RSMAS GENERAL (RSM)

RSM 500. Research Diving Techniques. 3 Credit Hours.  
This course is designed to introduce students to the practices and policies of scientific diving. The object is to prepare students to use SCUBA as a research tool for the marine sciences. The course content will qualify students as RESEARCH DIVERS under the UM/RSMAS Scientific Diving Program and will meet the standards set by the American Academy of Underwater Sciences (AAUS).  
Components: LEC.  
Grading: GRD.  
Typically Offered: Offered by Announcement Only.

RSM 512. Statistics for Environmental Management. 3 Credit Hours.  
This course covers the statistical theory, tools, and methods required for management analysis and improvement, emphasizing marine science applications.  
Components: THI.  
Grading: GRD.  
Typically Offered: Fall.

RSM 520. Climate and Society. 3 Credit Hours.  
This course is designed to provide students from different disciplinary backgrounds with an overview of physical processes, general concepts and policy debates surrounding climate issues.  
Components: LEC.  
Grading: GRD.  
Typically Offered: Spring.

RSM 521. Object-Oriented Programming And Agent-Based Modelling. 3 Credit Hours.  
"Hands-on training in object-oriented programming using Java, including Java statistical packages, and in the development of agent-based and individual-based simulation models for ecological, physiological, social, economic and physical sciences. Course includes introductions to cellular automatons and models based on social and behavioral networks. No prior programming experience required."  
Components: LEC.  
Grading: GRD.  
Typically Offered: Spring.

RSM 545. Scientific Communication. 0 Credit Hours.  
Components: LEC.  
Grading: GRD.  
Typically Offered: Spring.

RSM 560. Investigating Nature through Science Teacher Active Research (INSTAR) in Physical Science. 2 Credit Hours.  
This is a graduate level marine science course that provides a hands-on approach to education focused on geological and meteorological research in South Florida environment. The course provides training in marine science content, field techniques, state-of-the-art field, computer technology, and science educational reform measures. Participants work collaboratively with marine and atmospheric scientists to bring cutting edge marine science content and research to the classroom focusing on the following coastal themes: geology, hydrology and meteorology. The course will be applicable to all graduate and qualified undergraduate marine science students, per-service teachers in colleges of education, and in-service teachers in school systems throughout the country.  
Components: LEC.  
Grading: GRD.  
Typically Offered: Summer.

RSM 561. INSTAR for Physical Sciences Follow-up. 1 Credit Hour.  
This is a follow-up course for participants in MGG 560 and is designed to test the application of the methods learned in MGG 560 to the teaching of high school students. Participants are expected to show evidence of teaching material learned in MGG 560.  
Components: LEC.  
Grading: GRD.  
Typically Offered: Summer.

RSM 562. Investigating Nature through Science Teacher Active Research in Biological Science. 2 Credit Hours.  
This is a graduate level marine science course that provides a hands-on approach to education focused on marine science research and technology in South Florida coastal environments. The course provides training in marine science content, field techniques, state-of-the-art field and computer technology, and science educational reform measures. Participants work collaboratively with marine scientists to bring cutting edge marine science content and research to the classroom focusing on the following coastal themes: coral reefs and marine fisheries. The course will be applicable to all graduate and qualified undergraduate marine science students, per-service teachers in colleges of education, and in-service teachers in school systems throughout the country.  
Components: LEC.  
Grading: GRD.  
Typically Offered: Summer.

RSM 563. INSTAR Biological Sciences Follow-up. 1 Credit Hour.  
This is a follow-up course for participants in RSM 562 and is designed to test the application of the methods learned in RSM 562 to the teaching of high school students. Participants are expected to show evidence of teaching material learned in RSM 562.  
Components: LEC.  
Grading: GRD.  
Typically Offered: Summer.

RSM 565. Fish Ecology and Oceanography. 3 Credit Hours.  
This course is intended to introduce students to key biological, ecological, oceanographic, and climatic processes of direct relevance to fishery species, with a view toward development of an ecosystem perspective.  
Components: LEC.  
Grading: GRD.  
Typically Offered: Fall.
RSM 566. Polar Science. 3 Credit Hours.
The course covers the physical, chemical and biological components of the polar oceans, atmosphere and coastal regions. The interactions between ocean, ice, atmosphere and land are discussed in detail not only in terms of local relationships, with links to the climate system.
Components: LEC.
Grading: GRD.
Typically Offered: Offered by Announcement Only.

RSM 567. Motorboat Operator Certificate Course. 1 Credit Hour.
Components: LEC.
Grading: GRD.
Typically Offered: Fall & Spring.

RSM 570. Carbon and Climate. 3 Credit Hours.
This course is designed to provide students from different disciplinary backgrounds with an overview of the underlying processes, concepts, and policy debates surrounding the issue of carbon emissions and climate change. Individual faculty from RSMAS and elsewhere will lecture on cutting-edge research areas. Topics covered include: climate modeling; and climate policy.
Components: LEC.
Grading: GRD.
Typically Offered: Offered by Announcement Only.

RSM 571. Special Topics. 1-4 Credit Hours.
Lectures and research projects in special topics related to Marine and Atmospheric Science.
Components: LEC.
Grading: GRD.
Typically Offered: Offered by Announcement Only.

RSM 572. Special Topics. 1-4 Credit Hours.
Lectures and research projects in special topics related to Marine and Atmospheric Science.
Components: LAB.
Grading: GRD.
Typically Offered: Fall, Spring, & Summer.

RSM 573. Special Topics. 1-3 Credit Hours.
Components: LEC.
Grading: GRD.
Typically Offered: Fall, Spring, & Summer.

RSM 574. Special Topics. 1-3 Credit Hours.
Components: LEC.
Grading: GRD.
Typically Offered: Fall, Spring, & Summer.

RSM 575. Special Topics. 1-3 Credit Hours.
Components: LEC.
Grading: GRD.
Typically Offered: Fall, Spring, & Summer.

RSM 600. Research Diving Techniques. 3 Credit Hours.
This course is designed to introduce students to the practices and policies of scientific diving. The object is to prepare students to use SCUBA as a research tool for the marine sciences. The course content will qualify students as RESEARCH DIVERS under the UM/RSMAS Scientific Diving Program and will meet the standards set by the American Academy of Underwater Sciences (AAUS).
Components: LEC.
Grading: GRD.
Typically Offered: Offered by Announcement Only.

RSM 612. Statistics for Environmental Management. 3 Credit Hours.
This course covers the statistical theory, tools, and methods required for management analysis and improvement, emphasizing marine science applications.
Components: LEC.
Grading: GRD.
Typically Offered: Fall.

RSM 620. Climate and Society. 3 Credit Hours.
This course is designed to provide students from different disciplinary backgrounds with an overview of physical processes, general concepts and policy debates surrounding climate issues.
Components: LEC.
Grading: GRD.
Typically Offered: Spring.

RSM 621. Object-Oriented Programming And Agent-Based Modelling. 3 Credit Hours.
“Hands-on training in object-oriented programming using Java, including Java statistical packages, and in the development of agent-based and individual-based simulation models for ecological, physiological, social, economic and physical sciences. Course includes introductions to cellular automatons and models based on social and behavioral networks. No prior programming experience required.”
Components: LEC.
Grading: GRD.
Typically Offered: Spring.

RSM 645. Scientific Communication. 3 Credit Hours.
Components: LEC.
Grading: GRD.
Typically Offered: Spring.

RSM 660. Investigating Nature through Science Teacher Active Research (INSTAR) in Physical Science. 2 Credit Hours.
This is a graduate level marine science course that provides a hands-on approach to education focused on geological and meteorological research in South Florida environment. The course provides training in marine science content, field techniques, state-of-the-art field, computer technology, and science educational reform measures. Participants work collaboratively with marine and atmospheric scientists to bring cutting edge marine science content and research to the classroom focusing on the following coastal themes: geology, hydrology and meteorology. The course will be applicable to all graduate and qualified undergraduate marine science students, per-service teachers in colleges of education, and in-service teachers in school systems throughout the country.
Components: LEC.
Grading: GRD.
Typically Offered: Summer.

RSM 661. INSTAR for Physical Sciences Follow-up. 1 Credit Hour.
This is a follow-up course for participants in MGG 560 and is designed to test the application of the methods learned in MGG 560 to the teaching of high school students. Participants are expected to show evidence of teaching material learned in MGG 560.
Components: LEC.
Grading: GRD.
Typically Offered: Summer.
RSM 662. Investigating Nature through Science Teacher Active Research in Biological Science. 2 Credit Hours.
This is a graduate level marine science course that provides a hands-on approach to education focused on marine science research and technology in South Florida coastal environments. The course provides training in marine science content, field techniques, state-of-the-art field and computer technology, and science educational reform measures. Participants work collaboratively with marine scientists to bring cutting edge marine science content and research to the classroom focusing on the following coastal themes: coral reefs and marine fisheries. The course will be applicable to all graduate and qualified undergraduate marine science students, per-service teachers in colleges of education, and in-service teachers in school systems throughout the country.
Components: LEC.
Grading: GRD.
Typically Offered: Summer.

RSM 663. INSTAR Biological Sciences Follow-up. 1 Credit Hour.
This is a follow-up course for participants in RSM 562 and is designed to test the application of the methods learned in RSM 562 to the teaching of high school students. Participants are expected to show evidence of teaching material learned in RSM 562.
Components: LEC.
Grading: GRD.
Typically Offered: Summer.

RSM 665. Fish Ecology and Oceanography. 3 Credit Hours.
This course is intended to introduce students to key biological, ecological, oceanographic, and climatic processes of direct relevance to fishery species, with a view toward development of an ecosystem perspective.
Components: LEC.
Grading: GRD.
Typically Offered: Fall.

RSM 666. Polar Science. 3 Credit Hours.
The course covers the physical, chemical and biological components of the polar oceans, atmosphere and coastal regions. The interactions between ocean, ice, atmosphere and land are discussed in detail not only in terms of local relationships, with links to the climate system.
Components: LEC.
Grading: GRD.
Typically Offered: Offered by Announcement Only.

RSM 667. Motorboat Operator Certificate Course. 1 Credit Hour.
Components: LEC.
Grading: GRD.
Typically Offered: Fall & Spring.

RSM 670. Carbon and Climate. 3 Credit Hours.
This course is designed to provide students from different disciplinary backgrounds with an overview of the underlying processes, concepts, and policy debates surrounding the issue of carbon emissions and climate change. Individual faculty from RSMAS and elsewhere will lecture on cutting-edge research areas. Topics covered include: climate modeling; and climate policy.
Components: LEC.
Grading: GRD.
Typically Offered: Offered by Announcement Only.

RSM 671. Special Topics. 1-4 Credit Hours.
Lectures and research projects in special topics related to Marine and Atmospheric Science.
Components: LEC.
Grading: GRD.
Typically Offered: Offered by Announcement Only.

RSM 672. Special Topics. 1-4 Credit Hours.
Lectures and research projects in special topics related to Marine and Atmospheric Science.
Components: LAB.
Grading: GRD.
Typically Offered: Fall, Spring, & Summer.

RSM 673. Special Topics. 1-3 Credit Hours.
Components: LEC.
Grading: GRD.
Typically Offered: Fall, Spring, & Summer.

RSM 674. Special Topics. 1-3 Credit Hours.
Components: LEC.
Grading: GRD.
Typically Offered: Fall, Spring, & Summer.

RSM 675. Special Topics. 1-3 Credit Hours.
Components: LEC.
Grading: GRD.
Typically Offered: Fall, Spring, & Summer.

RSM 676. Special Topics. 1-4 Credit Hours.
Lectures and research projects in special topics related to Marine and Atmospheric Science.
Components: LAB.
Grading: GRD.
Typically Offered: Fall, Spring, & Summer.

RSM 677. Special Topics. 1-4 Credit Hours.
Lectures and research projects in special topics related to Marine and Atmospheric Science.
Components: LAB.
Grading: GRD.
Typically Offered: Offered by Announcement Only.

RSM 700. Research Ethics. 0 Credit Hours.
The NIH Guide for Grants and Contracts stipulates that Institutions receiving support for National Research Service Award Training Grants are required to develop a program in the principles of Scientific Integrity. The University of Miami Rosenstiel School has chosen to respond to this requirement with this course. This course must be taken during the first semester in the Department or Program. This is a six-hour course and will be given in two sessions of three hours each.
Components: LEC.
Grading: GRD.
Typically Offered: Fall.

RSM 720. Object-oriented Programming and Agent-based Modeling. 3 Credit Hours.
Basics of object-oriented programming using Java, including Java statistical packages, and hands-on development of agent-based simulation models for social, economic, biological and physical sciences. Includes introductions to automatons and individual-based models.
Components: LEC.
Grading: GRD.
Typically Offered: Spring.

RSM 771. Advanced Studies. 1-4 Credit Hours.
Supervised study or advanced special topics.
Components: LEC.
Grading: GRD.
Typically Offered: Offered by Announcement Only.

RSM 772. Advanced Studies. 1-3 Credit Hours.
Components: LEC.
Grading: GRD.
Typically Offered: Fall, Spring, & Summer.
RSM 773. Advanced Studies. 1-3 Credit Hours.
Components: LEC.
Grading: GRD.
Typically Offered: Fall, Spring, & Summer.

RSM 774. Advanced Studies. 1-3 Credit Hours.
Components: LEC.
Grading: GRD.
Typically Offered: Fall, Spring, & Summer.

RSM 775. Advanced Studies. 1-3 Credit Hours.
Components: LEC.
Grading: GRD.
Typically Offered: Fall, Spring, & Summer.

RSM 780. Directed Readings. 1-3 Credit Hours.
Components: LEC.
Grading: GRD.
Typically Offered: Fall, Spring, & Summer.

RSM 781. Directed Readings. 1-3 Credit Hours.
Components: LEC.
Grading: GRD.
Typically Offered: Fall, Spring, & Summer.