**Course Specifications of:**

**Technological Changes and Urban Spaces Design**

Program(s) on which the course is given:Ph. D. - Urban Design

Compulsory or Elective element of program: Compulsory

Department offering the program: Architecture

Academic year / Level: Doctor of Philosophy year 2013 / 2014

Date of specification approval: 23-1-2012

1. **Basic Information**

Title: Technological Changes and Urban Spaces Design Code: Arc 704

Credit Hours: 3 Lecture: 3 Practical:

Semester work:120 Final Exam:90 Practical: 90 Total: 300

1. **Professional Information**

**1- Overall aims of course:**

By the end of the course the student will be able to

* Utilize analytical techniques and updated schools for methodologies of Scientific research, covering how to carryout research, including preparing research process.
* Analyze and examine constraints as environment, socio-culture, economic criteria …etc that affects the decision-making concerning Technological Changes and Urban Spaces Designand has the ability to create alternatives.
* Determine and create new elements, principles, methods and applications in the field of Urban Spaces Design Technological Changes.

**2- Intended learning outcomes of course (ILOs):**

1. **Knowledge and understanding**

2.1.4 State in detail applicable techniques and methodologies that may be used in research.

2.1.7 Work with theoretical/research knowledge at the forefront of Architectural and urban design at peer reviewed standards/publication quality.

2.1.8 Recognize comprehensively the techniques/ methodologies applicable to the field of research.

1. **Intellectual skills**

2.2.5 Explain a detailed understanding of applicable urban techniques and advanced academic enquiry.

2.2.7 Recognize the development original problem solving techniques that leads to achieve results; and ability to discuss and debate these results based on proof evidence.

1. **Professional and practical skills**

2.3.5 Use appropriate technological techniques; and establish measure and review success criteria for urban issues.

1. **General and transferable skills**

2.4.1 Analyze and process information from a wide range of sources for our urban communities, analyze it critically and apply this information to research individually or in group using technological techniques (IT).

**3- Contents**

|  |  |  |  |
| --- | --- | --- | --- |
| Topic No. | Topic | No. of weeks | Total no. of hours |
| 1 | Introduction | 1 | 3 |
| 2 | In depth study of evolution of urban spaces and types | 1 | 3 |
| 3 | In depth study of evolution of urban spaces and types | 1 | 3 |
| 4 | Interrelation ships between public spaces and human needs and activity functions | 1 | 3 |
| 5 | Tools and means of configuration of urban spaces | 1 | 3 |
| 6 | Networks of urban spaces | 1 | 3 |
| 7 | Security and safety | 1 | 3 |
| 8 | Human behavior and urban spaces | 1 | 3 |
| 9 | Innovations and new technological approaches | 1 | 3 |
| 10 | Applied research and projects / maintenance | 1 | 3 |
| 11 | Urban development | 1 | 3 |
| 12 | Case studies | 1 | 3 |
| 13 | Project follow up  | 1 | 3 |
| 14 | Project follow up  | 1 | 3 |
| 15 | Submission and discussions | 1 | 3 |
| 16 | Final exam | 1 | 3 |
| TOTAL | 16 | 45 |

**4- Course Matrix**

|  |  |  |
| --- | --- | --- |
| ILO’s code number | Teaching/learning methods and strategies | Assessment methods and strategies |
| 2.1.42.1.72.1.8 | * Lectures.
* Seminars.
* Direct reading.
 | * Individual coursework assignments
* Essays about selected topics of interest
* Oral participation in discussion forum .
* Writing reports about case study topics.
 |
| 2.2.52.2.7 | * Lectures.
* Seminars.
* Discussions of students prepared term research paper
* Number of essays prepared in response to research topics.
 | * Oral examinations
* Written examinations and essays.
* Research project report about applied case study.
 |
| 2.3.5 | * Supervised practice for projects demonstrations, based upon site visits.
* Seminars.
* Direct reading..
 | * Oral and written dealing with selected urban problem issues,
* Coursework exercises through acknowledging potential concept alternative solutions.
 |
| 2.4.1 | * Seminars.
* Attendance of workshops or conferences or internal seminars as directed by staff.
 | * Providing illustrative and media based presentations.
* Project presentation
 |

**5-Assessment schedule**

Assessment 1 Assignmentson week’s 7-9-11-14

Assessment 3 Oral exam on week 15

Assessment 4 Final exam on week 16

**6- Weighting of assessments**

40% Home assignments

30% Oral examination

30% Final-term examination

100% Total

**7- List of References**

**Course Textbook:**

1. Branch, M. (1975), Urban planning Theory, Halsted, USA.
2. Krier, Rob.(1979), Urban Space. London: Academy Editions.
3. Morris, A. (1979), History of Urban Form. USA: John Wilry and Sons.

**Course References:**

1. Audirac, Ivonne. (2005). Information Technology and urban form: Challenges to Smart Growth. International Regional Science Review 28, 2: 119–145.
2. Bianca, Stefano.(2000),Urban Form in the Arab World: Past and Present.London:Thames and Hudson.
3. Ching,Francis D. K. (2006), Architecture: Form, Space, and Order. New York: Van Nostrand Reinhold.
4. Moughtin, Cliff and Mertrns, Miguel.(2006), Urban Design: Street and Squares. London: 3rd. Ed; Architectural Press.
5. Kirralie Houghton,(2010). Augmenting public urban spaces: The impact of the digital future on the design of public urban spaces. Available from <http://eprints.qut.edu.au/39503/1/c39503.pdf>
6. Moreno S., Hernandez. (2009). Current Technologies Applied to Urban Sustainable Development. Theoretical and Empirical Researches in Urban Management, no. 4(13).
7. www.futureofplaces.com
8. www.learningfromcairo.com
9. www.cairobserver.com
10. www.publicspace.org
11. www.urbaninformatic.net
12. www.newurbanism.org

**8- Facilities required for teaching and learning**

Lecture room equipped with overhead projector

Presentation board, computer and data show

**9- Intended learning outcomes of course (ILOs) Matrixes**

**9.1 Matrix 01: Course contents & ILO's**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **No. of weeks** | **Course Content** | **Total no. of hours** | **a. Knowledge and understanding** | **b. Intellectual Skills** | **c. Professional** **Skills** | **d. General Skills** |
| 2.1.4 | 2.1.7 | 2.1.8 | 2.2.5 | 2.2.7 | 2.3.5 | 2.4.1 |
| 1 | Introduction | 3 | **x**  | **x**  | **x**  |  |  |  |  |
| 2 | In depth study of evolution of urban spaces and types | 3 |  |  | **x**  | **x**  | **x**  |  |  |
| 3 | In depth study of evolution of urban spaces and types | 3 |  |  | **x**  | **x**  | **x**  |  |  |
| 4 | interrelation ships between public spaces and human needs and activity functions | 3 | **x**  |  |  | **x**  | **x**  | **x**  |  |
| 5 | tools and means of configuration of urban spaces | 3 | **x**  |  |  | **x**  | **x**  | **x**  |  |
| 6 | networks of urban spaces | 3 |  |  |  |  | **x**  | **x**  | **x**  |
| 7 | security and safety | 3 |  |  |  |  | **x**  | **x**  | **x**  |
| 8 | human behavior and urban spaces | 3 | **x**  | **x**  |  |  | **x**  | **x**  | **x**  |
| 9 | innovations and new technological approaches | 3 |  |  |  | **x**  | **x**  | **x**  | **x**  |
| 10 | applied research and projects / maintenance | 3 |  |  |  | **x**  | **x**  | **x**  | **x**  |
| 11 | urban development | 3 |  |  |  | **x**  | **x**  | **x**  | **x**  |
| 12 | Case studies | 3 |  |  |  |  | **x**  | **x**  | **x**  |
| 13 | Project follow up  | 3 |  | **x**  | **x**  | **x**  | **x**  | **x**  | **x**  |
| 14 | Project follow up  | 3 |  | **x**  | **x**  | **x**  | **x**  | **x**  | **x**  |
| 15 | Submission and discussions | 3 |  | **x**  | **x**  | **x**  | **x**  | **x**  | **x**  |
| 16 | Final exam | 3 | **x**  | **x**  | **x**  | **x**  | **x**  | **x**  | **x**  |

**9.2 Matrix 02: Aims & ILO's**

|  |  |  |  |
| --- | --- | --- | --- |
| **Aims****ILO's**  | **1** | **2** | **3** |
| 2.1.4 | **x** |  |  |
| 2.1.7 | **x** |  |  |
| 2.1.8 | **x** |  |  |
| 2.2.5 |  | **x** | **x** |
| 2.2.7 |  | **x** | **x** |
| 2.3.5 |  | **x** | **x** |
| 2.4.1 |  |  | **x** |
| 2.3.5 | **x** | **x** | **x** |
| 2.4.1 |  |  | **x** |

Course coordinator:**Ass.Prof. Dr. /Hassan El-Zamely**

Course instructor: **Ass.Prof. Dr. / Hassan El-Zamely**

Date 1/ 1 / 2014