**Department of Architecture**

**School of Architecture and planning**

**University of Management and technology**

**Course Outline (on OBE)**

**UMT’s Vision**

*Our Vision is... Learning*

It defines our existence, inspires all stakeholders associated with us, creates a powerful momentum inside, and responds to the challenges outside. It continues to evolve as present captures new realities and foresight to unfold new possibilities. All in an incessant attempt to help individuals and organizations discover their God-given potentials to achieve Ultimate Success actualizing the highest standards of efficiency, effectiveness, excellence, equity, trusteeship and sustainable development of global human society.

**UMT Mission**

Our Mission is.... Leading

We aspire to become a learning institution and evolve as the LEADING COMMUNITY for the purpose of integrated development of the society by actualizing strategic partnership with stakeholders, harnessing leadership, generating useful knowledge, fostering enduring values, and projecting sustainable technologies and practices.

**Mission of the School**

The mission of the School is to provide the best leadership in the fields of the built environment; particularly in the development, management and innovation in the fields of architecture, urban planning and related specializations and sub-specializations

**Mission of the Department**

At the Department of Architecture our mission is to challenge the participants to develop their abilities in solving complex problems by thinking creatively & informed decision making as a core of their professional schooling. Offering them a diverse interdisciplinary and meticulous program of studies led by an adroit faculty in a comprehensive studios or class environment and preparing them for leadership roles in the field of Architecture, Construction, Landscape, Built Environment and community development.

**Visual Communication – 1 (AR – 116)**

|  |  |
| --- | --- |
| **Program** | B.ARCH |
| **Credit Hours** | 0+3 |
| **Duration** | 15 Weeks + Examination |
| **Prerequisites** | None |
| **Resource Person** | Ar. Zahid Tauqeer Ahmed / Alveena Fatima Hassan Ar.Usman Buksh  |
| **Counseling Timing****(Room# )** | **TUESDAY 10:00am-2:00pm**  |
| **Contact** | zahid.tauqeer@umt.edu.pkalvina.fatima@umt.edu.pk usman.buksh@umt.edu.pk  |

**Chairman/Director signature………………… Dean’s signature……………………………**

**Date………………………………………….**

**Program educational objectives (PEO’s)**

**PEO-1:**

Able to interpret and elaborate architectural knowledge, communication, graphical and computer skills

**PEO- 2:**

Able to develop building and architectural plans through design coordination selecting suitable materials and construction techniques.

**PEO-3:**

Able to propose appropriate solution to complex building issues and adapt recent developments in architecture focusing on research, creativity and innovation.

**PEO-4:**

Able to maximize ethics by keeping spirit of discipline and respecting the professional codes and society.

**Program Learning outcomes PLO’s)**

Graduates of the B-Architecture at UMT are expected to have acquired and developed the following set of knowledge, skills and personality traits (these are also referred to as graduate attributes).

**PLO 1 Architectural Knowledge:** An ability to illustrate, architectural fundamentals through verbal and graphical Techniques

**PLO 2 Design Analysis and development:** An ability to identify literature and analyze architectural problems reaching substantiated conclusions to meet specified needs with appropriate societal and environmental consideration.

**PLO 3 Case study analysis:** An ability to analyze architectural issues in a methodical way including design, field surveys, interpretation of field data, and synthesis of information to derive valid conclusions.

**PLO 4 Digital Tool Usage:** An ability to create, select and apply appropriate techniques, resources, and modern architectural computer simulations, including prediction and modeling, to complex activities, with an understanding of the limitations.

**PLO 5 Environment and Sustainability:** An ability to propose sustainable solutions to environmental problems through architectural design thinking.

**PLO 6 Project Management:** An ability to demonstrate management skills and leadership qualities in individual and teamwork capacity.

**PLO 7 Design Coordination:** An ability to coordinate effectively across different sectors of construction industry. (Material suppliers, Electrical plumbing, HVAC and Civil works).

**PLO 8 Ethics and the society:** An ability to apply ethical principles and professional codes of the profession following the social norms to the best interest of the mankind.

**Course Learning outcomes (CLO’s)**

After studying this course, the students will be able to better understand:

1. Show different types of basic skill and knowledge in drawings with focus on the initiation of freehand drawn lines, basic rendering techniques as well as lettering exercise
2. Illustrate a clear understanding of rules & principles of architectural lettering by using lead pencils and felt tip pen
3. Interpret and compare use of different architectural scales to have a clear understanding of drawings
4. Interpret block models representing composition of simple solid forms to explore the spaces and draw basic orthographic views with the help of instruments as well as through freehand drawing, while using these models, 3-D views as Isometric, Axonometric, Praline, Oblique, Perspective etc.
5. Apply rendering techniques by using freehand drawing of simple objects

**Mapping of CLO’s to Program’s Learning outcomes(PLO’S)**

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Semester** | **Course Code** | **Title** | **Course Learning outcomes** | **PLO 1: Architectural Knowledge** | **PLO 2: Design Analysis: & Development** | **PLO3: Case study analysis Design/Development of Solutions Design/Development of Solutions Design/Development of Solutions** | **PLO 4: Digital Tool Usage** | **PLO 5: Environment and Sustainability** | **PLO 6: Project Management** | **PLO 7: Design Coordination**  | **PLO 8: Ethics** **and the society** |
| **1ST SEMESTER** | **AR-116** | **Visual Communications-I** | Show different types of basic skill and knowledge in drawings with focus on the initiation of freehand drawn lines, basic rendering techniques as well as lettering exercise  | √ |  |  |  |  |  |  |  |
| Illustrate a clear understanding of rules & principles of architectural lettering by using lead pencils and felt tip pen  | √ |  |  |  |  |  |  |  |
| Interpret and compare use of different architectural scales to have a clear understanding of drawings  |  |  |  |  |  |  | √ |  |
| Interpret block models representing composition of simple solid forms to explore the spaces and draw basic orthographic views with the help of instruments as well as through freehand drawing, while using these models, 3-D views as Isometric, Axonometric, Praline, Oblique, Perspective etc.  | √ |  |  |  |  |  |  |  |
|  |  |  | Apply rendering techniques by using freehand drawing of simple objects |  |  |  |  | √ |  |  |  |

**Learning Methodology:**

In accordance with HEC curriculum **outcomes**, students at the end of the course should be able to

* To be able to clearly & correctly draw the essential components of a basic architectural drawing I,e Plan, Elevation, Cross section etc. supported by isometric views using instruments & freehand drawing skills as well as standard drawing conventions/symbols etc.
* Develop skill of freehand drawing
* Understand application of communication skill in architecture
* Appreciate the importance of Model making in architecture.
* Acquire an ability to express their design intentions through communication and graphical presentation skills.

**Grade Evaluation Criteria**

Following is the criteria for the distribution of marks to evaluate final grade in a semester.

**Marks Evaluation Marks in percentage**

Assignments + Sketch book 60%

Mid Viva 15%

Final Viva + Final Project + Portfolio 25%

**Total 100%**

**Reference Books:**

* Time Saver Standards by Calendar, John Hancock.
	+ Architecture, Form, Space & Order by Ching Francis D.K. 2007/720.1 CHI-A.
	+ Draughtsman ship: architectural & building graphics by Fraser Reehie. 1976/720.
	+ **Model Making: Conceive, Create and Convince by Arjan Karssen & Bernard Otte**
	+ ARCHITECTURE: DESIGN NOTEBOOK, 2nd edition by A. Peter Fawcett.
	+ Architecture now – 2, by Awaji Yumebutai.
	+ Architecture now – 3, by Hitoshi Abe.
	+ METRIC HANDBOOK Planning and Design Data, Third Edition by David Littlefield.
	+ The Master Architect Series – Eisenma Architects [selected & current works].
	+ SPACED OUT – by Nicola Garmory & Rachel Tennant.
	+ Spirit *&* Place by Christopher Day.
	+ Perspective drawing Gordon by Robert Philip, 2008, R 742 GOR-P.
	+ Exercises in architecture by Unwin, Simon, 2012, 720.76 UNW-E.
	+ Architects’ sketchbooks, 2011, 720.284 ARC.

**Weekly Schedule of activities during Semester**

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| --- | --- | --- | --- |
| Week | **Topics** | **CLO** | **Activities** |
| **WEEK** | **TOPICS** | **CLO** | **Activities & Reference Book chapters** |
| 1 | General introduction to the course contents and the drawing material/equipment. Principles of freehand drawing/lettering. Exercise in freehand lines/lettering & sketching. | C1 | Lines and Lettering Exercise – Preparation and submission of Sheet - 1**Architecture: Space. Form & Order by Francis D.K Ching**  |
| 2 | Introduction to the use of standard architectural scale its practical application in various exercises by using different sizes of lines, Exercise of Lettering. Sketching of natural objects. Initiation of Freehand exercise / rules/ techniques / styles.**GUEST LECTURE**  | C1 | Preparation and submission of assignment |
| 3 | Based on ordering principles of spatial design as Linear, Curvilinear, Radial, Hierarchy, Cluster, Grid, Central etc. and using selected letters, abstract 2D compositions shall be developed in the studio using these concepts and properly rendered using the technique of “Freehand Drawn Lines” experimented and explored in the class & sketching. POSTER Design freehand | C1, C3 | Preparation and submission of assignment**Model Making: Conceive, Create and Convince by Arjan Karssen & Bernard Otte** |
| 4-5 | Introduction to different rendering techniques by using 2B to 5B pencils or felt tip pen. Development of simple “block type” models [based on their Basic Design knowledge] and using them to draw free hand 3D views as well as their complete set of Orthographic views & sketching.  **STUDY TRIP** | C1 | Preparation and submission of assignment**Architects’ sketchbooks, 2011, 720.284 ARC.** |
| 6-7 | Principles and rules related to drawing of orthographic views derived from simple 3-D composition of solid / hollow | C1 | Preparation and submission of assignment**Architects’ sketchbooks, 2011, 720.284 ARC.** |
| 8 | **MID TERM EXAM** |  | 15% |
| 9-10 | Enhancement of the above while incorporating objects with more details. Drawing of Isometric views from given Ortho. Views using architectural scale as well as drawn in freehand & sketching. | C2 | Preparation and submission of Sheet |
| 11-12 | Introduction To the method of “Measure Drawing”  | **C4** | **Architecture: Space. Form & Order by Francis D.K Ching**Preparation and  |
| 13-14 | Introduction To the method of “Measure Drawing” Introduction to and drawing of other type of 3-D views Perspective views using architectural scale as well as drawn freehand.  | **C4** | **Perspective drawing Gordon by Robert Philip, 2008, R 742 GOR-P.**submission of Sheet |
| 15 | Work improvement and preparation of FINAL PORTFOLIO |  |  |
| 16 | **FINAL EXAM** Viva – Portfolio Review and Jury of Final Project |  | 25% |
| **Rubrics for Assessment IMPORTANT NOTE:**  |
| Although the requirements will be added as per assignments. The general criteria of course is mentioned as below:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Format** | **Excellent A** | **V GOOD B** | **FAIR** | **POOR** | **V POOR/ FAIL** |
| **GENERAL SECTION** | Seven items related to work | Six items related to work | Five items related to work | Two items related to work | Inability to mention any relevant item |
| **GROUP ASSIGNMENTS OF PROJECT** ( 2-3 Students in a group) |
| **Knowledge of the Topic & basic concept** | Excellent knowledge cover 80% concepts | Very good knowledge | Fair knowledge | Little knowledge | No knowledge |
| **PRESENTATION**  | Presented 80% relevant material and very Confident Excellent knowledge | Presented 70% relevant material confident good knowledge | Presented 60% relevant material less confident average knowledge  | Weak Presented lack of relevant knowledge | Poor presentation lack of knowledge irrelevant material |
| **INDIVIDUAL** **ASSIGNMENTS**  |
| **ORIGINALITY** | Not Copied | Copied a part | Copied 15% | Copied 50% or more  | Copied 70% or more or all |
| **Sheet Presentation** (Study of material as shared in class and given instructions according to topic) | Added information more than 80% | Added information than 70% | Added information more than 60% | Added Less information  | Poor or no information  |
| **Implementation of creative thinking in the design** | Applied in project more than 80% | Applied in project more than 70% | Applied in project more than 60% | Less Applied in project | No application of the required material |
| **RENDERING** | CORRECT & IN DETAIL EXCELLENTLY RENDERED | AVERAGE DETAILS & RENDERING SKILLS APPLIED | FAIR DETAILS & RENDERED SKILLS APPLIED | LESS DETAILS & RENDERED SKILLS APPLIED | POOR SKILLS & DETAILS |

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