هيئة تقويم التعليم والتدريب
Education & Training Evaluation Commission

T-104
2022

Course Specification

Course Title: Model Making (صناعة النماذج)
Course Code: IND 471
Program: Interior Design Program
Department: Architecture Department
College: College of Engineering and Information Technology
Institution: Onaizah Private Colleges
Version: Third Version
Last Revision Date: 2025-05-20

Previous Course Specification
https://drive.google.com/file/d/19AQwHDTwkeTPnLNDd9g5kYuXhYD9weBM/view

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A. General information about the course:

Course Identification	
1. Credit hours:	3 Credit Hours [1 Theoretical + 2 Practical]
2. Course type a. University ☐ College ☐ Department ☒ Track ☐ Others ☐ b. Required ☒ Elective ☐	
3. Level/year at which this course is offered:	Fourth Level / Second Year
4. Course general Description This course introduces students to the techniques, tools, and materials used in creating scaled physical models for interior design projects. Emphasizing craftsmanship, precision, and spatial awareness, students learn to construct both conceptual and presentation models that effectively communicate design ideas. Through hands-on studio work, students explore a variety of modeling materials such as foam board, cardboard, acrylic, wood, and 3D-printed components. The course also examines the role of model making in the design process—from early ideation and spatial experimentation to client presentations and final project visualization. Students are encouraged to refine their technical skills while integrating creative expression and understanding of scale, proportion, and structural detail in three-dimensional design.	
5. Pre-requirements for this course (if any): None	
6. Co- requirements for this course (if any): None	
7. Course Main Objective(s) The primary objective of this course is to develop students' understanding of physical models as a fundamental design communication and problem-solving tool in interior design. It aims to enhance students' ability to interpret and translate two-dimensional drawings into accurate, expressive three-dimensional models. Through the exploration of diverse model-making materials—such as foam board, wood, acrylic, and recycled elements—and appropriate construction techniques, students will cultivate spatial awareness, technical proficiency, and creative problem-solving. The course further emphasizes precision, craftsmanship, safety, and professional presentation standards, preparing students to effectively communicate interior design concepts in academic and professional environments.	

1. Teaching mode

No.	Mode of Instruction	Contact Hours	Percentage
1	Traditional classroom	75	100%
2	E-learning		
3	Hybrid • Traditional classroom • E-learning		
4	Distance learning		

2. Contact Hours (based on the academic semester)

No.	Activity	Contact Hours
1	Lectures	15
2	Laboratory/Studio	60
3	Field	
4	Tutorial	
5	Others (specify)	
Total		**75**

B. Course Learning Outcomes (CLOs), Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Code of CLOs aligned with program	Teaching Strategies	Assessment Methods
1.0	**Knowledge and understanding**			
IND 471.C LO.K.1	Describe different types of interior design models, the materials used in their construction, and their applications in representing design concepts	K.2(التصميم برنامج الداخلى Interior Design)	Primary: Lecture Additional: Video	Formative: Research Summary (Rubric) Summative: Student Portfolio
2.0	**Skills**			
IND 471.C LO.S.1	Apply appropriate fabrication techniques and finishing processes by selecting suitable materials and methods for modeling sustainable interior design projects, in accordance with applicable codes and environmental standards	S.1(التصميم برنامج الداخلى Interior Design)	Primary: Interactive Lecture \ Demonstration Additional: Presentations (Individual or Group)	Formative: Project Assessment (Rubric) Summative: Student Portfolio
3.0	**Values, Autonomy, and Responsibility**			
IND 471.C LO.V.1	Demonstrate awareness of occupational health and safety	V.2(التصميم برنامج الداخلى Interior Design)	Primary: Group Project or Research	Formative: Observation (Instructor/ Students/

Code	Course Learning Outcomes	Code of CLOs aligned with program	Teaching Strategies	Assessment Methods
	policies, ethical responsibilities, and professional conduct within the model making workshop environment		Additional: Independent Study or Research	Committee) (Rubric) Summative: Oral Exam or Interview (Rubric)
IND 471.C LO.V.2	Demonstrate safe working practices, ethical responsibilities, and principles of professional conduct when using equipment in the model making workshop	V.2(التصميم برنامج الداخلى Interior Design)	Primary: Lab Work/Experiment Additional: Group Project or Research	Formative: Case Study (Individual or Group) Summative: Student Portfolio

C. Course Content

No.	List of Topics	Contact Hours
1	Introduction to Model Making.	5
2	- Importance of scale models in design. - Types and purposes of models (conceptual, presentation, working models). - Safety rules and workshop orientation.	5
3	Tools, Materials, and Techniques: - Essential model making tools and their uses. - Material types: foam board, cardboard, acrylic, balsa wood, 3D printing filaments. - Cutting, scoring, and gluing techniques. - Finishing and surface treatment.	5
4	Scale and Proportion: - Understanding architectural scales (1:50, 1:100, etc.). - Converting drawings to scaled models. - Scale human figures and furniture for spatial understanding.	5
5	Basic Model Construction: - Creating base platforms and topographic layering. - Walls, openings, and partitions. - Roofs and ceilings in model form.	5
6	Detailing and Materials Representation: - Textures and materials simulation. - Representing interior finishes and furnishings. - Landscape and contextual elements (trees, streets, urban context).	5
7	Advanced Techniques: - Laser cutting and CNC applications. - 3D printing for model components. - Lighting integration in models.	5
8	Digital Integration: - Translating CAD/BIM drawings into physical models.	5
9	Midterm.	5
10	Final Project: - Design and build a complete scaled model.	5
11	Interior Elements: - Scaled furniture and interior detailing.	5

	- Material textures and finishes in miniature.	
12	Structure of model.	5
13	Exercise.	5
14	Landscape, vegetation and landscape.	5
15	Final Project: Major Design model and presentation.	5
Total		**75**

D. Students Assessment Activities

No.	Assessment Activities*	Assessment Timing (in Week No.)	Percentage of Total Assessment Score
1	Student Portfolio	16th	45%
2	Project Assessment (Rubric)	14th	10%
3	Research Summary (Rubric)	3rd	10%
4	Observation (Instructor/ Students/ Committee) (Rubric)	9th	5%
5	Case Study (Individual or Group)	10th	10%
6	Oral Exam or Interview (Rubric)	12th	20%
			100%

*Assessment Activities (i.e., Written test, oral test, oral presentation, group project, essay, etc.)

E. Learning Resources and Facilities

1. References and Learning Resources

Essential References	- Model Making: A Basic Guide (Norton Professional Books for Architects & Designers) Paperback – September 17, 1999. - Architectural Model Building: Tools, Techniques, and Materials 1st Edition. - Model-Making: Materials and Methods Paperback – April 15, 2023. - The Handbook of Model-making for Set Designers Paperback – May 13, 2008. - Basic Architectural Model Making for Students, by Day, Keith, 2000. - The Encyclopedia of Model making Techniques, by Payne, Christopher. 1996. - Model making, by Sutherland, Martha. 1999.
Supportive References	None.
Electronic Materials	None.
Other Learning Materials	None.

2. Required Facilities and Equipment

Items	Resources
Facilities (Classrooms, Laboratories, Exhibition Rooms, Simulation Rooms, etc.)	Lecture Hall, Studio Hall, Computer Lap, Models Workshop, Gallery Space.
Technology Equipment (Projector, Smart Board, Software)	Computers, Data Show, Smart Board, Applications Software.
Other Equipment (Depending on the nature of the specialty)	Model Cutting Equipment, Model Making Materials.

F. Assessment of Course Quality

Assessment Areas/Issues	Assessor	Assessment Methods
Effectiveness of teaching	Peer Reviewer	Direct (peer classroom observation according to the approved Rubric)
Effectiveness of students' assessment	Faculty/Instructor	Direct (analysis of CLOs assessment results and grade distributions)
Quality of learning resources	Students	Indirect (course evaluation survey)
The extent to which CLOs have been achieved	Faculty/Instructor	Direct (CLOs assessment and analysis of results according to CLOs targets)
	Students	Indirect (Students through course evaluation survey)
Commitment to learning and teaching strategies and assessment methods included in the program and course specifications	Peer Reviewer	Direct (Peer- classroom observation according to the approved Rubric in OC-QMS)
	Department Chair through Students Focus Groups	Indirect (Chair – survey questions to a focus group of students according to OC QMS)
Action Plan Continuity (Closing the Loop)	QAC (Quality Assurance Committee)	Direct (periodic review of course reports and submitting comments to course instructor/coordinator)
Instructor's Support to Students	Students	Indirect (course evaluation survey)

Assessor (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify)
Assessment Methods (Direct, Indirect)

G. Specification Approval Data

COUNCIL /COMMITTEE	Department of Architecture Council
REFERENCE NO.	11
DATE	2023-05-09

Learning outcomes of this course, as well as CLOs/Teaching Strategies/Assessment Methods matrix have been evaluated and reviewed by multiple OC parties according to OC-QMS. You can access results of these final reviews by scanning the QR code on the right, which contains a link to the reviews on OC-E-QMS.

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