td>Conservation Ecology</td> <td></td> <td></td> <td>D</td> <td>D</td> <td></td> <td>D</td> <td>D</td>	BIO 3063/3063L	Conservation Ecology			D	D		D	D
BIO 3012       Applied Plant Science       D       N       D <td< td=""><td>BIO 4097</td><td>Biology Seminar</td><td></td><td></td><td></td><td></td><td></td><td>М</td><td>М</td></td<>	BIO 4097	Biology Seminar						М	М
BIO 3015/3015L       Microbiology       D<	UPPER-DIVISION I	ELECTIVES (11 units)	М	С	0	Е			
BIO 3023/3023L         Introduction to Oceanography         D	BIO 3012	Applied Plant Science		D	М	D			D
Interface       Interface <thinterface< th=""> <thinterface< th=""> <thinterface< th=""></thinterface<></thinterface<></thinterface<>	BIO 3015/3015L	Microbiology	D	D		D			D
Induction of the biology       Image: Drive	BIO 3023/3023L	Introduction to Oceanography			D	D		D	D
BIO 3050/3050L     Advanced Cell Biology     M     M     M       BIO 3050/3050L     Advanced Cell Biology     D/M     D/M     D     C     D       BIO 3050/3050L     Molecular Biology     D/M     D     C     D     D       BIO 3050/3050L     Immunology     M     M     M     D     D     D       BIO 4000/4000L     Developmental Biology     M     M     D     M     M     D       BIO 4010/4010L     Vertebrate Biology     M     M     D     D/M     D/M     D       BIO 4023/4023L     Advanced Human Physiology     D     D/M     D/M     D     D       BIO 4030/4030L     Animal Behavior     D/M     D/M     M     D     D       BIO 4050/4050L     Advanced Biochemistry     M     M     M     M     D       BIO 4063     Methods of Feaching Secondary Science     M     M     M     M     M       BIO 4073/     Experimental Marine Ecology     M     M     M     M     D       BIO 4083     Introduction to GIS     D     D     D     D     D       BIO 4090     Internships in Biology     M     M     M     M     D       BIO 4099     Reserch	BIO 3033/3033L	Marine Biology			D/N	1 D/M		D	D
BIO 3080/3080L     Molecular Biology     Molecular Biology     D/M     D     Image: Control of Control	BIO 3040	Field Biology			D	D			D
D/M     M/M     M/M <td>BIO 3050/3050L</td> <td>Advanced Cell Biology</td> <td>м</td> <td>М</td> <td></td> <td></td> <td></td> <td></td> <td>D</td>	BIO 3050/3050L	Advanced Cell Biology	м	М					D
International and the second secon	BIO 3080/3080L	Molecular Biology	D/M	D					D
Introduction     M     M     M     D     D       BIO 4010/4010L     Vertebrate Biology     D/M     D/M     D/M     D       BIO 4023/4023L     Advanced Human Physiology     D     D/M     D/M     D       BIO 4030/4030L     Animal Behavior     D/M     D/M     D/M     D       BIO 4030/4030L     Advanced Biochemistry     M     M     M     D       BIO 4053/4050L     Advanced Biochemistry     M     M     M     M       BIO 4053     Methods of Teaching Secondary Science     M     M     M     M       BIO 4073     Kaperimental Marine Ecology     M     M     M     M     D       BIO 4073/4073L     Experimental Marine Ecology     M     M     M     M     D       BIO 4083     Introduction to GIS     D     D     D     D/M       BIO 4099     Research in Biology     M     M     M     M     D/M       BIO 4099     Research in Biology     M     M     M     M     M       Extracurricular Activities     M     C     O     E     E       Faculty Advising (required for registration clearance)     I     I     I	BIO 3090/3090L	Immunology	М	М	М				D
BIO 4023/4023L     Advanced Human Physiology     D     D/M     D/M     D       BIO 4030/4030L     Animal Behavior     D/M     D/M     D/M     D       BIO 4030/4030L     Advanced Biochemistry     M     M     M     M     D       BIO 4050/4050L     Advanced Biochemistry     M     M     M     M     M       BIO 4050/4050L     Advanced Biochemistry     M     M     M     M     M       BIO 4063     Methods of Teaching Secondary Science     M     M     M     M     M       BIO 40730     Neuroscience     D     M     M     M     M     M       BIO 40731L     Experimental Marine Ecology     D     M     M     M     M     D       BIO 4073     Introduction to GIS     D     D     D     D     D       BIO 4099     Research in Biology     M     M     M     M     D/M       BIO 4099     Research in Biology     M     M     M     M     D/M       Extracurricular Activities     M     C     O     E     C     C       Faculty Advising (required for registration clearance)     I     I     I     D	BIO 4000/4000L	Developmental Biology	М	М	D			М	D
BIO 4030/4030L Animal Behavior D/M D/M D/M D/M D   BIO 4050/4050L Advanced Biochemistry M M M M M D   BIO 4063 Methods of Teaching Secondary Science M M M M M M   BIO 4070 Neuroscience D M M M M M   BIO 4073 Experimental Marine Ecology M M M M M   BIO 4083 Introduction to GIS D D D D   BIO 4099 Research in Biology M M M M M   BIO 4099 Research in Biology M M M M D/M   BIO 4043 Internships in Biology M M M M M   BIO 4099 Research in Biology M M M M M   BIO 4043 Internships in Biology M M M M M   BIO 4043 Internships in Biology M M M M M   BIO 4099 Research in Biology M M M M M   BIO 4099 Research in Biology M M C O E   Faculty Advising (required for registration clearance) I I I   Pre-Health Advising I I I I	BIO 4010/4010L	Vertebrate Biology			D/M	D/M		D/M	D
BIO 4050/4050L Advanced Biochemistry M M M M M D   BIO 4063 Methods of Teaching Secondary Science M M M M M M   BIO 4070 Neuroscience D M M M M D D   BIO 4073/4073L Experimental Marine Ecology D M M M M D D   BIO 4083 Introduction to GIS D D D D D D   BIO 4099 Research in Biology M M M M M D/M   BIO 4099 Research in Biology M M M M D/M   BIO 4091 Hernships in Biology M M M M D/M   BIO 4099 Research in Biology M M M M M   BIO 4099 Research in Biology M M M M D/M   BIO 4099 Research in Biology M M M M M   BIO 4099 Research in Biology M M M M M   BIO 4099 Research in Biology M M C O E I   Faculty Advising (required for registration clearance) I I I I   Pre-Health Advising I I I I I	BIO 4023/4023L	Advanced Human Physiology		D	D/M				D
Image: Minimum definition       Mi	BIO 4030/4030L	Animal Behavior			D/M	D/M		D/M	D
Image: Mode of Mode o	BIO 4050/4050L	Advanced Biochemistry	М	М					D
BIO 4073/4073L     Experimental Marine Ecology     M     M     M       BIO 4083     Introduction to GIS     D     D       BIO 4090     Internships in Biology     M     M     M     M       BIO 4099     Research in Biology     M     M     M     M       Extracurricular Activities     M     C     O     E       Faculty Advising (required for registration clearance)     Image: Control of Contr	BIO 4063	Methods of Teaching Secondary Science	м	М	М	М			М
Introduction to GIS     Image: Mode M     Mode M <td>BIO 4070</td> <td>Neuroscience</td> <td>D</td> <td>М</td> <td>М</td> <td></td> <td></td> <td></td> <td>D</td>	BIO 4070	Neuroscience	D	М	М				D
BIO4090     Internships in Biology     M     M     M     M     M       BIO4099     Research in Biology     M     M     M     M     M       BIO4099     Research in Biology     M     M     M     M     M       Extracurricular Activity     M     C     O     E     C       Faculty Advising (registration clearance)     Image: Comment of the second clearance)	BIO 4073/4073L	Experimental Marine Ecology			М	М			D
Image: Minit Mini Minit Minit M	BIO 4083	Introduction to GIS			D	D			D
Image: Mining	BIO4090	Internships in Biology	М	М	М	М			D/M
Faculty Advising (required for registration clearance)     I       Pre-Health Advising     I	BIO 4099	Research in Biology	М	М	М	М			D/M
Pre-Health Advising	Extracurricular Activities			С	0	Е			
	Faculty Advising (required for registration clearance)								I
Pre-Teaching Advising D	Pre-Health Advising								D
	Pre-Teaching Advising								D

Point Loma Nazarene University		LO 1	LO 2	LO 3	LO 4
Biology B.A. Curriculum Map		Students will demonstrate an understanding of the process science, and of the concepts and theories of biology across broad range of organizational levels: molecular (M), cellular (C), organismal (O), and	Biology/Chemistry clubs or in	Students will develop a rationally defensible integration of science and faith.	Students will be prepared for entry to professional or graduate schools, or to science- related careers.
Course	Course Title	ecological (E) (population, community, ecosystem).			
Undergraduate Research & Internships		ммм			D
Participation in science clubs or as a grader, TA, or tutor			I, D, M		D

Point Loma Nazarene University			LO 1			LO 2	LO 3	LO 4
Biology B.S. Curriculum Map		unders science and the broad r levels: r (C), org	tanding e, and of cories of range of molecula canismal	the con biology organiza ar (M), c (O), and	rocess of cepts across a ational ellular	Students will participate in the life of the department in Biology/Chemistry clubs or in various positions of responsibility such as graders, tutors, and teaching assistants	Students will develop a rationally defensible integration of science and faith.	Students will be prepared for entry to professional or graduate schools, or to science- related careers.
Course	Course Title		ecological (E) (population, community, ecosystem).					
LOWER-DIVISION	REQUIREMENTS	м	С	0	Е			
BIO 2010/2010L	Cell Biology and Biochemistry	I	Ι				I	I
BIO 2011/2011L	Ecological and Evolutionary Systems			Ι	I		I	Ι
BIO 2012/2012L	Organismal Biology			Ι				I
UPPER-DIVISION F	REQUIREMENTS	М	С	0	Е			
BIO 3045/3045L	Genetics	D	D	D			D	D
BIO 3052	Research Methodology	D	D	D	D			D
BIO 3063/3063L	Conservation Ecology			D	D		D	D
BIO 3080/3080L	Molecular Biology	D/M	D					D
BIO 4097	Biology Seminar						М	М
UPPER-DIVISION E	LECTIVES	M	С	0	Е			
BIO 3012	Applied Plant Science		D	М	D			D
BIO 3015/3015L	Microbiology	D	D		D			D
BIO 3023/3023L	Introduction to Oceanography			D	D		D	D
BIO 3033/3033L	Marine Biology			D/N	1 D/M		D	D
BIO 3040	Field Biology			D	D			D
BIO 3050/3050L	Advanced Cell Biology	м	М					D
BIO 3090/3090L	Immunology	м	М	М				D
BIO 4000/4000L	Developmental Biology	м	М	D			М	D
BIO 4010/4010L	Vertebrate Biology			D/M	D/M		D/M	D

Point Loma Nazarene University			LO 1			LO 2	LO 3	LO 4
Biology B.S. Curriculum Map		under scienc and th broad levels: (C), or	science, and of the concepts and theories of biology across a broad range of organizational levels: molecular (M), cellular (C), organismal (O), and			Students will participate in the life of the department in Biology/Chemistry clubs or in various positions of responsibility such as graders, tutors, and teaching assistants	Students will develop a rationally defensible integration of science and faith.	Students will be prepared for entry to professional or graduate schools, or to science- related careers.
Course	Course Title		ecological (E) (population, community, ecosystem).					
BIO 4023/4023L	Advanced Human Physiology		D	D/M				D
BIO 4030/4030L	Animal Behavior			D/M	D/M		D/M	D
BIO 4050/4050L	Advanced Biochemistry	М	М					D
BIO 4063	Methods of Teaching Secondary Science	М	М	М	М			М
BIO 4070	Neuroscience	D	М	М				D
BIO 4073/4073L	Experimental Marine Ecology			М	М			D
BIO 4083	Introduction to GIS			D	D			D
BIO4090	Internships in Biology	М	М	М	М			D/M
BIO 4099	Research in Biology	М	М	М	М			D/M
Extracurricular Activ	ities	М	С	0	Е			
Faculty Advising (required for registration clearance)								I
Pre-Health Advising								D
Pre-Teaching Advisin	Pre-Teaching Advising							D
Undergraduate Resea	arch & Internships	М	М	М	М			D
Participation in scier	nce clubs or as a grader, TA, or tutor					I, D, M		D