**Bayero University, Kano**

**Earth and Environmental Sciences**

**Architecture**

**B. Sc. Architecture**

**Proposed 30% addition to the CCMAS Course Structure/Summary**

**100 LEVEL**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Course Code | Course Title | Units | Status | LH | PH |
| BUK-ARC 121 | Free Hand Sketch | 2 | C | 10 | 20 |
| BUK-ARC 123 | Fundamentals of Design I | 2 | C | 20 | 10 |
| BUK-ARC 124 | Fundamentals of Design II | 2 | C | 20 | 10 |
| BUK-ARC 122 | Basic Elements of Planning | 2 | C | 30 | - |
| BUK-ARC 125 | Sociology for Architects | 2 | C | 30 | - |
|  | **Total** | **10** |  |  |  |

**200 LEVEL**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Course Code** | **Course Title** | **Units** | **Status** | **LH** | **PH** |
| BUK-ARC 221 | Design Thinking | 2 | C | 20 | 10 |
| BUK-ARC 223 | Studio Culture | 2 | C | 20 | 10 |
| BUK-ARC 220 | Building Climatology | 2 | C | 30 | - |
| BUK-ARC 224 | Land Surveying | 2 | C | 20 | 10 |
| BUK-ARC 222 | Statistics for Architects | 2 | C | 30 | - |
| BUK-ARC 226 | Studio Culture | 2 | C | 20 | 10 |
|  | **Total** | **12** |  |  |  |

**300 LEVEL**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Course Code** | **Course Title** | **Units** | **Status** | **LH** | **PH** |
| BUK-ARC 321 | Landscape Architecture | 2 | C | 20 | 10 |
| BUK-ARC 323 | Working Drawings | 2 | C | 10 | 20 |
| BUK-ARC 325 | Model Making | 2 | C | - | 30 |
|  | **Total** | **6** |  |  |  |

**400 LEVEL**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Course Code** | **Course Title** | **Units** | **Status** | **LH** | **PH** |
| BUK-ARC 425 | Rural Development and Planning | 2 | C | 30 | - |
| BUK-ARC 423 | Facilities Management | 2 | C | 30 | - |
| BUK-ARC 422 | Psychology for Architects | 2 | C | 30 | - |
| BUK-ARC 421 | Building Acoustics | 2 | C | 30 | - |
| BUK-ARC 422 | Urban Design | 2 | C | 20 | 10 |
| BUK-ARC 424 | Building Law and Arbitration | 2 | C | 30 | - |
| BUK-ARC 426 | Project Management | 2 | C | 30 | - |
|  | **Total** | **14** |  |  |  |
|  | **Grand Total** | **42** |  |  |  |

**Bayero University, Kano (BUK)**

**Earth and Environmental Sciences (FEES)**

**Architecture**

**B. Sc Architecture**

BUK-ARC 123 **Fundamentals of Design**, (2 Units; Core; L = 10; P = 20)

**Senate-approved relevance**

This is a preparatory architecture course, in which the creative and imaginative capacities of the students are developed. This is not a prerequisite course, but is very crucial and fundamental in the teaching of architecture students. It will prepare them to be focussed and appreciate dots, lines, forms, volumes, solids, shades, texture, colour and variety.

**Overview**

This course is intended to develop students’ creative, imaginative and visual sensitivity and architectonics (forms generation, type and visual characters). It teaches them the basic synthesis of form in achieving the desired building configuration and also builds the students’ capacities in modelling of geometric forms. It also introduces students to the basic elements of design, anthropometry and ergonometric in architecture. The students will be exposed to some principles of design such as balance, rhythm, symmetry, variety, unity, visual sensitivity etc.

The objectives of the course, learning outcomes, and contents are provided to address this need.

**Objectives**

The objectives of the course are to:

1. To rekindle the creative, imaginative and visual sensitivities of the students.

2. identify the principles of anthropometry and ergonometric in architecture.

3. identify the science behind forms generation and synthetic.

4. be able to model many geometric forms.

5. describe the differences between the various design principles.

6. identify key elements of visual sensitivity.

7. be able to appreciate symmetry and asymmetry of objects.

**Learning outcomes**

On completion of the course, students should be able to:

1. State clearly the principles of anthropometry and ergonometric.

2. describe the importance of creativity and imagination in architecture.

3. identify and model many geometric forms.

4. describe balance, rhythm and variety in architecture.

5. distinguish between symmetry and unity of buildings.

6. describe the various colours and textures in relation to buildings.

7. be able to utilize visual senses in appreciating forms, volumes and solids.

**Course contents**

This course is intended to develop students’ creative, imaginative and visual sensitivity and architectonics (forms generation, type and visual characters). Synthesis of form in achieving the desired building configuration and modelling of geometric forms. It also introduces students to the basic elements of design, anthropometry and ergonometric in architecture. They will be exposed to some principles of design such as balance, rhythm, variety, unity, visual sensitivity etc.

**Minimum Academic Standards**

Architecture classroom with a CC-MAS requirement facilities.

**Bayero University, Kano (BUK)**

**Earth and Environmental Sciences (FEES)**

**Architecture**

**B. Sc Architecture**

BUK-ARC 122 **Basic Element of Planning**, (2 Units; Core; L = 20; P = 10)

**Senate-Approved Relevance**

Training of high-quality graduates who are highly skilled and knowledgeable in the initiation, planning in Nigeria. This is in tandem with Bayero University kano’s mission to address African developmental challenges in producing highly skilled graduates as seen in Architects from BUK being able to conceptualise, develop and manage projects from inception to realisation and beyond.

**Overview**

This course aims to provide architecture students with an understanding of the basic elements of planning in the Nigerian context. Through lectures, readings, case studies, and site visits, students will explore the various aspects of planning, including land use, zoning, site analysis, and site selection, and gain an understanding of the role of architects in the planning process.

**Objectives**

The objectives of the course are to:

1. Understand the fundamental principles of planning in Nigeria
2. Identify the key issues and challenges facing planners in Nigeria, such as rapid urbanization, land use conflicts, and environmental sustainability
3. Analyze sites and develop planning strategies that respond to the physical, social, and cultural context of the site
4. Use appropriate planning tools, such as maps, diagrams, and computer software, to communicate planning proposals effectively
5. Collaborate effectively with other professionals involved in the planning process, such as urban planners, engineers, and surveyors

**Learning outcomes**

On completion of the course, students should be able to:

1. Analyze and evaluate planning proposals based on their alignment with key principles of sustainability, efficiency, and effectiveness.
2. Develop planning proposals that respond creatively and appropriately to the physical, social, and cultural context of a given site in Nigeria.
3. Communicate planning proposals effectively using a range of planning tools and techniques.
4. Collaborate effectively with other professionals involved in the planning process, such as urban planners, engineers, and surveyors, to develop comprehensive and effective planning proposals
5. Develop planning tools, such as maps, diagrams, and computer software, to communicate planning proposals.

**Course Contents**

This course is designed to provide participants with a comprehensive understanding of the key elements of planning. The course will cover topics such as the planning process, establishing goals and objectives, conducting a SWOT analysis, identifying and prioritizing tasks, evaluating and adjusting the plan, and more. Participants will learn how to create effective plans that align with organizational goals and objectives.

**Minimum Academic Standards**

Architecture classroom with a NUC-MAS requirement facilities.

**Bayero University, Kano (BUK)**

**Earth and Environmental Sciences (FEES)**

**Architecture**

**B. Sc Architecture**

BUK-ARC 125 **Sociology for Architects**, (2 Units; Core; C = 30; P = 0)

**Senate-Approved Relevance**

Training of high-quality graduates who are highly skilled and conversant with societal norms and values and diversity of Nigeria as a political entity. This is in agreement with BUK’s mission to address African developmental challenges in producing Architects that will not only design modern building but Architects that can appreciate Nigeria’s cultural heritage and preserve it using modern techniques in offering Architectural Services.

**Overview**

This course is designed to expose students to understand societal norms and values, relationship between Sociology and Architecture, factors that influence built form, Relevance of culture and anthropological concepts, Culture-change as regards to building form. Also, to build the capacity of students in the area of addressing the issues of cultural diversity in Nigeria. The importance of the course lies in service delivery of good culturally sensitive cognitive skill and creativity in designs achieving sustainable development. The objectives of the course, learning outcomes, and contents are provided to address this need.

**Objectives**

The objectives of the course are to:

1. Define Sociology.
2. Understand societal norms and values.
3. Relationship between sociology and architecture and its relevance.
4. Factors that influence built forms.
5. Relevance of culture and anthropological concepts
6. Culture-change as regards to building form.
7. Describe the various theories of social stratification
8. State the effect of urbanisation resulting the urban rural dichotomy on both rural and urban areas.

**Learning outcomes**

On completion of the course, students should be able to:

1. Define Sociology.

2. Define societal norms and values.  
3. Understand the relationship between sociology and architecture and its relevance.  
4. Identify the different social factors that influence building form.

5. Relevance of culture and anthropological concepts

6. Culture-change as regards to building form.  
7. Describe the various theories of social stratification.  
8. State the effect of urbanisation resulting the urban rural dichotomy on both rural and urban areas.

**Course contents**

Introduction to what is sociology, its relationship with architecture. Societal norms and values. General review of factors that influence built form. Relevance of culture and anthropological concepts in the analysis of built form. Culture change analysis and the context of built form.

Social norms and behaviour; social theory; Types of different societies; Sociology of Planning  
Meaning of Sociology and its basic concepts. Define such concepts as society, social actions  
(interactions, relationships, organizations, control and culture). Types of groups, Associations,  
Institutions and communities. Social Stratification. Various theorists of consensus and conflict-  
Marx Weber, Karl Marx, Davis. Social Problems Emanating from Urbanization process.  
Urbanization process. Urban –Rural Continuum with particular reference to Nigeria. Urban Rural  
Dichotomy. Effects of urbanization, Over- Population, Under- Population on the Urban and Rural  
centres. Behavioural Implications of urbanization and urbanism- violence, mental stress,  
delinquency

**Minimum Academic Standards**

Architecture classroom with a NUC-MAS requirement facilities.

**Bayero University, Kano (BUK)**

**Earth and Environmental Sciences (FEES)**

**Architecture**

**B. Sc Architecture**

BUK-121 **Free Hand Sketch**, (2 Units; core; L = 10 P = 20)

**Senate-approved relevance**

Training of high-quality architecture graduates who are highly skilled and knowledgeable in the design, construction of buildings. This is in line with BUK’s mission of producing graduates that are equip with entrepreneurial skills, so as to enable its graduates to become job  
creators rather than job seeker. And to provide solutions to building problems as a result of rapid urbanization being witnessed in Nigeria. Relevance will be seen in skilled graduate that can use Freehand drawing to visualization of an idea in the form of a sketch.

**Overview**

Freehand sketching enables the visualization of an idea in the form of a drawing. As drawing is a universal language designer use to communicate with other participants of a project. That is why freehand sketch ought to be an inherent course in every architecture school. This course is designed to expose students to various observation skills. And, to encourage students to learn about the designed environment. Drawing is a way of digesting the environment in its natural sense for a greater outcome. Sketching as a whole can increase observatory skills, as it connects one’s hands to minds.

The objectives of the course, learning outcomes, and contents are provided to address this need.

**Objectives**

The objectives of the course are to:

1. Know the materials used to develop analytical drawing skills.
2. Understanding Pencil sketching.
3. Understand the principle of line weight and shading in sketching
4. Undertake any simple life and abstract sketching with pencil, by cross hatching, pointillism, shadowing and tonal effects.
5. Understand how to sketch using pen and ink.
6. Know how to sketch using the different types of perspectives rules.
7. Know how to use range of drawing media as a means of exploring visual communication
8. Know how to undertake any simple life and abstract sketching in colours, shadows.

**Learning outcomes**

On completion of the course, students should be able to:

1. Describe why and how sketching is used as a method of Communication.
2. Know the materials used for artistic production and the application of freehand sketching techniques
3. To show the Practical application of freehand sketching techniques
4. Know how denote line thickness and shading in sketching
5. Undertake Pen and ink Sketching
6. Sketch, using single- and two-point perspective.
7. Know the application of different drawing media.
8. Demonstrate the use of media to record and/ or communicate a given subject.
9. Sketch by rendering in colours, shadows, tonal effect.

**Course contents**

This course intends to create basis for the student to have bare hand skills and creativity undergoing through several simple life sketching exercises. It is mainly a practical oriented course covered with theory as a guidance in freehand sketching, exposing students developing their talents, to enhance their graphics communication in architecture by expressing themselves in a free style through means of using a graphite pencil and a paper as medium. The course undertakes the process of producing/creating monochromatic drawings through drafting several line weight, shades and shadow rendering as well as tonal effects of forms, landscapes and simple life sketching of objects, cars, trees, buildings/building entourage and combination of all.

Student will also be exposed to graphics communication in architecture by expressing themselves in a free style through means of using coloured pencil, water paint, poster colour, crayons and so on by usage of plain paper as a medium. The course undertakes the process of producing/creating polychromatic drawings through drafting several line weight, shades and shadow rendering as well as tonal effects of forms, landscapes and simple life sketching of objects, cars, trees, buildings/building entourage and combination of all.

**Minimum Academic Standards**

Drawing Studio, different Papers sizes, Soft/Hard Pencils, sketch boards, A3-mobile

Drawing Boards, Pens of various sizes, ink of different colours, Coloured pencils, water colour, marker pens, pastels, ink etc.

**Bayero University, Kano (BUK)**

**Earth and Environmental Sciences (FEES)**

**Architecture**

**B. Sc Architecture**

BUK-ARC 220 **Building Climatology**, (2 Units; Core; L = 30; P = 0)

**Senate-approved relevance**

Training of high-quality graduates who are highly skilled and knowledgeable in designing a building that responds to the climate of any location. This is in agreement with BUK’s mission in addressing African developmental challenges in producing architectural, graduates to help mitigate challenges in building physics.

**Overview**

The skills and knowledge from this course will give students a competitive edge within the global market of designing with the climate in mind. This highlights the importance of preparing students in architecture with the knowledge and skills of building orientation, how to deal with sun glare, the science behind the use of shading devices and their types.

This course is designed to expose students to the culture of managing internal functions of a building with a view to achieving a good thermal environment indoors, it also builds their capacity in the area of addressing the issues of poor layout in any given climate. The objectives of the course, learning outcomes, and contents are provided to address this need.

**Objectives**

The objectives of the course are to:

1. Identify the climate of any given project site.
2. identify the cardinal points in relation to sun movement
3. describe the principles and science behind sun movement.
4. identify key seasonal variations of the weather.
5. describe the many types of shading devices and their materials.
6. explain the rationale behind green foliage in providing indoor comfort.
7. explain the concept of thermal comfort.
8. explain the concept of green building and the process of certifying a green building.

**Learning outcomes**

On completion of the course, students should be able to:

1. describe the climate of any project sites in Nigeria and Africa.
2. describe at least four (4) cardinal points and their intermediaries.
3. identify the seasonal variations of sun movement and its effect on the interiors of buildings.
4. Explain the situation of the weather during hot, cold and harmatan seasons.
5. describe the various internal and external shading devices and their impact on indoor comfort.
6. describe the different types of seasonal trees and how they impact on indoor comfort.
7. explain the six (6) elements that determine the thermal comfort of an indoor environment.
8. explain green building and the process of the certifying it in relation to Nigeria. List at least six green building societies in the world and their certification processes.

**Course contents**

This course is intended to expose the students to thermal comfort and acceptable level of comfort within a building. Building orientation and location of functions in relation to solar movement, Sun glare, shading devices and materials. Building sustainability and green buildings.

**Minimum Academic Standards**

Architecture classroom with a CC-MAS requirement facilities.

**Bayero University, Kano (BUK)**

**Earth and Environmental Sciences (FEES)**

**Architecture**

**B. Sc Architecture**

BUK-ARC 224 **Land Surveying**, (2 Units; Core; L = 20; P = 10)

**Senate-Approved Relevance**

Training of high-quality graduates who are highly skilled and knowledgeable in the initiation and conducting land surveys. This is in agreement with BUK’s mission to address African developmental challenges in producing architectural, graduates to help mitigate challenges in land surveying. Relevance is seen in Architects from BUK being able to conceptualise, develop and manage land surveying aspects in building construction competently.

**Overview:**

This course is designed to introduce architecture students to the fundamental principles and practices of land surveying in Nigeria. It aims to equip students with knowledge and skills necessary for the accurate measurement and mapping of land, which are essential for the successful design and construction of buildings. This course is designed to provide architecture students with the knowledge and skills necessary to effectively survey land for design and construction purposes in Nigeria. The course will cover the fundamental principles and methods of land surveying, including mapping, measurements, and analysis. Students will also learn how to use surveying equipment, including GPS and total stations, and how to interpret and analyze survey data

**OBJECTIVES:**

1. Understand land survey and types of survey
2. Understand how to plot simple survey, computations, errors and closure
3. Understand what is plane table surveying
4. Determine angles, azimuth and bearing
5. Have practical field work knowledge on site levelling, demarcation, measuring horizontal, vertical angles and bearings.

**Learning Outcomes:**

1. Explain the basic principles of land surveying and coordinate systems.
2. Use modern surveying equipment and techniques to measure land accurately.
3. Analyze and interpret survey data and maps to make informed design decisions.
4. Have practical field work knowledge on site levelling, demarcation, measuring horizontal, vertical angles using surveying instruments.

**Course Contents:**

Introduction of fundamental concepts of surveying, definitions, errors, computations of field notes; theory of practice of measuring distance, linear measurements; chain surveys, step chaining, levelling, plotting simple sections, measurement of difference in elevation and adjustment of levelling instruments; the different levelling instruments, methods, field practice, measurement of horizontal angles and directions in open and close traverses. Demarcation of site boundaries, use of pocket compass, care and use of the transit, measuring horizontal and vertical angles

in exposing the student in knowing and acquiring knowledge of plane table surveying as well as surveys with transit and tape, stadia surveying principles of field astronomy, and determination of azimuths and bearings.; the use of bearing and co-ordinates; the siting of buildings and simple road works. Preparation of plans, profiles and cross sections; horizontal and vertical curves, use of electronic distance measuring devices and geographical information system (GIS) mapping.

**Minimum Academic Standards**

Architecture classroom with a NUC-MAS requirement facilities.

**Bayero University, Kano (BUK)**

**Earth and Environmental Sciences (FEES)**

**Architecture**

**B. Sc Architecture**

BUK-ARC 221 **Design Thinking**, (2 Units; Core; L = 20; P = 10)

**Senate-Approved Relevance**

Training of high-quality graduates with a view to understand the principles and practice of architectural design thinking with reference mentorship by staff and students at various levels. This is in harmony with BUK’s mission to address African developmental challenges in producing architectural graduates to effectively manage design thinking activities especially design as a whole. The relevance can be synchronized through the architects from BUK with a good understanding of studio practice.

**Overview:**

The aim of this course is to educate you with the actual meaning of design thinking which has always been a funny expression. Fashion designers say they do design thinking, & people who design airplanes, cars, computers, systems, buildings, roads & many more other stuffs like business, banking & industries all say they do design thinking, but they are quite different people. Some are really analytical, social, marketing & while orders are much more environmental, manufacturing as well as artistic. Today the diversity of the application of design thinking has deepen to the extent one might not easily said who you think came up with the term “design thinking”.

In order to understand design thinking, it is important to know the main background theories behind it. Design thinking theories & their authors will be reviewed & explained in detail in this section of the course. Theoretical explanation of design thinking will begin with the fundamental start-up theories produced in the early 1930s, & the many other ones that followed. Our first discussion here will focus mainly on the theory of the technical systems that viewed all problem-solving process including design thinking as a rational process. Followed by science & reflective theories & a discussion on the relationship between the three theoretical perspective & cooperative organizational management. At the end of this session, you will reflect on changes that may occur into their world with respect to the Abductive theory.

* + - The Technical theory vs. Design Theory by Herbert Marcuse, 1930.
    - The Scientific theory vs. Design Theory by Herbert Simon, 1960.
    - The Reflective theory of Design Thinking by Donald Shon, 1983.
    - The Abductive theory of Design Thinking by Kees Dorst, 2011.

Resources are usually a central tool for any organization. This section of the course explores on design thinking resources, their types & application. This part of the course introduces you to actions they can take to use & transform design thinking resources

**Objectives**

At the conclusion of the course, you should be able to understand:

* + - The concept of design thinking.
    - Logic, analogic, analytical & metaphorical reasonings.
    - Benefits & drawbacks of design.
    - Rate of return of the application of design.
    - Role of design in problem-solving.
    - Universal & multidisciplinary character of design.
    - Creative & innovative design practices.
    - Rapport building.
    - Answerability & responsibility of needs.
    - How to overcome barriers that typically arise in design brief.
    - Efficient & effective product development.
    - How to find opportunities for innovative problem-solving.
    - Creative strategy guided decision making.
    - The values of design in Architecture.
    - Effective design preconditions.
    - Creative & innovative decision-making strategies & approaches.
    - End-user satisfaction design tactics.
    - How to unfold multitude of methods spawning, improving, & evaluating different initiatives.

**Learning Outcomes:**

Areas expected to cover understand;

* + - The Scope of Design
    - The Characteristics of Design
    - The Approaches of Design
    - The Strategies of Design
    - The Benefits of Design
    - The Challenges of Design
    - The Acquirement of Design
    - The Prospects of Design

**Minimum Academic Standards**

Architecture classroom with a NUC-MAS requirement facilities.

**Bayero University, Kano (BUK)**

**Earth and Environmental Sciences (FEES)**

**Architecture**

**B. Sc Architecture**

BUK-ARC 222 **Statistics for Architects**, (2 Units; Core; C = 30; P = 0)

**Senate-Approved Relevance**

Training of high-quality graduates who are highly skilled and knowledgeable in building acoustics through planning, design and production of building projects that meet the criteria of International standards of design in Nigeria. This is in agreement with BUK’s mission to address African developmental challenges in producing architectural, graduates to help promote healthy living and working environment in order to boost productivity and mitigate challenges of poor sound quality, noise and lack of user satisfaction. Relevance is seen in architects from BUK being able to collect and analyse data efficiently.

**Overview**

The course aims to introduce students to the basic statistical concepts relevant to the Architecture and provide them with rudiment skills for handling architectural data.

Basic statistical concepts like data, population, sample, variable, parameter and statistics will be discussed. The course will explore sources of architectural data, scales of data and data organization methods. Numerical descriptive methods like central tendency, dispersions and shapes measurement will be covered by the course. Elements of probability, hypothesis and hypothesis testing are part of the course content.

**The objectives of the course are to:**

1. Define data to the students and acquaint the students with the various types and sources and methods of data collection.
2. Explain to the students what is referred to as population of a study.
3. Define sample and teach the students how to determine sample size for any research study.
4. Describe research variable and help the students understand what independent and dependent variables are.
5. Define statistics to the students and explain their importance both in everyday life and in research work.
6. Identify the various scales of measurement.
7. State the various methods of data organization and physically apply them.
8. Define and teach the students the various methods of central tendency, how they can be computed and their various applications.
9. To know the various measures of dispersion, how they can be computed and their applications.
10. To acquaint the students with the measurement of areas and volumes of plane and solid shapes respectively.
11. Define probability and explain to the students the various ways of computing probability and how they are applied in research work.
12. Define hypothesis to the students and explain its relevance in research work and also acquaint them with the various method of hypothesis testing and how to compute them both manually and using software and how to apply them.

**Learning outcomes:**

On completion of the course, students should be able to:

1. Explain the two major sources of data and give examples of each.
2. Determine population of study.
3. Determine sample size for any research work.
4. Determine the various independent research variables that will be used in their study.
5. Understand the relevance of statistics in both everyday life and in research work.
6. Students should be able to list the various scales of measurement and explain their roles in data categorization.
7. State at least five methods of data presentation and graphically represent them.
8. State the three measures of central tendency and how to calculate them for both grouped and ungrouped data.
9. List at least three measures of dispersion and how to calculate them for both grouped and ungrouped data.
10. Methods of calculating areas and volumes for regular and irregular plane and solid shapes.
11. Be able to compute any form of probability task.
12. List at least five methods of testing hypothesis and should be able to compute them manually and electronically.

**Minimum Academic Standards**

Architecture classroom with a NUC-MAS requirement facilities.

**Bayero University, Kano (BUK)**

**Earth and Environmental Sciences (FEES)**

**Architecture**

**B. Sc Architecture**

BUK-ARC 223 **Architectural Design Studio Culture**, (2 Units; Core; L = 30; P = 0)

**Senate-approved relevance**

Training of high-quality graduates with a view to understand the principles and practice of architectural design studio culture with reference mentorship by staff and students at various levels. This is in harmony with BUK’s mission to address African developmental challenges in producing architectural graduates to effectively manage studio activities especially design as a whole. The relevance can be synchronized through the architects from BUK with a good understanding of studio practice.

**Overview**

This course aims to provide architecture students with an understanding of the principles and practices of architectural design studio culture, especially mentorship. Presentation skills and techniques, studio management and basic specification writing. Through lectures, readings, and case studies, students will explore the various aspects of design studio culture, including design methodology, design critiques, and design collaboration, and gain an understanding of the role of architects in studio culture.

**Objectives**

The objectives of the course are to:

1. understand the fundamental principles of architectural design studio culture
2. describe mentorship by staff to students’ levels
3. explain presentation skills and techniques, studio management and basic specification writing
4. identify the key components of design studio culture, such as design methodology, design critiques, and design collaboration
5. develop effective design strategies that respond to the studio culture context
6. use appropriate design tools, such as sketches, diagrams, and computer software, to communicate design proposals effectively
7. collaborate effectively with other architecture students in a studio environment especially the seniors.

**Learning outcomes**

On completion of the course, students should be able to:

1. understand what are the fundamental principles of architectural design studio culture
2. describe the mentorship by staff to students at all levels
3. explain the presentation skills and techniques, studio management and basic specification writing
4. identify what are the key components of design studio culture, such as design methodology, design critiques, and design collaboration
5. develop the effective design strategies that respond to the studio culture context
6. use the appropriate design tools, such as sketches, diagrams, and computer software, to communicate design proposals effectively
7. collaborate effectively with other architecture students in a studio environment especially the seniors.

**Course contents** Students are introduced to the principles and practice of architectural design studio culture, mentorship by staff to students’ levels, presentation skills and techniques, studio management. Basic specification writing at various levels.

**Minimum Academic Standards**

Architecture classroom with a NUC-MAS requirement facilities.

**Bayero University, Kano (BUK)**

**Earth and Environmental Sciences (FEES)**

**Architecture**

**B. Sc Architecture**

BUK-ARC 321 **Landscape Architecture**, (2 Units; Core; L = 30; P = 0)

**Senate-approved relevance**

Training of high-quality graduates who are highly skilled and knowledgeable in designing a building complete within its vicinity. This gives them the leverage to utilize local settings, in the form of foliage, vegetative matter, water bodies etc. to enhance its aesthetics and improve the indoor comfort. This is in agreement with BUK’s mission in addressing African developmental challenges in producing architectural graduates that help in mitigating the challenges of producing barren buildings.

**Overview**

This course is designed to expose students to the culture of managing the concept of site planning and landscaping. It also builds the students’ capacities in addressing the issues of site planning, planning laws, bye-laws and regulations, site zoning, survey plans, etc. It teaches them the basic landscaping elements; hard (pavements, sculptures, water bodies, etc.) and soft landscape (plants, horticulture, etc.). The skills and knowledge learned from this course will give them a competitive edge in designing a site plan with appropriate scaling, the ability to locate new and existing structures, at the same time be able to aptly place natural features, parking lots, drainages and access roads in the most appropriate locations.

The objectives of the course, learning outcomes, and contents are provided to address this need.

**Objectives**

The objectives of the course are to:

1. Identify the principles of site planning.

2. identify the science behind landscaping.

3. be able to distinguish between planning laws, bye-laws and regulations.

4. describe the differences between soft and hard landscaping.

5. identify key elements of soft and hard landscaping.

6. be able to place trees, grass, and other horticultural elements on site appropriately.

7. identify the many types of scales and be able to choose the most appropriate one to use.

8. be able to locate existing and natural features in any given site.

9. be in a position to appropriately site access road, parking lots and drainages.

**Learning outcomes**

On completion of the course, students should be able to:

1. State clearly the principles of site planning.

2. describe the importance of landscaping to building comfort and aesthetics.

3. identify the National and local planning laws and regulations.

4. describe the situations where to apply soft and hard landscaping elements.

5. describe the various soft landscaping elements and their impact on indoor comfort.

6. describe the various hard landscaping elements and their impact on building aesthetics.

7. describe the different types of seasonal trees and how they impact on indoor comfort.

8. explain any six (6) effects in which scale define a building.

9. describe the process of siting an access road to a building.

**Course contents**

This course introduces the students to the concept of site planning and landscaping. Site planning, planning laws, bye-laws and regulations, site zoning, survey plans, etc. The basic landscaping elements; hard (pavements, sculptures, water bodies, etc.) and soft landscape (plants, horticulture, etc.) Designing a site plan; scale; locating new and existing structures; natural features; locating parking, drainages, access, etc.).

**Minimum Academic Standards**

Architecture classroom with a CC-MAS requirement facilities.

**Bayero University, Kano (BUK)**

**Earth and Environmental Sciences (FEES)**

**Architecture**

**B. Sc Architecture**

BUK-ARC 423 **Facilities Management**, (2 Units; Elective; L = 30; P = 0)

**Senate-approved relevance**

This is a preparatory architecture course, in which the creative and imaginative capacities of the students are developed. This is not a prerequisite course, but is very crucial and fundamental in the teaching of architecture students. It will prepare them to be focussed and appreciate dots, lines, forms, volumes, solids, shades, texture, colour and variety.

**Course Overview:**

This course aims to provide architecture students with an understanding of the principles and practices of facilities management in the Nigerian context. Through lectures, readings, case studies, and site visits, students will explore the various aspects of facilities management, including maintenance, operations, security, and sustainability, and gain an understanding of the role of architects in facilities management.

**Course Objectives:**

By the end of the course, students should be able to:

1. Understand the fundamental principles of facilities management in Nigeria

2. Identify the key issues and challenges facing facilities managers in Nigeria, such as maintenance, operations, security, and sustainability

3. Analyze building sites and develop design strategies that facilitate effective facilities management

4. Use appropriate design tools, such as sketches, diagrams, and computer software, to communicate facilities management proposals effectively

5. Collaborate effectively with other professionals involved in facilities management, such as building owners, operators, and maintenance staff

**Learning Outcomes:**

Upon completion of the course, students will be able to:

1. Analyze and evaluate facilities management proposals based on their alignment with key principles of sustainability, efficiency, and effectiveness

2. Develop facilities management proposals that respond creatively and appropriately to the physical, social, and cultural context of a given building site in Nigeria

3. Communicate facilities management proposals effectively using a range of design tools and techniques.

4. Collaborate effectively with other professionals involved in facilities management, such as building owners, operators, and maintenance staff, to develop comprehensive and effective design proposals

**Course Content;**

Using case studies, and site visits, students will explore the various aspects of facilities management, including maintenance, operations, security, and sustainability, and gain an understanding of the role of architects in facilities management. Knowledge of Building Management Systems (MBS) is an added advantage and exploring some building technology soft wares will help in developing facilities management proposals.

**Minimum Academic Standards**

Architecture classroom with a CC-MAS requirement facilities.

**Bayero University, Kano (BUK)**

**Earth and Environmental Sciences (FEES)**

**Architecture**

**B. Sc Architecture**

BUK-ARC 422 **Urban Design**, (2 Units; Core; L = 20; P = 10)

**Senate-Approved Relevance**

Training of high-quality graduates who are highly skilled and knowledgeable in the initiation, planning, and management of urban design projects in Nigeria. This is in agreement with BUK’s mission to address African developmental challenges in producing architectural, graduates to help mitigate challenges in urban design project delivery. Relevance is seen in Architects from BUK being able to conceptualise, develop and manage urban design projects from inception to realisation and beyond.

**Overview:**

This course aims to provide architecture students with an understanding of the principles and practices of urban design in the Nigerian context. Through lectures, readings, case studies, and site visits, students will explore the various aspects of urban design, including the historical context, urban morphology, transportation, public spaces, and sustainability, and gain an understanding of the role of architects in urban design

Course Objectives: By the end of the course, students should be able to:

1. Understand the fundamental principles of urban design in Nigeria.
2. Identify the key issues and challenges facing urban designers in Nigeria, such as rapid urbanization, informal settlements, and environmental sustainability.
3. Analyze urban sites and develop design strategies that respond to the physical, social, and cultural context of the site.
4. Use appropriate design tools, such as sketches, diagrams, and computer software, to communicate urban design proposals effectively.
5. Collaborate effectively with other professionals involved in urban design, such as urban planners, engineers, and landscape architects.

**Learning Outcomes:**

Upon completion of the course, students will be able to:

1. Analyze and evaluate urban design proposals based on their alignment with key principles of sustainability, efficiency, and effectiveness.
2. Develop urban design proposals that respond creatively and appropriately to the physical, social, and cultural context of a given site in Nigeria.
3. Communicate urban design proposals effectively using a range of design tools and techniques.
4. Collaborate effectively with other professionals involved in urban design, such as urban planners, engineers, and landscape architects, to develop comprehensive and effective design proposal.

**Course Content**

This course provides an overview of the principles, theories, and methods of urban design, with a focus on the relationship between urban form and architecture. Through a combination of lectures, readings, discussions, and design exercises, students will explore the process and practice of urban design, as well as the key issues of sustainability, resilience, and social equity. Students will develop the skills necessary to analyze urban patterns, develop design guidelines and standards, and engage with communities in the urban design process.

**Minimum Academic Standards**

Architecture classroom with a NUC-MAS requirement facilities.

**Bayero University, Kano (BUK)**

**Earth and Environmental Sciences (FEES)**

**Architecture**

**B. Sc Architecture**

BUK-ARC 426 **Project Management**, (2 Units; Elective; L = 30; P = 0)

**Senate-approved relevance**

Training of high-quality graduates who are highly skilled and knowledgeable in the initiation, planning, and management of projects especially building projects in Nigeria. This is in agreement with BUK’s mission to address African developmental challenges in producing architectural, graduates to help mitigate challenges in project delivery. Relevance is seen in architects from BUK being able to conceptualise, develop and manage projects from inception to realisation and beyond.

**Overview**

Project management principles and techniques are vital skills required to mitigate challenges of project delivery in Nigeria where failed projects and budget/cost overruns have become too common. The skills and knowledge of running successful projects will give students a competitive edge within the Nigerian marketplace This highlights the importance of preparing students in architecture with the knowledge and skills of project conception, planning, management, monitoring and evaluation, contingency planning all in an effort to ensure project success in the challenging Nigerian environment.

This course is designed to expose students to the culture of management, due process and due diligence and inculcating values of achieving set goals. Also, to build the capacity of students in the area of addressing the issues of poor project delivery in Nigeria. The importance of the course lies in service delivery of good qualitative projects on time and within budget in achieving sustainable development. The objectives of the course, learning outcomes, and contents are provided to address this need.

**Objectives**

The objectives of the course are to:

1. describe what a project is, and project life cycle.
2. describe the principles of project management and explain the role/job of a project manager.
3. identify key areas of management in a project cycle
4. describe stakeholder management and identify project stakeholders and their needs.
5. describe communication management and identify effective communication strategies
6. explain scope management and the mission, goals, objectives and scope of a project.
7. explain schedule management and identify project activity sequence and relationships.
8. explain time, cost and resources management and identify time, cost and resource management strategies of a new project
9. describe risk management and identify strategies for risk management and project opportunities to exploit.
10. describe quality management and identify quality assurance and quality control strategies

**Learning outcomes**

On completion of the course, students should be able to:

1. describe what a project is, and project life cycle (5 phases) and list activities critical to each.
2. describe at least five (5) principles of project management and identify/explain at least seven (7) role/job of a project manager the role.
3. identify at least six (6) key areas of management.
4. describe stakeholder management, identify project stakeholders and their needs and prioritize stakeholders' impacts to the project by the following criteria: proximity to the project, power, and urgency (time sensitivity).
5. describe communication management, create and develop an effective communication plan for a project employing good communication strategy.
6. explain scope management, develop a mission, vision, goals and objectives of the project to create a project work breakdown structure (WBS) that accurately reflects a given project's scope and deliverables.
7. explain schedule management, employ a work breakdown structure (WBS) to develop a network diagram that accurately reflects duration, sequencing of project activities and deliverables.
8. explain time, cost and resource management, identify time, cost and resource management strategies, analyse new project constraints (time, resources, performance) employ a project's critical path and compute a project's earliest possible finish date.
9. describe risk management, identify four (4) methods for responding to project risks (avoid, transfer, mitigate, and accept) and the three (3) methods for responding to project opportunities (exploit, share, and enhance) and identify their differences.
10. describe quality management and identify quality assurance and quality control strategies.

**Course contents**

The principles of project management and techniques, role of project manager, and project life cycle; initiating the project, planning the project, executing the project, monitoring and controlling the project, closing the project. Key areas of management: Integration management; levels of integration management. Scope management; scope, goals and objectives of the project, work/task breakdown. Schedule management; network diagrams and critical path identification, Gantt charts, contingency planning. Time, Cost and Resource management; list of activities of a project and estimation of duration, links between activities, resource allocation and cost estimations, resource balancing and its effects, planned cost curve cash flow plan, difference between cash and cost, Time value of money, Monitoring and Control, Earned Value Analysis, Taking corrective actions, use of software tools for Project analysis and reporting (Microsoft Project). Quality management; quality assurance and quality control strategies. Communication management; importance of communication management, project charter, project reporting. Risk management; identification of project risks, evaluation of probabilities and impact of risks strategies to manage risks. Procurement management; procurement types, role in efficient project delivery, Stakeholder management; project stakeholders and their needs.

**Minimum Academic Standards**

Architecture classroom with a NUC-MAS requirement facilities.

**Bayero University, Kano (BUK)**

**Earth and Environmental Sciences (FEES)**

**Architecture**

**B. Sc Architecture**

BUK-ARC 421 **Building Acoustics**, (2 Units; Elective; L = 30; P = 0)

**Senate-approved relevance**

Training of high-quality graduates who are highly skilled and knowledgeable in building acoustics through planning, design and production of building projects that meet the criteria of International standards of design in Nigeria. This is in agreement with BUK’s mission to address African developmental challenges in producing architectural, graduates to help promote healthy living and working environment in order to boost productivity and mitigate challenges of poor sound quality, noise and lack of user satisfaction. Relevance is seen in architects from BUK being able to conceptualise and develop buildings from inception to realisation that will satisfy the diverse users and functions in terms sound.

**Overview**

Building acoustics or Architectural acoustics principles and techniques are vital skills and knowledge required to design and construct buildings with a healthy environment. This will aid in mitigating challenges of poor conducive working and living environment especially in specialised buildings such as in academia where problems of indoor environmental quality have become too common in Nigeria. The skills and knowledge of producing buildings with sound acoustics will give students a competitive edge within the Nigerian marketplace. This highlights the importance of preparing students in architecture with the knowledge and skills of acoustics in an effort to ensure project success in the challenging Nigerian environment.

This course is designed to expose students to the design of complex acoustic spaces such theatres, sporting arenas, classrooms etc. Also, to build the capacity of students in the area of addressing challenges of such in Nigerian buildings. The importance of the course lies in delivering enhanced architectural services. The objectives of the course, learning outcomes, and contents are provided to address this need.

**Objectives**

The objectives of the course are to:

1. describe what is acoustics and its branches.
2. describe architectural/building acoustics
3. identify the various categories of sound and their assessment
4. describe principles of generation, transmission in buildings and influence on design/structure
5. describe noise, problems and issues, sources; airborne, structure, characteristics in buildings
6. explain basic principles of acoustic control, sound and noise control, permissible noise and sound levels in buildings, reverberation time, echo etc.
7. explain sound insulation and acoustic materials
8. explain room acoustics
9. describe design consideration and requirements for different spaces and building types.

**Learning outcomes**

On completion of the course, students should be able to:

1. describe what acoustics is, and major branches of acoustics (architectural, environmental, musical, engineering and ultra sonics).
2. describe architectural/building acoustics and sources of sound in buildings.
3. identify the various categories of sound, sound level/power and the subjective and objective assessment criteria.
4. describe principles of generation, five phenomena associated with transmission, and how they may affect design.
5. describe problem of noise in building environment.
6. explain principles of acoustic control; sound and noise control: reducing transmission from external source, reducing transmission through layout and design, reducing transmission through structure, permissible levels, echoes and calculating reverberation time.
7. explain various sound insulation techniques and choice of best acoustical materials for spaces.
8. explain room acoustics and designing spaces.
9. describe design consideration and requirements different spaces and building types such as theatres, auditoriums, law courts etc.

**Course contents**

Sound and its behaviour in buildings. Noise control in buildings, transmission of air borne and structure borne sounds, noise reduction, sound insulation, community noise and barriers. Room acoustics, design of auditorium, theatres, law courts etc. reverberation control, sound absorbing materials and systems, special problems in Architectural acoustics, study of functional acoustics design based on design project.

**Minimum Academic Standards**

Architecture classroom with a NUC-MAS requirement facilities.

**Bayero University, Kano (BUK)**

**Earth and Environmental Sciences (FEES)**

**Architecture**

**B. Sc Architecture**

BUK-ARC 424 **Building Law and Arbitration**, (2 Units; Core; L = 30; P = 0)

**Senate-approved relevance**

Training of high-quality graduates with knowledge of Nigerian legal system and its implications in building industry especially contract administration process. This is in tandem with BUK’s mission to address African developmental challenges in producing architectural, graduates to in developmental process of building delivery. The relevance can be adduced through the architects from BUK with ability to comply with existing laws and guiding principles in Nigeria so also general laws with regards to building project.

**Overview**

Building Law and Arbitration is vital course that provides the control measures in contract administration and mitigate the likely consequences of failure in management of building project. The knowledge so acquired would from Nigerian Legal System, types of courts, and types of Contract would help to mitigate challenges of project delivery in Nigeria where contractual documentations are seldom allowed to be implemented to the latter.

This course is designed to expose students to the nature of Nigerian Legal system that will culminate into aspects of arbitration in case of failure to deliver according to the agreement signed. It will further enhance the quality of building production process while building the students capacity to address the issues of quality building project delivery set goals. which culture of management, due process and due diligence and inculcating values of achieving set goals. Also, to build the capacity of students in the area of addressing the issues of poor project delivery in Nigeria. The objectives of the course, learning outcomes, and contents are provided to address this need.

**Objectives**

The objectives of the course are to:

1. describe what a is law and its implication in building industry.
2. describe the Nigerian Legal System; principles of criminal and civil law.
3. explain what is law of contract and law of Tort.
4. describe agent and principles of agency
5. describe forms of contract with and without quantities.
6. explain arbitration procedure and conciliation; Act Cap 19 of 1990
7. explain duties, liabilities and relationship between employer, architect, contractor, clerk of works in both public and private sector
8. explain National Building Code

**Learning outcomes**

On completion of the course, students should be able to:

1. describe what is law in relation to building industry,
2. describe Nigerian legal system; the constitution, and other laws
3. identify and describe principles of both criminal and civil law
4. describe law of tort and its principles and properly guide it to building project
5. describe agent and law of agency in relation to building contract.
6. explain forms of contract with and without quantities as a basis of making a proper choice to use for timely and quality delivery
7. explain arbitration and conciliation; Act Cap 19 of 1990 as a single law binding on arbitration and conciliation.
8. explain duties, liabilities, and relationship between employer, architect, contractor, clerks of work in both public and private practice.
9. explain the national building code, especially the section dealing with architecture.

**Course contents**

The course is intended to equip the students with knowledge of legal implications in building industry. Introduction to Nigerian legal system, principles of criminal and civil law, law of tort, law of contract, principles of agency and agent. Forms of contract, contract with and without quantities, arbitration procedure, the arbitration and conciliation Act CAP 19 of 1990, duties; liabilities and relationship between employer, architect, contractor, clerk of work in both public and private practice. Introduction to National Building code.

**Minimum Academic Standards**

Architecture classroom with a NUC-MAS requirement facilities.

**Bayero University, Kano (BUK)**

**Earth and Environmental Sciences (FEES)**

**Architecture**

**B. Sc Architecture**

BUK-ARC 425 **Rural Development and Planning**, (2 Units; Elective; L = 30; P = 0)

**Senate-approved relevance**

Training of high-quality graduates with knowledge of planning with emphasis to rural development, especially in terms of integrated local planning for development. This is in harmony with BUK’s mission to address African developmental challenges in producing architectural, graduates to in developmental process of building delivery. The relevance can be adduced through the architects from BUK with a wider view to strengthen the rural areas in terms of growth and development in Nigeria

**Overview**

This course aims to provide architecture students with an understanding of the principles and practices of rural development and planning in the Nigerian context. The evolution of development based on basic economic parameters to a more integrated local planning approach. Through lectures, readings, case studies, and field trips, students will explore the unique challenges facing rural communities in Nigeria and gain an understanding of the role of architects in rural development and planning.

**Objectives**

The objectives of the course are to:

1. describe the fundamental principles of rural development and planning in Nigeria
2. identify the key issues and challenges facing rural communities in Nigeria, such as access to basic infrastructure, economic development, and environmental sustainability
3. describe development planning process and its organizational and spatial dimensions; policies, programs, land resource assessment
4. describe rural development in market, mixed and state driven societies.
5. analyze rural sites and develop design strategies that respond to the site's physical, social, and cultural context
6. explain the use appropriate design tools, such as sketches, diagrams, and computer software, to communicate rural development and planning proposals effectively
7. describe effective collaboration with other professionals involved in rural development and planning, such as planners, engineers, and community stakeholders

**Learning outcomes**

On completion of the course, students should be able to:

1. describe what are the fundamental principles of rural development and planning in Nigeria
2. identify the key issues and challenges facing rural communities in Nigeria, such as access to basic infrastructure, economic development, and environmental sustainability
3. describe the development planning process and its organizational and spatial dimensions; policies, programs, land resource assessment
4. describe the rural development in market, mixed and state driven societies.
5. Analyse the rural sites and develop design strategies that respond to the site's physical, social, and cultural context
6. explain the use appropriate design tools, such as sketches, diagrams, and computer software, to communicate rural development and planning proposals effectively
7. describe the effective collaboration with other professionals involved in rural development and planning, such as planners, engineers, and community stakeholders

**Course contents**

This course is to equip students with knowledge of planning with emphasis to rural development. Evolution of development form micro/macroeconomics beginning to more integrated local planning. Examine development planning process and its organizational and spatial dimensions; policies, programs, land resource assessment. Rural development in market, mixed and state driven societies.

**Minimum Academic Standards**

Architecture classroom with a NUC-MAS requirement facilities.

**Bayero University, Kano (BUK)**

**Earth and Environmental Sciences (FEES)**

**Architecture**

**B. Sc Architecture**

BUK-ARC 422 **Psychology for Architects**, (2 Units; Elective; L = 30; P = 0)

**Senate-approved relevance**

Training of high-quality graduates who are highly skilled and knowledgeable in use of psychology in planning and design to enhance the physical experience of building projects in Nigeria. This is in agreement with BUK’s mission to address African developmental challenges in producing architectural, graduates to help mitigate challenges of loss of interrelationship between humans and their surroundings. Relevance is seen in architects from BUK being able to conceptualise and develop buildings that contribute to human experience.

**Overview**

As Architecture is about built environment and psychology is an individual experience of the physical environment. Architectural psychology is a study based on the interaction of people with spaces and interrelationship between humans and their surroundings. Psychology principles and techniques are vital skills required to mitigate challenges of designing and building projects in Nigeria where end users experience are often ignored. The skills and knowledge of designing new buildings that provide new experiences and technology is upon us and thus will give students a competitive edge within the Nigerian marketplace. This highlights the importance of preparing students in architecture with the knowledge of planning, designing and constructing buildings that enhance human interrelation with physical environment in the challenging Nigerian environment.

This course is designed to expose students to the understanding of how to use architecture to create spaces that evoke emotions, ambience and various responses in users in different types of buildings and different/multiple users thereby enhancing their experience. Also to build students capacity in design through better understanding clients and users addressing issues of poor quality projects in Nigeria. The importance of the course lies in delivery of good qualitative projects in achieving sustainable development. The objectives of the course, learning outcomes, and contents are provided to address this need.

**Objectives**

The objectives of the course are to:

1. describe what is psychology with relevant theories and examples.
2. describe the human psyche, frame of the human mind and human thought process.
3. describe human personality, behaviour and distinctive qualities of a person.
4. explain human creativity.
5. explain role of human mind in productivity.
6. explain psychology of colours and use in built environment.
7. explain psychological effect and human perception of spaces.
8. explain human mind adaptation to change of environment.
9. identify gained knowledge and translating to design.
10. explain profiling and developing of client and users profiles to achieve optimum design.

**Learning outcomes**

On completion of the course, students should be able to:

1. describe what is psychology with relevant theories and examples.
2. describe the human psyche, frame of the human mind and theory of multiple intelligence, human thought process, perception, observation etc.
3. describe human personality, behaviour and distinctive qualities of a person; mental traits, emotional, temperamental, ego etc. and some environmental influences on humans.
4. explain human creativity and influence of human emotions and behaviour in creative thinking and process.
5. explain role of human mind in productivity; habits and norms, conducive environment, incentives and motivation
6. explain psychology of colours with examples and exercises on human mind/perception and emotion/ambience
7. explain psychological effect and human perception of; building types and identity ie institutional, religious, open and enclosed spaces, form and shape, lighting and space, scale, size and proportion, texture, mass and volume, etc.
8. explain human mind adaptation to change of environment; acclimatization, cultural practices
9. Identify gained knowledge and translating to design environment and buildings to meet specific psychological atmosphere.
10. explain profiling of client; identifying needs and wants, profiling users’ identifying needs and wants to achieve optimum design.

**Course contents**

The study of human minds, behaviour and response to architectural design/creativity and built environment. The human psyche; conscious, subconscious, unconscious, human character and behaviour. Analyse human/self-expression and thought in creation/design. The response of the human mind to colours, building forms, scale and proportion, lighting, adaptation to environment and perception of space, symbolism etc. perception of building types and identity, relationship between human emotions and certain building types. Developing Client and user profiles.

**Minimum Academic Standards**

Architecture classroom with a NUC-MAS requirement facilities.