COURSE SLO REPORT - INDUSTRY AND TECHNOLOGY DIVISION

COURSE SLO STATEMENTS - ARCHITECTURE

Course ID	Course Name	Course SLO Title	Course SLO Statement
ECC: ARCH 100	An Orientation to Architecture	SLO #1Urban and Social Environment	Given lecture information, worksheet examples and in-class discussion, students will be able to demonstrate how architecture shapes the urban and social environment on global and local scales.
		SLO #2 Becoming an Architect	Given lecture information, worksheet examples and in-class discussion, students will be able to demonstrate knowledge of the education necessary, internship and licensing procedures to become a professional architect
		SLO #3 Careers connected to Architecture	Given lecture Information and classroom discussions, students will have knowledge of parallel vocations that a student with an education in architecture could pursue after their education is complete, if they choose not to pursue a career as an architect.
ECC: ARCH 104	History of Western Architecture	SLO #1 Important Buildings	After completing class lectures, slide presentations, reading assignments, and films, students will be able to identify important buildings covered in the course including the name, location, architect (where applicable), style, and approximate dates.
		SLO #2 Architectural Styles	Students will be able to identify important architectural styles from the ancient architecture of Mesopotamia to the modern architecture of the 21st century in terms of religious, political and social context and relevant dates and architects.
		SLO #3 Architecture & Culture	This course on architectural history expects the students to understand important buildings throughout history including historical context as well as social and religious relevancy, and the important role architecture plays in the development of cultures.
ECC: ARCH 119	Computer Aided Architectural Drafting	SLO #1 Commands for Producing Drawings	Given lecture information, worksheet examples, in-class discussion, and hands-on experience, students will be able to know the commands necessary to produce a set of construction drawings for a small house, using AutoCAD Architectural computer software.
		SLO #2 Graphic Techniques	Successful students, completing the Architecture Program, following instructions, supervised classroom practice using CADD system, will use proper graphic techniques to complete instructions.
		SLO #3 Spatial Organization	Successful students tracking for graduation transfer, and or employment in the architecture field, will create design drawings and design models to show spatial organization.
ECC: ARCH 121	Three-Dimensional Architectural Computer Aided Design	SLO #1 Construction Documents	By the conclusion of the course, students should be able to: • Understand basic concepts of Revit Architecture 2014 • Create a 3D Revit model to generate building plans, sections, elevations and 3D views • Understand basic concepts of detail and schedule creation • Understand basic concepts of stair and curtain wall creation • Understand basic concepts of creating parametric families • Create simple renderings and shadow studies • Understand how Revit is used in a professional office setting
		SLO #2 3D Modeled Office Building	Using Revit software, students will create a detailed 3D computer model of a 3-story office building complete with floor plans, RCPs, building sections, interior and exterior

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		SLO #2 3D Modeled Office Building	elevations, details, and schedules as well as photo realistic renderings. Students will use Building Information Modeling (BIM) in design, analysis and documentation of their buildings
		SLO #3 Computer Generated Drawings	Students will be able to demonstrate proficiency in the basics of 3D BIM modeling using Autodesk Revit software, and will be able to create detailed computer models of buildings that can be used to generate building plans, sections, elevations, details, schedules, etc. Once completed with this course, the student will be prepared for entry -level employment with an architecture firm using computer software to generate drawings.
ECC: ARCH 125	Advanced Three-Dimensional Architectural Computer Aided Design	SLO #1 Advanced Concepts	By the conclusion of the course, students should be able to: • Understand advanced concepts of Revit Architecture 2012 • Create a detailed 3D Revit model with building plans, sections, elevations, RCPs, enlarged plans and 3D views • Understand advanced concepts of detail and schedule creation • Understand advanced concepts of stair and curtain wall creation • Understand advanced concepts of creating parametric families • Understand how Revit and sustainable design/LEED work together • Understand how Revit is used in a professional office setting • Create renderings, shadow studies, and animations • Create parametric Revit families • Create your own BIM with construction documents that can be used in a portfolio
		SLO #2 Three-Story Office Building	Students will create, using Revit software, a detailed 3D computer model of a 3-story office building complete with floor plans, RCPs, building sections, interior and exterior elevations, and details as well as photo realistic renderings. Students will also create curtain wall systems, door, window, Revit families, and furniture schedules, 3D animations, and understand the protocol for using Revit in a professional office setting. Students will use Building Information Modeling (BIM) in design, analysis and documentation of their buildings.
		SLO #3 3D BIM Modeling	The course requires its students to learn advanced concepts of 3D BIM modeling using Autodesk Revit software and to create details computer models of buildings that can be used to generate building plans, sections, elevations, details, schedules, etc. Students will also learn concepts of stair; curtail wall, and family creation and the responsibilities of a BIM Manager. Once completed with this course, student will be prepared for advanced-level employment with an architecture firm using computer software to manage a BIM.
ECC: ARCH 150A	Architectural Drafting I	SLO #1 Lines and Lettering	Upon completion of a beginning course of study in architecture drawing, a student will develop an architectural drawing technique of Lines and Lettering to create a series of drawings.
		SLO #2 Graphic Instructions	Successful students, completing the Architecture Program, following instructions, supervised classroom practice using CADD System; will use proper graphic techniques to complete instructions.
		SLO #3 Spatial Organization	Successful students tracking for graduation transfer, and or employment in the

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		SLO #3 Spatial Organization	architecture field, will create design drawings and design models to show spatial organization.
		SLO #4 Graphic Technique	Given lecture explanation and graphic examples of architectural drawing line values and line types, students will correctly apply that graphic technique to their project drawings.
ECC: ARCH 150B	Architectural Drafting II	SLO #1 Two-Story House	Upon completion of this advanced course, the student will be able to draw all of the construction documents for a two story house on AutoCAD software.
		SLO #2 Model	Upon completion of this class, a student will be able to build a massing model from the drawings they create.
		SLO #3 Stair Design	Upon completion of this course a student will be able to design, calculate and draw a stairway for a pre-described area of space given to them. They will meet all current Building Codes related to stair design.
ECC: ARCH 158	Structures Analysis-Timber	SLO #1 Beams and Lateral Bracing	Given lecture information, handouts and in-class discussion, students will be able to demonstrate the knowledge of the function of structural components in residential buildings. Students will be able to calculate the size of beams, columns and lateral bracing systems of light framed wood structures.
		SLO#2 Graphic Techniques	Successful students, completing the Architecture Program, following instructions, supervised classroom practice using CADD system; will use proper graphic techniques to complete instructions.
		SLO#3 Spatial Organization	Successful students tracking for graduation transfer, and or employment in the architecture field, will create design drawings and design models to show spatial organization.
ECC: ARCH 170	Architectural Graphics Techniques	SLO #1 Graphic Tools	Given lecture information, handouts and in-class discussion, students will be able to demonstrate the ability to delineate the entourage necessary to illustrate an architectural presentation drawing. The student will be knowledgeable in the use of various graphic tools that architects use in their office to delineate presentation drawings.
		SLO #2 Orthographic Projection	Given lecture material, students will be able to orthographically project elevation and section views of buildings from plan views of said building.
		SLO #3 Illumination	Given lecture material, handouts and classroom discussion, students will be able to illuminate objects in plan, elevation and perspective so as to show materials in illuminated form as well as showing shade and shadow forms.
ECC: ARCH 171	Architectural Three-Dimensional Illustration	SLO #1 Three Dimensional Drawings	Given lecture information, handouts and in-class discussion, students will be able to demonstrate the ability to draw and delineate numerous three dimensional drawings such as Isometrics, Axonometrics, Obliques, One, Two and Three Point Perspectives.
		SLO#2 Graphic Techniques	Successful students, completing the Architecture Program, following instructions, supervised classroom practice using CADD system; will use proper graphic techniques to complete instructions.
		SLO#3 Spatial Organization	Successful students tracking for graduation transfer, and or employment in the architecture field, will create design drawings and design models to show spatial organization.
ECC: ARCH 172	Architectural Color Rendering Techniques	SLO #1 Color Theory and Schemes	Given lecture information, handouts and in-class discussion, students will be able to demonstrate the ability to draw and delineate architectural presentation drawings using

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ECC: ARCH 172	Architectural Color Rendering Techniques	SLO #1 Color Theory and Schemes	various color mediums. The student will demonstrate knowledge of color theory and color schemes, (monochromatic, complimentary, etc.) that architectural illustrators use in various circumstances.
		SLO #2 Use of Medium	Given lecture information, handouts and in-class discussion, students will be able to demonstrate and ability to illustrate architectural renderings with the following color mediums; color pencils, markers, water colors, pastels and various computer software.
		SLO #3 Composition of Color	Given lecture information, handouts and in-class discussion, students will be able to demonstrate and ability to mix colors to create Hue Schemes, (Monochromatic, Analogous, Complimentary, etc.) that will be the right colors for the building they are trying to illustrate.
ECC: ARCH 179	Design or Build Studio	SLO #1 Designing and Collaborating	Upon completing the course work, students will demonstrate the ability to design a simple house and then successfully collaborate within a team to build the structure in the Lab
		SLO #2 Design Theory	Given instruction in Design Theory, based on lecture material given and handouts and required reading in the book, the student will create conceptual diagrams and analytical drawings, like exploded axonometrics, to explain the main concept of idea behind the solution.
		SLO #3 Construction Tool Safety	Given instruction on how to handle tools properly and safely, the student will take a safety test and pass with 100% score before they are allowed to work in the construction yard using power and manual tools.
ECC: ARCH 199	Architecture Design Studio	SLO #1 Model Series	Given instruction in basic design, a student will execute a series of models that demonstrate understanding, and application of those specific design principles.
		SLO #2 Design Theory Research Paper	The student will develop an evolving knowledge base of design theory represented by built and unbuilt architecture and its place in history and will incorporate learned content, historical accuracy, relevancy and the application and analysis of theory into a research paper.
		SLO #3 Drawings & Scaled Models	Using his or her own developed research report information on theory and design development, and other design principles taught in class, the student will create an environmentally responsible and sustainable architecture project in the form of drawings and scaled models.
Distinct Count:			Distinct Count:36