

FIVE COLLEGE COASTAL & MARINE SCIENCES CERTIFICATE COURSE LISTINGS

MARINE BIODIVERSITY

SCHOOL	COURSE	TITLE
AC	GEOL 27	Paleontology
MHC	BIOL 310F	Invertebrate Zoology
MHC	GEOL 321	Paleontology
SC	BIOL 242	Invertebrate Zoology
SC	GEOL 231	Invertebrate Paleontology and Paleoecology
UM	BIOLOGY 297B	Biology of Marine Vertebrates
UM	BIOLOGY 540	Herpetology
UM	BIOLOGY 542	Ichthyology
UM	BIOLOGY 544	Ornithology
UM	BIOLOGY 548	Mammalogy
UM	BIOLOGY 597G	Environmental Evolution
UM	GEO-SCI 483	Environmental Evolution
UM	GEO-SCI 591M	Marine Micropaleontology

MARINE AND COASTAL ECOLOGY

SCHOOL	COURSE	TITLE
AC	BIOL 18	Adaptation and the Organism
AC	BIOL 23	Ecology
AC	BIOL 39	Animal Behavior
HC	NS 180	Marine and Freshwater Ecology
HC	NS 195	Pollution and our Environment
HC	NS 207	Ecology
MHC	BIOL 315	Behavioral Ecology
MHC	BIOL 331	Conservation Biology
SC	BIO 110	Conservation Biology
SC	**BIO 268/9	Marine Ecology**
SC	BIO 364	Plant Ecology
SC	BIO 390	Topics in Environmental Bio: Ecology of Coral Reefs
SC	BIO 366	Biogeography
UM	BIOLOGY 287	Introductory Ecology
UM	BIOLOGY 421	Plant Ecology
UM	BIOLOGY 497H	Tropical Field Biology
UM	GEO-SCI 541	Paleoecology
UM	W&FCONSV 569	Biodiversity Conservation
UM	W&FCONSV 470	Ecology of Fish

Certificate Requirements: Six courses, one from each category, are required. At least three of the six must be above introductory level, and in at least two fields of study (geology and biology, etc.)

At least one course in bold must be taken to complete the Certificate requirements. An introductory course in marine science is strongly recommended, either through Five Colleges or an approved semester away program (introductory courses are marked with asterisks).

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GEOLOGY/CHEMISTRY

SCHOOL	COURSE	TITLE
AC	GEOL 09	Environmental Science
AC	GEOL 34	Sediment & Stratigraph
AC	GEOL 45	Biogeochemistry
HC	NS 106	Earth Resources
HC	NS 107	Evolution of the Earth
HC	NS 109	Weather
HC	NS 194	Geological Controversies
MHC	CHEM 200s	Environmental Chemistry
MHC	GEOL 101	Environmental Geology
MHC	GEOL 102	History of Life
MHC	**GEOL 103	Oceanography**
MHC	GEOL 203	Surface Processes
MHC	GEOL 227	Groundwater
MHC	GEOL 240	Geological Resources and the Environment
MHC	GEOL 324	Stratigraphy-Sedimentology
MHC	GEOL 326	Climate Through Earth History
SC	CHM 108	Environmental Chemistry
SC	EGR 315	Ecohydrology
SC	GEO 106	Extraordinary Events in History of Earth, Life & Climate
SC	**GEO 108	Oceanography**
SC	GEO 109	The Environment
SC	GEO 111	Introduction to Earth Processes and History
SC	GEO 232	Sedimentology
SC	GEO 270: J-term	Carbonate Systems and Coral Reefs of the Bahamas
SC	GEO 301	Aqueous Geochemistry
SC	GEO 309	Groundwater Geology
SC	GEO 361	Tectonics and Earth History
SC	BIOLOGY 280	Evolution: Diversity of Life Through Time
SC	EVS 300	Seminar in Environmental Science & Policy
UM	GEO-SCI 100	Global Environmental Change
UM	GEO-SCI 101	The Earth
UM	**GEO-SCI 103	Introductory Oceanography**
UM	GEO-SCI 201	History of the Earth
UM	GEO-SCI 285	Environmental Geology
UM	GEO-SCI 354	Climatology
UM	GEO-SCI 415	Introduction to Geochemistry
UM	GEO-SCI 485	Applied Environmental Geology
UM	GEO-SCI 517	Sedimentary Geochemistry
UM	GEO-SCI 519	Aqueous and Environmental Geochemistry
UM	GEO-SCI 591P	Paleoceanography
UM	GEO-SCI 595D	Physical Oceanography
UM	GEO-SCI 597	Isotope Geochemistry
UM	GEO-SCI 615	Organic and Biogeochemistry
UM	GEO-SCI 666	The Water's Edge

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RESOURCE MANAGEMENT/POLICY

SCHOOL	COURSE	TITLE
MHC	ECON 203	Environmental Economics
MHC	ENVST 304	Planning and the Environment
MHC	GEOG 204	Human Dimensions of Environmental Change
MHC	GEOL 307	Remote Sensing
MHC	POLI T 256S	The International Protection of the Environment
SC	ECO 224B	Environmental Economics
SC	GOV 243	International Law
SC	GOV 254	Politics of the Global Environment
SC	PPL 220	Public Policy Analysis
SC	PPL 260	Global Warming: Science and Policy
UM	GEO-SCI 392B	Coastal Resource Policy
UM	GEO-SCI 420	Human Impact on the Natural Environment
UM	GEO-SCI 591Q	Introduction to Remote Sensing
UM	NRC 597M	Ecosystem Management
UM	W&FCONSV 260	Fish Conservation and Management
UM	W&FCONSV 261	Wildlife Conservation
UM	W&FCONSV 564	Wildlife Habitat Management
UM	W&FCONSV 571	Fisheries Science and Management
UM	W&FCONSV 587	Digital Remote Sensing
UM	W&FCONSV 592G	GIS in Natural Resources Management
UM	W&FCONSV 597R	Watershed Science and Management

Approval of Unlisted Courses

Course approval is at the discretion of the certificate advisor. The student must present his or her advisor with a course description and syllabus. This procedure also applies to all courses taken through academic off-campus programs (e.g. SEA Semester, Williams-Mystic, Shoals Marine Lab, etc.).

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