

University of Miami Bulletin, 2009 – 2010
Undergraduate Course Listing

* 500 level courses appear in both the undergraduate and graduate course listing and may be considered undergraduate or graduate at the discretion of the department. Prerequisites, co-requisites and other course requirements are subject to change.

University of Miami Bulletin, 2009-2010
Undergraduate Course Listing
SCHOOL OF ARCHITECTURE
ARCHITECTURE

ARC101 Architecture Design I

6 credits

Fall Semester

The study of architecture as an intellectual and aesthetic discipline. Topics include concept, site, form and technique. Corequisite: ARC 111, 121.

PREREQUISITE: COREQUISITE: ARC 111, 121.

ARC102 Architecture Design II

6 credits

Spring Semester

Architectural response to shelter, space and setting requirements. Topics include programming, program analysis and design, anthropometrics, and architecture psychology. Corequisite: ARC 112, 122.

PREREQUISITE: ARC 101. COREQUISITE: ARC 112, 122.

ARC110 Introduction to Architectural Design

3 credits

First & Second Summer Session

Introduction to the design process and the role of the architect in society. Building design, landscape architecture, urban planning, historic preservation, architectural theory and graphics are taught through drawing and model making in a studio setting.

Open to non-architecture majors in college and high school students entering 10th, 11th and 12th grades interested in exploring the field of architecture.

PREREQUISITE: PERMISSION OF INSTRUCTOR.

ARC111 Drawing I

3 credits

Fall Semester

Exploration and expression of ideas through increased awareness and acquisition of visual and graphic vocabulary, stressing orthographic, oblique and conical projections; light shade and shadow; freehand sketching. Corequisite: ARC 101, 121.

PREREQUISITE: COREQUISITE: ARC 101, 121.

ARC112 Drawing II

3 credits

Spring Semester

Conical projection and freehand exploration of graphic expression and representation, studies in principles of composition, perspective, form, color, materials. Corequisite: ARC 102, 122.

PREREQUISITE: ARC 101, 111. COREQUISITE: ARC 102, 122.

ARC121 Architecture and Culture

3 credits

Fall Semester

Architecture as an intellectual and aesthetic discipline. Focus on design theory, language, typology, image, form, context, and case studies. Corequisite: ARC 101, 111.

PREREQUISITE: COREQUISITE: ARC 101, 111.

ARC122 Architecture and Behavior

3 credits

Spring Semester

Those aspects of environmental psychology which affect architectural design. Studies in human behavior and the design process, application of psychological factors to the design of buildings and their environment. Corequisite: ARC 102, 112.

PREREQUISITE: ARC 101, 121. COREQUISITE: ARC 102, 112.

University of Miami Bulletin, 2009-2010
Undergraduate Course Listing
SCHOOL OF ARCHITECTURE
ARCHITECTURE

ARC141 On-Site Survey of European Architecture and Urbanism

3- 6 credits

Spring Semester & First & Second Summer Session

On site introduction to architecture and the city with a historical review of most European periods from classical to contemporary. Survey of European architectural and urbanistic precedents in important selected locations. Elective course open to all majors; lecture and seminar format.

ARC171 Architecture: The Natural and the Manmade

3 credits

Offered By Announcement Only

A review of the relationship between mankind, the landscape, and architecture from American pre-history to the twentieth century.

ARC191 Architecture Drawing

3 credits

Offered By Announcement Only

Methods of graphic simulation for non-architecture majors, stressing orthographic, oblique and conical projections, and architectural graphic conventions: plan, elevation, section, perspective.

ARC203 Architecture Design III

6 credits

Fall Semester

Architectural response to natural environment and site requirements. Focus on site analysis and design, climate, access and circulation, landscape, relation to larger context. Corequisite: ARC 223.

PREREQUISITE: ARC 102, COREQUISITE: ARC 223.

ARC204 Architecture Design IV

6 credits

Spring Semester

Building materials and structure as active constituents of architecture design. Focus on orientation, enclosure, low-energy responses, selection and assembly of construction materials, short and intermediate span structural systems. Corequisite: ARC 231.

PREREQUISITE: ARC 203, 261. COREQUISITE: ARC 231.

ARC213 Computing I

3 credits

Fall & Spring Semester

An introduction to new electronic design tools and technology available to architects today. Lectures on the history and future of computing in the profession.

PREREQUISITE: ARC 102, 111, 112 OR PERMISSION OF INSTRUCTOR.

ARC223 Architecture and the Environment

3 credits

Fall Semester

Architectural response to natural environmental requirements. Focus on climate, control, natural energy use, ecosystems, energy flow, environmental intervention, case studies of indigenous buildings.

PREREQUISITE: ARC 102, 122.

ARC231 Building Structures

3 credits

Spring Semester

The structural behavior and tectonic form of the basic elements of buildings. Topics include loads, stability, equilibrium, strength, and dimensions of structural form.

Corequisite: ARC 204.

PREREQUISITE: PHY 103. COREQUISITE: ARC 204.

University of Miami Bulletin, 2009-2010
Undergraduate Course Listing
SCHOOL OF ARCHITECTURE
ARCHITECTURE

ARC261 Building Construction

3 credits

Fall Semester

Material characteristics of enclosure and structural systems, case studies in traditional and modern building construction. Topics include properties of building materials; wood, masonry, concrete, steel and glass construction techniques; on-site and off-site processes; interior and exterior finishes; assemblies, detailing and building codes.

Corequisite: ARC 203.

PREREQUISITE: ARC 102. COREQUISITE: ARC 203.

ARC267 History of Architecture I: Ancient, Medieval and Renaissance

3 credits

Fall Semester

Studies of the history of architecture and urban design. Focus on religious and secular monuments and their settings, domestic architecture and infrastructure, regional constructional and compositional traditions from prehistory to the end of the sixteenth century. Corequisite: ARC 203.

PREREQUISITE: COREQUISITE: ARC 203.

ARC268 History of Architecture II: Baroque through Contemporary

3 credits

Spring Semester

Studies of the history of architecture and urban design. Focus on religious and secular monuments and their settings, domestic architecture and infrastructure, regional constructional and compositional traditions from the end of the sixteenth century through to the present. Corequisite: ARC 204.

PREREQUISITE: COREQUISITE: ARC 204.

ARC292 Introduction to Architecture Design I

3 credits

Spring Semester

Survey of the architecture profession and introduction to architecture design for non-architecture majors. Role, opportunities, vocabulary, visual awareness, techniques and procedures of design.

PREREQUISITE: ARC 191.

ARC293 Introduction to Architecture Design II

3 credits

Fall Semester

Continuation of ARC 292 and an introduction to the interactions between architecture and the engineering disciplines for non-architecture majors. Theories of building and site design, technology as an integral component of design, program, site, climate and methodology.

PREREQUISITE: ARC 191, 292.

ARC294 Introduction to the Development of Architecture

3 credits

Fall Semester

Introduction to architecture for non-architecture majors. Vocabulary, themes, principles and processes of design, cultural, social, economic and technological influences demonstrated through historic examples.

PREREQUISITE: SOPHOMORE STANDING OR PERMISSION OF INSTRUCTOR.

ARC301 Architecture Design

6 credits

First & Second Summer Session

Comprehensive building and site design for students transferring into the architecture program at third year level. Topics include human, environmental, cultural and technological factors.

PREREQUISITE: SOPHOMORE STANDING.

University of Miami Bulletin, 2009-2010
Undergraduate Course Listing
SCHOOL OF ARCHITECTURE
ARCHITECTURE

ARC302 Theory of Classical Architecture and Urbanism

3 credits

Fall Semester

Theoretical basis of western classical architecture and urbanism from Greek and Roman times to today. Studies of classical theories of siting and urbanism, anthologies of classical works, and vernacular interpretations and main contemporary theories and works.

PREREQUISITE: PERMISSION OF INSTRUCTOR, OR ARC 204.

ARC305 Architecture Design V

6 credits

Fall Semester

Environmental systems and structure as active constituents of architectural design. Topics include the integration of enclosure, structure, environmental and mechanical systems in intermediate and long span structures. Corequisite: ARC 362, CAE 213.

PREREQUISITE: ARC 204. COREQUISITE: ARC 362, CAE 213.

ARC306 Architecture Design VI

6 credits

Spring Semester

Government and finance as active constituents of architecture design. Topics include zoning regulations, building codes, principles of public health, safety and welfare, market and feasibility studies. Corequisite: ARC 351, CAE 313.

PREREQUISITE: ARC 305. CAE 313.

ARC323 On Site Study of Selected Architecture and Urbanism

3- 6 credits

Spring Semester & First & Second Summer Session

On site study of specific architectural and/or urbanistic precedents at selected locations. Focus on specific period(s) and/or architect(s). Elective course open to all majors.

ARC324 On Site Graphic Analysis of Selected Architecture and Urbanism

3 credits

Spring Semester & First & Second Summer Session

On site analysis and illustration of specific architectural and/or urbanistic precedents at selected locations. Diagrams, sketches, and drawings recording, analyzing and evaluating buildings and places. Focus on specific period(s) and/or architect(s). Elective course open to all majors.

ARC362 Building Systems I

3 credits

Fall Semester

Environmental and Safety Systems. Topics include mechanical - HVAC and conveyors; plumbing - fixtures and pipes; safety systems - fire safety and emergency and signal systems. Corequisite: ARC 305.

PREREQUISITE: ARC 261, PHY 103. COREQUISITE: ARC 305.

ARC363 Building Systems II

3 credits

Spring Semester

Principles and applications of light and acoustics. Topics include natural and artificial light - planning for sunlight, problems and solutions for interior and exterior illumination; sound - properties, problems and solutions in new and existing spaces. Principles and applications of electrical equipment and wiring design. Corequisite: ARC 306.

PREREQUISITE: ARC 362, PHY 103. COREQUISITE: ARC 306.

University of Miami Bulletin, 2009-2010
Undergraduate Course Listing
SCHOOL OF ARCHITECTURE
ARCHITECTURE

ARC371 Ancient Architecture

3 credits

Fall Semester

History of architecture and human settlements. Western European prehistory, Egypt, Mesopotamia, Persia, Aegean and Mediterranean, Greece, Rome.

PREREQUISITE: HIS 131 AND 132, ARC 204 OR PERMISSION OF INSTRUCTOR.

ARC372 Selected Topics in World Architecture

3 credits

Fall Semester

History of architecture and human settlements. Islamic Near East, Spain, North Africa, Hindu and Buddhist India, Nepal, S. E. Asia, China, Japan, Pre-Columbian America.

PREREQUISITE: HIS 131 AND 132, ARC 204 OR PERMISSION OF INSTRUCTOR.

ARC373 Early Christian, Byzantine, and Medieval Architecture

3 credits

Fall Semester

History of architecture and human settlements. Early Christian and Byzantine architecture in Italy, the Near East, Greece, North Africa, Eastern Europe, Medieval architecture in Western Europe.

PREREQUISITE: HIS 131 AND 132, ARC 204 OR PERMISSION OF INSTRUCTOR.

ARC374 Renaissance Architecture

3 credits

Fall Semester

History of architecture and human settlements. Renaissance and Baroque architecture in Italy, France, Spain and Portugal, Great Britain, Austria, Germany, and neighboring countries.

PREREQUISITE: HIS 131 AND 132, ARC 204 OR PERMISSION OF INSTRUCTOR.

ARC382 Architecture and Culture in Italy

3 credits

Spring Semester

A cultural and historical framework in preparation for participation in the Rome program. A range of topics, including architecture, art, history, cinema, literature and politics presented by University faculty from a variety of disciplines. Required for participation in the Rome Program.

PREREQUISITE: PERMISSION OF INSTRUCTOR.

ARC390 History of Cities

3 credits

Fall Semester

Historical overview of the origin of cities and the development of cities in the East, West, and New World. Focus on the nature of the industrial revolution and the development of the industrial city and contemporary urban settlements.

PREREQUISITE: ARC 204.

ARC407 Architecture Design VII

6 credits

Fall & Spring Semester & First & Second Summer Session

Elective component: student and faculty select areas of in-depth study. Topics include building types, environment, energy, community design.

PREREQUISITE: ARC 503, 306, 231, CAE 213.

ARC408 Architecture Design VIII

6 credits

Fall & Spring Semester & First & Second Summer Session

Elective component: student and faculty select areas of in-depth study. Topics include building types, environment, energy, community design, etc.

PREREQUISITE: ARC 407.

University of Miami Bulletin, 2009-2010
Undergraduate Course Listing
SCHOOL OF ARCHITECTURE
ARCHITECTURE

ARC452 Management of Professional Practice

3 credits

Fall & Spring Semester

Overview of the practice and the profession, legal and ethical concerns, business types and management practices, traditional and non-traditional practices and services, contracts and contractual relationships.

PREREQUISITE: ARC 306.

ARC475 Colonial Architecture

3 credits

Fall Semester

History of architecture and human settlements. Colonial Architecture from the 16th through the 19th centuries in North and South America, the Caribbean, India and Africa.

PREREQUISITE: ARC 204.

ARC476 19th and 20th Century Architecture

3 credits

Fall Semester

History of architecture and human settlements. America and Europe during the 19th and 20th centuries; cultural, technological and theoretical development.

PREREQUISITE: ARC 204 OR 292, 294 OR 371 OR 372 OR 373 OR PERMISSION OF THE INSTRUCTOR.

ARC481 Special Problems

1- 3 credits

Fall & Spring Semester & First & Second Summer Session

Group or individual investigations of significant architectural issues, offered by special arrangement only.

PREREQUISITE: PERMISSION OF PROGRAM DIRECTOR.

ARC482 Special Problems

1- 3 credits

Fall & Spring Semester & First & Second Summer Session

Group or individual investigations of significant architectural issues, offered by special arrangement only.

PREREQUISITE: PERMISSION OF PROGRAM DIRECTOR.

ARC483 Special Problems

1- 3 credits

Fall & Spring Semester & First & Second Summer Session

Group or individual investigations of significant architectural issues, offered by special arrangement only.

PREREQUISITE: PERMISSION OF PROGRAM DIRECTOR.

ARC501 Architecture Design and Theory I

6 credits

Fall Semester

Cultural, human and environment component and architectural responses to these: Social and aesthetic concepts, architectural psychology, climatic principles, programming analysis and design.

PREREQUISITE: GRADUATE STANDING.

ARC502 Architecture Design and Theory II

6 credits

Spring Semester

Technology component; materials, structure, and environmental control systems as a framework for architectural design. Construction materials and methods, structural systems, mechanical systems.

PREREQUISITE: ARC 501.

University of Miami Bulletin, 2009-2010
Undergraduate Course Listing
SCHOOL OF ARCHITECTURE
ARCHITECTURE

ARC503 Architectural Design and Theory III

6 credits

Fall Semester

Legal and economic component; government and finances as active constituents of architecture design. Zoning regulations, building codes, principles of public health, safety and welfare, market and feasibility studies.

PREREQUISITE: ARC 502.

ARC507 Architecture Design

6 credits

Fall & Spring Semester & First & Second Summer Session

Elective component: student and faculty select areas of in-depth study. Topics include building types, environment, energy, community design, etc.

PREREQUISITE: ARC503

ARC509 Architecture Design IX

6 credits

Fall & Spring Semester & First & Second Summer Session

Elective component: student and faculty select areas of in-depth study. Topics include building types, environment, energy, community design, etc.

PREREQUISITE: ARC 408.

ARC510 Architecture Design X

6 credits

Fall & Spring Semester & First & Second Summer Session

Elective component: student and faculty select areas of in-depth study. Topics include building types, environment, energy, community design, etc.

PREREQUISITE: ARC 509.

ARC511 Drawing

3 credits

Fall Semester

Graphic representation and exploration of visual ideas through increased awareness of visual and graphic vocabulary, stressing projections, light, shade and shadow, perspective, and freehand sketching.

PREREQUISITE: GRADUATE STANDING AND PERMISSION OF INSTRUCTOR.

ARC512 Advanced Visual Analysis

3 credits

Offered By Announcement Only

Drawing as a means of analyzing and recording visual experience. Composition, form, light, color and drawing as a primary device in the mental registration of visual experience.

PREREQUISITE: ARC 204, 112.

ARC513 Computing

3 credits

Spring Semester

An introduction to new electronic design tools and technology available to architects today. Lectures on the history and future of computing in the profession.

PREREQUISITE: GRADUATE STANDING AND PERMISSION OF INSTRUCTOR.

ARC514 Michelangelo

3 credits

Fall Semester

Drawing as a form of research across mediums to understand historical research and interpretation of Michelangelo's work.

PREREQUISITE: ARC 306, 112, 213 OR PERMISSION OF THE INSTRUCTOR.

University of Miami Bulletin, 2009-2010
Undergraduate Course Listing
SCHOOL OF ARCHITECTURE
ARCHITECTURE

ARC515 Computer Modeling

3 credits

Fall & Spring Semester

Three-dimensional, computer modeling, and rendering. Lecture, problem solving exercises and laboratory.

PREREQUISITE: ARC 213, 513 OR PERMISSION OF THE INSTRUCTOR.

ARC516 Architectural Watercolor Renderings

3 credits

Fall Semester

This course will use freehand drawing and watercolor painting as a vehicle to study and record the urban and architectural conditions of Coral Gables and other South Florida sites. Particular emphasis will be placed on the analytical potential of sketches (recording space, light, surfaces and color).

PREREQUISITE: ARC 306 OR PERMISSION OF THE INSTRUCTOR.

ARC517 Construction Documents

3 credits

Fall Semester

Working drawings and specifications. Form, content and role of constituent parts of working drawings and specifications by using case studies.

PREREQUISITE: ARC 204 AND 261.

ARC518 Documentation of Historic Architecture

3 credits

First & Second Summer Session

Principles of preservation and restoration, research methods, measured drawings, surveying methods, case studies.

PREREQUISITE: ARC 204.

ARC519 Architecture and Color

3 credits

First & Second Summer Session

This course focuses on the theory and practice of color and its application to architectural design. Topics include color history from Newton through Alber, the relationship between color practice in science versus art, and the discipline of color in architecture from the Neoclassical movement through the Modern Movement.

PREREQUISITE: ARC 306 OR PERMISSION OF THE INSTRUCTOR.

ARC520 Computer Modeling II

3 credits

Spring Semester

Advanced three-dimensional computer modeling and rendering. Lecture, problem solving exercises and laboratory.

PREREQUISITE: ARC 213 OR 513 AND 515 OR PERMISSION OF THE INSTRUCTOR.

ARC521 The Architecture of American Cities

3 credits

Fall Semester

Study of theories on relationships between architectural objects and urban space based on works which include Sitte, Rossi, and Norberg-Schulz. Application of selected theoretical principles to the contemporary American cities.

PREREQUISITE: ARC 374.

University of Miami Bulletin, 2009-2010
Undergraduate Course Listing
SCHOOL OF ARCHITECTURE
ARCHITECTURE

ARC522 Architecture Psychology

3 credits

Offered By Announcement Only

Environmental behavior concepts and their application to an architecture focused on designing for people. Fundamental principles covered include proxemics, privacy, personalization, territoriality, defensible space, social interaction, aesthetics, symbolism, and spatial perception, reasons for individual and cultural differences in spatial actions are outlined. Psychological and social concepts are applied to the process of design and to residential environments, neighborhoods, and public spaces.

PREREQUISITE: PERMISSION OF INSTRUCTOR.

ARC523 Interior Architecture Design

3 credits

Fall Semester

Principles and technical components of interior design. Topics include activity, analysis, finishes, furniture, fixture, lighting, and acoustics.

PREREQUISITE: ARC 204 OR PERMISSION OF THE INSTRUCTOR.

ARC524 Selected Topics in Interior Architecture Design

3 credits

Spring Semester

Principles and technical components of interior design. Topics include interior volumetrics, finishes, furnishings and lighting.

PREREQUISITE: ARC 204 OR PERMISSION OF THE INSTRUCTOR.

ARC525 Landscape Arch Design I

3 credits

Fall & Spring Semester

Analysis and design of landscape spaces. Studies in historical precedent, gardens, parks, plazas, squares and response to architectural context.

PREREQUISITE: ARC 204 OR PERMISSION OF THE INSTRUCTOR.

ARC526 Landscape Arch Design II

3 credits

Offered By Announcement Only

Analysis and design of landscape spaces. Topics include ecological principles, landforms and plant materials.

PREREQUISITE: ARC 204 OR PERMISSION OF THE INSTRUCTOR.

ARC527 Architecture Photography

3 credits

Offered By Announcement Only

Photography with emphasis on architectural subjects. Introduction to visual principles, photographic equipment, materials, and techniques.

PREREQUISITE: ARC 204.

ARC528 Historic Preservation

3 credits

Spring Semester

Basic design principles for the rehabilitation of historic buildings. Evaluating character-defining details; significance analysis; context of setting issues within historic districts; applying the Secretary of the Interior's Standards for rehabilitation.

PREREQUISITE: ARC 204.

ARC529 Research in Design-Methods and Procedures

3 credits

Fall & Spring Semester

Application of research methods and procedures to design issues. Historical, descriptive, analytic, experimental research methods; tools for data manipulation and communication.

PREREQUISITE: PERMISSION OF PROGRAM DIRECTOR.

University of Miami Bulletin, 2009-2010
Undergraduate Course Listing
SCHOOL OF ARCHITECTURE
ARCHITECTURE

ARC530 Architectural Principles of Harmony

3 credits

Fall & Spring Semester

The study of the essential elements of architectural design including form, proportion, light, color, ornamentation and intention. Referring to historic precedents, students will investigate the relationship between these elements through the spectrum of harmonic ratios. Emphasis on understanding Greek and Roman principles of design through analytical drawing.

PREREQUISITE: ARC 382.

ARC531 Building Structures I

3 credits

Spring Semester

The structural behavior and tectonic form of the elements of buildings. Topics include loads, stability, equilibrium, strength, and the dimensions of structural form.

PREREQUISITE: PHY 103, GRADUATE STANDING OR PERMISSION OF INSTRUCTOR.

ARC532 Building Structures II

3 credits

Spring Semester & First Summer Session

The structural behavior of simple frame structures. Topics include techniques to determine basic system layout and preliminary dimensioning of key subsystems and members.

PREREQUISITE: ARC 531.

ARC533 Building Structures III

3 credits

Fall Semester & Second Summer Session

The structural behavior of complex structures. Topics include prestressed systems, waffle and space trusses, curved structures and longspan buildings.

PREREQUISITE: ARC 532.

ARC534 The Palazzo in Italian Architecture

3 credits

Fall & Spring Semester

Study of the development of the Renaissance and Baroque palazzo in Rome and other important centers of art and culture. Emphasis on the socio-political context.

PREREQUISITE: ARC 382.

ARC535 Historic Italian Urbanism

3 credits

Fall & Spring Semester

Study of Italian cities and towns from medieval to contemporary times, including a comparative analysis of history and form.

PREREQUISITE: ARC 382.

ARC536 Italian Gardens

3 credits

Fall & Spring Semester

Study of Italian garden design during the Renaissance, Baroque and Mannerist periods. Emphasis on historical and political context.

PREREQUISITE: ARC 382.

ARC537 Research in Rome

3 credits

Fall & Spring Semester

An exploration of Roman history, architecture and urban form through lectures, on site study and drawing assignments. Emphasis on chronological and spatial sequence of development.

PREREQUISITE: ARC 382.

University of Miami Bulletin, 2009-2010
Undergraduate Course Listing
SCHOOL OF ARCHITECTURE
ARCHITECTURE

ARC541 Seminar on Town Design

3 credits

Fall Semester

Introduction to the lexicon of urbanism; analytical presentations of the concepts of: region, town, neighborhood, corridor, district, and building type; interdisciplinary presentations, review, and criticism of current town and urban design projects.

ARC542 Seminar on Housing

3 credits

Offered By Announcement Only

Introduction to domestic building typology; exploration of the concepts of low, medium, and high density housing with attention to social, environmental, and economic issues; presentations of current case studies.

PREREQUISITE: ARC 306 OR PERMISSION OF INSTRUCTOR.

ARC543 Seminar on Retrofit of Suburbia

3 credits

Offered By Announcement Only

Introduction to the critical reconstitution of the city; theory and history of the concepts of revitalization and redevelopment; presentations, review, and criticism of current case studies.

PREREQUISITE: ARC 306 OR PERMISSION OF INSTRUCTOR.

ARC544 The Architecture of Palladio

3 credits

Fall Semester

On site study of the architecture and urbanism of Andrea Palladio. Emphasis on the artistic precedents of the Veneto Region.

PREREQUISITE: PERMISSION OF THE INSTRUCTOR.

ARC545 Urban Composition

3 credits

Offered By Announcement Only

Survey and analytical review of urban rooms as the vessel of human activity in urban culture. Study of proportional and compositional aspects of urban rooms together with economic, social, and cultural factors. Readings and discussion format.

PREREQUISITE: ARC 306, 502, OR PERMISSION OF INSTRUCTOR.

ARC546 Studies of Havana

3 credits

Spring Semester

Analysis of the physical structure of a major city and its environments including an exploration of its history and iconographic themes, mapping and building studies.

ARC547 Architecture and Urban Identity

3 credits

Offered By Announcement Only

Study of the relationship between architecture and urbanism focusing on the ways by which architecture provides urban identity and image of place. Case studies relating monuments, fabric and urban plans to their culture, time and place. Lecture and seminar format.

PREREQUISITE: ARC 306 OR PERMISSION OF INSTRUCTOR.

ARC548 Seminar in Community Development

3 credits

Offered By Announcement Only

Study of the contemporary context for the development of the physical environment. Examination of public, private and third sector implementation of building and community design. Format: guest speakers, readings, discussions, and seminar.

PREREQUISITE: ARC 305, 502, OR PERMISSION OF INSTRUCTOR.

University of Miami Bulletin, 2009-2010
Undergraduate Course Listing
SCHOOL OF ARCHITECTURE
ARCHITECTURE

ARC550 Professional Lecture Series

3 credits

Fall & Spring Semester

Exposure to the various professional disciplines in South Florida that make contributions to the design process. Case study analysis and evaluation of current building project, from time of initial formulation through completion, including research, diagrammatic studies, site visits and lectures.

ARC551 Contemporary Theories of Architecture

3 credits

Offered By Announcement Only

Theoretical basis of modern architecture and different present currents and movements. Agrarianism, technism, orthodoxy, brutalism, scientism, revivalism, consumerism, rationalism, classicism.

PREREQUISITE: ARC 204 OR PERMISSION OF INSTRUCTOR.

ARC553 Structural Design Theory

3 credits

Offered By Announcement Only

Relationship of structural systems to architectural design. Case studies in theories of structure, form and construction.

PREREQUISITE: ARC 306 AND CAE 313.

ARC554 Architecture of South Florida

3 credits

Offered By Announcement Only

History of architecture and human settlements. Studies of significant architectural landmarks and urban design of the South Florida Region, chronological growth of Miami, Miami Beach, Coral Gables, Key West and Palm Beach.

PREREQUISITE: ARC 204 OR PERMISSION OF THE INSTRUCTOR.

ARC555 Design and Fabrication Techniques in Wood: The Lamp

3 credits

Spring Semester

Design, construction and detailing of wood as applied to furnishings and interiors. Focus: lamps and illumination. Workshop based course including research, exercises, measuring, documentation and a final project.

ARC556 Design and Fabrication Techniques in Wood - The Clock

3 credits

Fall Semester

Design, construction and detailing of wood as applied to furnishings and interiors. Focus: Traditional Clock and Case Design. Workshop based course including research, exercises, measuring, documentation and a final project.

ARC557 Design and Fabrication Techniques: Carved Panels

3 credits

First & Second Summer Session

Design, construction and detailing of wood as applied to furnishings and interiors. Focus: low and high relief carved wood panels. Workshop based course including research, exercises, measuring, documentation and a final project.

ARC558 Theories of Landscape Architecture

3 credits

Fall Semester

Leading theories of landscape architecture which have influenced current considerations of nature, landscape and design.

PREREQUISITE: ARC 204 OR PERMISSION OF INSTRUCTOR.

University of Miami Bulletin, 2009-2010
Undergraduate Course Listing
SCHOOL OF ARCHITECTURE
ARCHITECTURE

ARC559 Computer Aided Presentation Graphics

3 credits

Offered By Announcement Only

Introduction to computer aided presentation graphics from the perspective of the design professional. Topics include: desktop publishing, image processing, and desktop presentations.

PREREQUISITE: ARC 213 OR PERMISSION OF INSTRUCTOR.

ARC561 Building Construction

3 credits

Fall Semester

Material characteristics of enclosure and structural systems, case studies in traditional and modern building construction. Topics include properties of building materials; wood, masonry, concrete, steel and glass construction techniques; on-site and off-site processes; interior and exterior finishes; assemblies, detailing and building codes.

PREREQUISITE: GRADUATE STANDING OR PERMISSION OF INSTRUCTOR.

ARC562 Building Systems I

3 credits

Fall Semester

Environmental and Safety Systems. Topics include mechanical - HVAC and conveyors; plumbing - fixtures and pipes; electrical - equipment and wiring design; safety systems - fire safety and emergency and signal systems.

PREREQUISITE: ARC 561 OR PERMISSION OF INSTRUCTOR.

ARC563 Building Systems II

3 credits

Spring Semester

Principles and applications of light and acoustics. Topics include natural and artificial light - planning for sunlight, problems and solutions for interior and exterior illumination; sound - properties, problems and solutions in new and existing spaces electrical equipment and wiring design.

PREREQUISITE: ARC 562 OR PERMISSION OF INSTRUCTOR.

ARC564 Building Systems III

3 credits

Offered By Announcement Only

Direction, control and coordination of construction project activities. Topics include inspection, reporting, recording, safety standards.

PREREQUISITE: ARC 363 OR 563 OR PERMISSION OF INSTRUCTOR.

ARC567 History of Architecture I: Ancient, Medieval and Renaissance

3 credits

Fall Semester

Studies of the history of architecture and urban design. Focus on religious and secular monuments and their settings, domestic architecture and infrastructure, regional constructional and compositional traditions from prehistory to the end of the sixteenth century. Corequisite: ARC 501.

PREREQUISITE: GRADUATE STANDING. COREQUISITE: ARC 501.

ARC568 History of Architecture II: Baroque through Contemporary

3 credits

Spring Semester

Studies of the history of architecture and urban design. Focus on religious and secular monuments and their settings, domestic architecture and infrastructure, regional constructional and compositional traditions from the end sixteenth century through to the present. Corequisite: ARC502.

PREREQUISITE: GRADUATE STANDING. COREQUISITE: ARC 502.

University of Miami Bulletin, 2009-2010
Undergraduate Course Listing
SCHOOL OF ARCHITECTURE
ARCHITECTURE

ARC569 Directed Readings

3 credits

Fall & Spring Semester & First & Second Summer Session

A structured program of readings and essays organized by the student and his/her graduate supervisor constituting a preparation for graduate research in the student's chosen area of interest.

PREREQUISITE: PERMISSION OF PROGRAM DIRECTOR.

ARC570 Modern Architecture

3 credits

Spring Semester

History of architecture, landscape, and city design in the modern era.

ARC571 Ancient Architecture

3 credits

Fall Semester

History of architecture and human settlements. Western European prehistory, Egypt, Mesopotamia, Persia, Aegean and Mediterranean, Greece, Rome.

PREREQUISITE: GRADUATE STANDING OR PERMISSION OF INSTRUCTOR.

ARC572 Selected Topics in World Architecture

3 credits

Fall Semester

History of architecture and human settlements. Islamic Near East, North Africa, Hindu and Buddhist India, Nepal, S. E. Asia, China, Japan, Pre-Columbian America.

PREREQUISITE: GRADUATE STANDING OR PERMISSION OF INSTRUCTOR.

ARC573 Early Christian, Byzantine, and Medieval Architecture

3 credits

Fall Semester

History of architecture and human settlements. Early Christian and Byzantine architecture in Italy, the Near East, Greece, North Africa, Eastern Europe, Medieval architecture in Western Europe.

PREREQUISITE: GRADUATE STANDING OR PERMISSION OF INSTRUCTOR.

ARC574 Renaissance Architecture

3 credits

Fall Semester

History of architecture and human settlements. Renaissance and Baroque architecture in Italy, France, Spain and Portugal, Great Britain, Austria, Germany, and neighboring countries.

PREREQUISITE: GRADUATE STANDING OR PERMISSION OF INSTRUCTOR.

ARC575 Colonial Architecture

3 credits

Fall Semester

History of architecture and human settlements. Iberian and British Colonies from the 16th through the 19th centuries: North and South America, Caribbean, India and Africa.

PREREQUISITE: GRADUATE STANDING OR PERMISSION OF INSTRUCTOR.

ARC576 19th and 20th Century Architecture

3 credits

Fall Semester

History of architecture and human settlements. America and Europe during the 19th and 20th centuries; cultural, technological and theoretical development.

PREREQUISITE: GRADUATE STANDING OR PERMISSION OF INSTRUCTOR.

ARC577 The Architecture of Alvar Aalto

3 credits

Fall Semester

An examination of the architecture of Alvar Aalto through the analysis of selected buildings.

PREREQUISITE: PERMISSION OF THE INSTRUCTOR.

University of Miami Bulletin, 2009-2010
Undergraduate Course Listing
SCHOOL OF ARCHITECTURE
ARCHITECTURE

ARC578 Italian Rationalist Architecture

3 credits

Offered By Announcement Only

History of Italian architecture and urban design between 1914 and 1950: cultural, technological, and theoretical developments; relationship between architecture, politics and propaganda; related survey of the period in other countries (France, German, Soviet Union).

PREREQUISITE: ARC 305 OR PERMISSION OF THE INSTRUCTOR.

ARC579 History of Architecture: The Natural and the Man-Made

3 credits

Offered By Announcement Only

A review of the relationship between man, the landscape, and architecture from pre-history to the twentieth century.

PREREQUISITE: GRADUATE STANDING.

ARC584 Special Problems

1- 3 credits

Fall & Spring Semester & First & Second Summer Session

Group or individual investigations of significant architectural issues, offered by special arrangement only.

PREREQUISITE: PERMISSION OF PROGRAM DIRECTOR.

ARC585 Special Problems

1- 3 credits

Fall & Spring Semester & First & Second Summer Session

Group or individual investigations of significant architectural issues, offered by special arrangement only.

PREREQUISITE: PERMISSION OF PROGRAM DIRECTOR.

ARC586 Special Problems

1- 3 credits

Fall & Spring Semester & First & Second Summer Session

Group or individual investigations of significant architectural issues, offered by special arrangement only.

PREREQUISITE: PERMISSION OF PROGRAM DIRECTOR.

ARC590 History of Cities

3 credits

Fall & Spring Semester

Historical overview of the origin of cities and the development of cities in the East, West, and New World. Focus on the nature of the industrial revolution and the development of the industrial city and contemporary urban settlements.

PREREQUISITE: GRADUATE STANDING OR PERMISSION OF INSTRUCTOR.

ARC592 Computing in Design Practice

3 credits

Fall Semester

Introduction to computer applications specific to the design professional practice and management of computing resources in a design firm.

PREREQUISITE: ARC 213 OR 513 OR PERMISSION OF INSTRUCTOR.

ARC593 Computer Animation

3 credits

Spring Semester

Explores the use of computer animation and advanced visualization techniques in architecture with emphasis on texture and lighting, spatial choreography and story-boarding.

PREREQUISITE: ARC 415 OR PERMISSION OF INSTRUCTOR.

University of Miami Bulletin, 2009-2010
Undergraduate Course Listing
SCHOOL OF ARCHITECTURE
ARCHITECTURE

ARC594 Geographic Information Systems in Urban Design

3 credits

Spring Semester

Exploration of Geographic Information Systems (GIS) in urban design. Principles of GIS and their application to spatial analysis, data management and visualization.

PREREQUISITE: ARC 213 OR 513 OR PERMISSION OF INSTRUCTOR.

ARC595 Database Management Systems and Programming

3 credits

Fall Semester

Introduction to principles of database management and programming. Instruction of a selected database management program and a programming language.

PREREQUISITE: GRADUATE STANDING OR PERMISSION OF INSTRUCTOR.

ARC596 Interactive Multimedia in Design

3 credits

Spring Semester

Integration of text, video, sound, and computer graphics to create an interactive electronic information medium.

PREREQUISITE: ARC 213 OR 513 OR PERMISSION OF INSTRUCTOR.

ARC597 Computer Visualization

3 credits

Spring Semester

Focus: Explores the use of various advanced visualization techniques in design.

Topic will change from semester to semester. Format: lecture, laboratory and exercises.

PREREQUISITE: ARC 593 OR 596 OR PERMISSION OF INSTRUCTOR.