uc **santa barbara** Geography

2024-25 Upper Division Course List with Course Numbers and Titles SUBJECT TO CHANGE

	Physical Geography		Geographical Techniques
Geog 102	Intro to Environmental Optics in Physical Geography	Geog 115A	Remote Sensing of the Environment 1
Geog 104	Physical Geography of the World's Oceans (or Ocean Sci Area B)	Geog 115B	Remote Sensing of the Environment 2
Geog 110	Introduction to Meteorology (or Ocean Sci Area D)	Geog 115C	Remote Sensing of the Environment 3
Geog 112	Environmental Hydrology	Geog 117	Scientific Research Methods in Geography
Geog 114A	A Soil Science	Geog 126	Maps in Science and Society
Geog 114E	Soil Genesis and Classification	Geog 128	Analytical and Computer Cartography
Geog 116	Groundwater Hydrology	Geog 172	Intermediate Geographical Data Analysis (or Ocean Sci Area A)
Geog 119	Climatic Change and Its Consequences (or Ocean Sci Area D)	Geog 175	Measuring our Environment
Geog 130	The Urban Environment	Geog 176A	Introduction to Geographic Information Systems
Geog 131	Mountain Weather & Climate (or Ocean Sci Area D)	Geog 176B	Technical Issues in Geographic Information Systems
Geog 132	Coastal Pollution (or Ocean Sci Area C)	Geog 176C	GIS Design and Applications
Geog 133	Tropical Meteorology (or Ocean Sci Area D)	Geog 178	Conceptual Modeling and Programming for the Geo-Sciences
Geog 134	Earth System Science (or Ocean Sci Area D)	Geog 183	Cartographic Design and Geovisualization
Geog 136	Field Studies in Water, Energy, and Ecosystems	Geog 184	Introduction to Cartographic Programming
Geog 137	Quantitative Geomorphology	Geog 186	Analysis and Modeling of Movement
Geog 142	Global Biogeochemical Cycles (or Ocean Sci Area D)	Geog 190	Location Theory and Modeling
Geog 144	Form, Process, and Human Use of Rivers	Geog 191	Introduction to Optimization Methods for Geographic Problems
Geog 162	Environmental Water Quality	_	
0463	Ocean Circulation (or Ocean Sci Area C)		
Geog 163			
Geog 165			
Geog 165			
Geog 165 Geog 166 Geog 167 Geog 101	Waves and Tides in the Ocean (or Ocean Sci Area C) Ocean Carbon Cycle and Climate (or Ocean Sci Area C) Biogeography – Study of Plant and Animal Distributions Human Geography Transportation Futures	C	Integrative and Regional Geography
Geog 165 Geog 166 Geog 167 Geog 101 Geog 108	Waves and Tides in the Ocean (or Ocean Sci Area C) Ocean Carbon Cycle and Climate (or Ocean Sci Area C) Biogeography – Study of Plant and Animal Distributions Human Geography Transportation Futures Urban Geography	Geog 113	Polar Environment
Geog 165 Geog 166 Geog 167 Geog 101 Geog 108 Geog 109	Waves and Tides in the Ocean (or Ocean Sci Area C) Ocean Carbon Cycle and Climate (or Ocean Sci Area C) Biogeography – Study of Plant and Animal Distributions Human Geography Transportation Futures Urban Geography Economic Geography	Geog 140	Polar Environment Environmental Impacts in Human History
Geog 165 Geog 166 Geog 167 Geog 101 Geog 108 Geog 109 Geog 111A	Waves and Tides in the Ocean (or Ocean Sci Area C) Ocean Carbon Cycle and Climate (or Ocean Sci Area C) Biogeography – Study of Plant and Animal Distributions Human Geography Transportation Futures Urban Geography Economic Geography Transportation Planning and Modeling	Geog 140 Geog 148	Polar Environment Environmental Impacts in Human History California
Geog 165 Geog 166 Geog 167 Geog 101 Geog 108 Geog 109 Geog 111A Geog 111A	Waves and Tides in the Ocean (or Ocean Sci Area C) Ocean Carbon Cycle and Climate (or Ocean Sci Area C) Biogeography – Study of Plant and Animal Distributions Human Geography Transportation Futures Urban Geography Economic Geography Transportation Planning and Modeling Transportation Modeling and Simulation	Geog 140 Geog 148 Geog 149	Polar Environment Environmental Impacts in Human History California The California Channel Islands (or Ocean Sci Area C)
Geog 165 Geog 166 Geog 167 Geog 101 Geog 108 Geog 109 Geog 111A Geog 111A Geog 111A Geog 111A	Waves and Tides in the Ocean (or Ocean Sci Area C) Ocean Carbon Cycle and Climate (or Ocean Sci Area C) Biogeography – Study of Plant and Animal Distributions Human Geography Transportation Futures Urban Geography Economic Geography Transportation Planning and Modeling Transportation Modeling and Simulation C Smart Green Cities	Geog 140 Geog 148 Geog 149 Geog 150	Polar Environment Environmental Impacts in Human History California The California Channel Islands (or Ocean Sci Area C) Geography of the United States
Geog 165 Geog 167 Geog 101 Geog 108 Geog 109 Geog 1114 Geog 1116 Geog 1414	Waves and Tides in the Ocean (or Ocean Sci Area C) Ocean Carbon Cycle and Climate (or Ocean Sci Area C) Biogeography – Study of Plant and Animal Distributions Human Geography Transportation Futures Urban Geography Economic Geography Transportation Planning and Modeling Transportation Modeling and Simulation C Smart Green Cities	Geog 140 Geog 148 Geog 149 Geog 150 Geog 155	Polar Environment Environmental Impacts in Human History California The California Channel Islands (or Ocean Sci Area C) Geography of the United States Geography of Latin America
Geog 165 Geog 167 Geog 101 Geog 108 Geog 109 Geog 1114 Geog 1116 Geog 1414 Geog 1414	Waves and Tides in the Ocean (or Ocean Sci Area C) Ocean Carbon Cycle and Climate (or Ocean Sci Area C) Biogeography – Study of Plant and Animal Distributions Human Geography Transportation Futures Urban Geography Economic Geography Transportation Planning and Modeling Transportation Modeling and Simulation Smart Green Cities Population Geography Population and Development	Geog 140 Geog 148 Geog 149 Geog 150 Geog 155 Geog 158	Polar Environment Environmental Impacts in Human History California The California Channel Islands (or Ocean Sci Area C) Geography of the United States Geography of Latin America Introduction to Marine Resources (Or Ocean Sci Area C)
Geog 165 Geog 167 Geog 101 Geog 108 Geog 109 Geog 1114 Geog 1414 Geog 1414 Geog 1414 Geog 1416	Waves and Tides in the Ocean (or Ocean Sci Area C) Ocean Carbon Cycle and Climate (or Ocean Sci Area C) Biogeography – Study of Plant and Animal Distributions Human Geography Transportation Futures Urban Geography Economic Geography Transportation Planning and Modeling Transportation Modeling and Simulation Smart Green Cities Population Geography Population and Development California Population Analysis and Policy	Geog 140 Geog 148 Geog 149 Geog 150 Geog 155 Geog 158 Geog 159	Polar Environment Environmental Impacts in Human History California The California Channel Islands (or Ocean Sci Area C) Geography of the United States Geography of Latin America Introduction to Marine Resources (Or Ocean Sci Area C) Geography of Europe
Geog 165 Geog 167 Geog 101 Geog 108 Geog 109 Geog 1114 Geog 1116 Geog 1414 Geog 1416 Geog 1416 Geog 145	Waves and Tides in the Ocean (or Ocean Sci Area C) Ocean Carbon Cycle and Climate (or Ocean Sci Area C) Biogeography – Study of Plant and Animal Distributions Human Geography Transportation Futures Urban Geography Economic Geography Transportation Planning and Modeling Transportation Modeling and Simulation Smart Green Cities Population Geography California Population Analysis and Policy Society and Hazards	Geog 140 Geog 148 Geog 149 Geog 150 Geog 155 Geog 158 Geog 159 Geog 161	Polar Environment Environmental Impacts in Human History California The California Channel Islands (or Ocean Sci Area C) Geography of the United States Geography of Latin America Introduction to Marine Resources (Or Ocean Sci Area C) Geography of Europe World Agriculture, Food, and Population
Geog 165 Geog 167 Geog 101 Geog 108 Geog 109 Geog 1114 Geog 1116 Geog 1414 Geog 1416 Geog 1416 Geog 145 Geog 146	Waves and Tides in the Ocean (or Ocean Sci Area C) Ocean Carbon Cycle and Climate (or Ocean Sci Area C) Biogeography – Study of Plant and Animal Distributions Human Geography Transportation Futures Urban Geography Economic Geography Transportation Planning and Modeling Transportation Modeling and Simulation Smart Green Cities Population Geography Population and Development California Population Analysis and Policy Society and Hazards Introduction to Transportation	Geog 140 Geog 148 Geog 149 Geog 150 Geog 155 Geog 158 Geog 161 Geog 171B	Polar Environment Environmental Impacts in Human History California The California Channel Islands (or Ocean Sci Area C) Geography of the United States Geography of Latin America Introduction to Marine Resources (Or Ocean Sci Area C) Geography of Europe World Agriculture, Food, and Population Biotechnology, Food, and Agriculture
Geog 165 Geog 167 Geog 101 Geog 109 Geog 111A Geog 111A Geog 111A Geog 141A Geog 141A Geog 141A Geog 141A Geog 141A Geog 141A Geog 145 Geog 146 Geog 152	Waves and Tides in the Ocean (or Ocean Sci Area C) Ocean Carbon Cycle and Climate (or Ocean Sci Area C) Biogeography – Study of Plant and Animal Distributions Human Geography Transportation Futures Urban Geography Economic Geography Transportation Planning and Modeling Transportation Modeling and Simulation Command Geography Population Geography Population Geography Colifornia Population Analysis and Policy Society and Hazards Introduction to Transportation Health Geography	Geog 140 Geog 148 Geog 149 Geog 150 Geog 155 Geog 158 Geog 159 Geog 161 Geog 171B Geog 171F	Polar Environment Environmental Impacts in Human History California The California Channel Islands (or Ocean Sci Area C) Geography of the United States Geography of Latin America Introduction to Marine Resources (Or Ocean Sci Area C) Geography of Europe World Agriculture, Food, and Population Biotechnology, Food, and Agriculture Small-Scale Food Production
Geog 165 Geog 167 Geog 101 Geog 108 Geog 109 Geog 1114 Geog 1116 Geog 1416 Geog 145 Geog 145 Geog 145 Geog 152 Geog 1534	Waves and Tides in the Ocean (or Ocean Sci Area C) Ocean Carbon Cycle and Climate (or Ocean Sci Area C) Biogeography – Study of Plant and Animal Distributions Human Geography Transportation Futures Urban Geography Economic Geography Transportation Planning and Modeling Transportation Modeling and Simulation Smart Green Cities Population Geography Population and Development California Population Analysis and Policy Society and Hazards Introduction to Transportation Health Geography Behavioral Geography	Geog 140 Geog 148 Geog 149 Geog 150 Geog 155 Geog 158 Geog 161 Geog 171B Geog 171FI Geog 192	Polar Environment Environmental Impacts in Human History California The California Channel Islands (or Ocean Sci Area C) Geography of the United States Geography of Latin America Introduction to Marine Resources (Or Ocean Sci Area C) Geography of Europe World Agriculture, Food, and Population Biotechnology, Food, and Agriculture Small-Scale Food Production Urban and Environmental System Analysis
Geog 165 Geog 167 Geog 101 Geog 108 Geog 109 Geog 111A Geog 111A Geog 141A Geog 141A Geog 141A Geog 141A Geog 145 Geog 145 Geog 145 Geog 153A Geog 153A	Waves and Tides in the Ocean (or Ocean Sci Area C) Ocean Carbon Cycle and Climate (or Ocean Sci Area C) Biogeography – Study of Plant and Animal Distributions Human Geography Transportation Futures Urban Geography Economic Geography Transportation Planning and Modeling Transportation Modeling and Simulation Smart Green Cities Population Geography California Population Analysis and Policy Society and Hazards Introduction to Transportation Health Geography Behavioral Geography	Geog 140 Geog 148 Geog 149 Geog 150 Geog 155 Geog 158 Geog 159 Geog 161 Geog 171B Geog 171F	Polar Environment Environmental Impacts in Human History California The California Channel Islands (or Ocean Sci Area C) Geography of the United States Geography of Latin America Introduction to Marine Resources (Or Ocean Sci Area C) Geography of Europe World Agriculture, Food, and Population Biotechnology, Food, and Agriculture P Small-Scale Food Production Urban and Environmental System Analysis California's Coast (or Ocean Sci Area C)
Geog 165 Geog 167 Geog 101 Geog 108 Geog 109 Geog 1114 Geog 1414 Geog 1414 Geog 1416 Geog 145 Geog 145 Geog 1534 Geog 1534 Geog 1534 Geog 1536	Waves and Tides in the Ocean (or Ocean Sci Area C) Ocean Carbon Cycle and Climate (or Ocean Sci Area C) Biogeography – Study of Plant and Animal Distributions Human Geography Transportation Futures Urban Geography Economic Geography Transportation Planning and Modeling Transportation Modeling and Simulation Smart Green Cities Population Geography Population and Development California Population Analysis and Policy Society and Hazards Introduction to Transportation Health Geography Behavioral Geography Behavioral Geography Introduction to Spatial Decision Making and Behavior Environmental Perception and Cognition	Geog 140 Geog 148 Geog 149 Geog 150 Geog 155 Geog 158 Geog 159 Geog 161 Geog 171B Geog 171F Geog 192 Geog 194	Polar Environment Environmental Impacts in Human History California The California Channel Islands (or Ocean Sci Area C) Geography of the United States Geography of Latin America Introduction to Marine Resources (Or Ocean Sci Area C) Geography of Europe World Agriculture, Food, and Population Biotechnology, Food, and Agriculture Small-Scale Food Production Urban and Environmental System Analysis California's Coast (or Ocean Sci Area C) Career Courses
Geog 165 Geog 167 Geog 101 Geog 108 Geog 109 Geog 1114 Geog 1116 Geog 1416 Geog 1416 Geog 1416 Geog 145 Geog 145 Geog 1534 Geog 1536 Geog 1536 Geog 1536	Waves and Tides in the Ocean (or Ocean Sci Area C) Ocean Carbon Cycle and Climate (or Ocean Sci Area C) Biogeography – Study of Plant and Animal Distributions Human Geography Transportation Futures Urban Geography Economic Geography Transportation Planning and Modeling Transportation Modeling and Simulation Smart Green Cities Population Geography California Population Analysis and Policy Society and Hazards Introduction to Transportation Health Geography Behavioral Reception and Cognition Despatial Decisions in Retailing	Geog 140 Geog 148 Geog 149 Geog 150 Geog 155 Geog 158 Geog 159 Geog 161 Geog 171B Geog 171F Geog 192 Geog 194	Polar Environment Environmental Impacts in Human History California The California Channel Islands (or Ocean Sci Area C) Geography of the United States Geography of Latin America Introduction to Marine Resources (Or Ocean Sci Area C) Geography of Europe World Agriculture, Food, and Population Biotechnology, Food, and Agriculture P Small-Scale Food Production Urban and Environmental System Analysis California's Coast (or Ocean Sci Area C)
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Geog 165 Geog 167 Geog 101 Geog 108 Geog 109 Geog 1114 Geog 1116 Geog 1416 Geog 1416 Geog 1416 Geog 145 Geog 145 Geog 153	Waves and Tides in the Ocean (or Ocean Sci Area C) Ocean Carbon Cycle and Climate (or Ocean Sci Area C) Biogeography – Study of Plant and Animal Distributions Human Geography Transportation Futures Urban Geography Economic Geography Transportation Planning and Modeling Transportation Planning and Simulation Smart Green Cities Population Geography Population and Development California Population Analysis and Policy Society and Hazards Introduction to Transportation Health Geography Behavioral Geography Introduction to Spatial Decision Making and Behavior Environmental Perception and Cognition Spatial Decisions in Retailing Global Cities in the Information Age Geography Planning and Policy Making	Geog 140 Geog 148 Geog 149 Geog 150 Geog 155 Geog 158 Geog 161 Geog 171B Geog 171F Geog 192 Geog 194 Geog 197 (Polar Environment Environmental Impacts in Human History California The California Channel Islands (or Ocean Sci Area C) Geography of the United States Geography of Latin America Introduction to Marine Resources (Or Ocean Sci Area C) Geography of Europe World Agriculture, Food, and Population Biotechnology, Food, and Agriculture Small-Scale Food Production Urban and Environmental System Analysis California's Coast (or Ocean Sci Area C) Career Courses Careers in Geography *GEOG majors only
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Geog 165 Geog 167 Geog 101 Geog 108 Geog 109 Geog 111A Geog 111B Geog 141A Geog 141A Geog 141A Geog 141A Geog 145 Geog 145 Geog 153 Geog 153 Geog 153 Geog 153 Geog 153 Geog 185 Geog 185 Geog 185 Geog 185	Waves and Tides in the Ocean (or Ocean Sci Area C) Ocean Carbon Cycle and Climate (or Ocean Sci Area C) Biogeography – Study of Plant and Animal Distributions Human Geography Transportation Futures Urban Geography Economic Geography Transportation Planning and Modeling Transportation Planning and Simulation Smart Green Cities Population Geography Population and Development California Population Analysis and Policy Society and Hazards Introduction to Transportation Health Geography Behavioral Geography Introduction to Spatial Decision Making and Behavior Environmental Perception and Cognition Spatial Decisions in Retailing Global Cities in the Information Age Geography Planning and Policy Making	Geog 140 Geog 148 Geog 149 Geog 150 Geog 155 Geog 158 Geog 161 Geog 171B Geog 171F Geog 192 Geog 194 Geog 197 (Polar Environment Environmental Impacts in Human History California The California Channel Islands (or Ocean Sci Area C) Geography of the United States Geography of Latin America Introduction to Marine Resources (Or Ocean Sci Area C) Geography of Europe World Agriculture, Food, and Population Biotechnology, Food, and Agriculture Small-Scale Food Production Urban and Environmental System Analysis California's Coast (or Ocean Sci Area C) Career Courses Careers in Geography *GEOG majors only