

**ATTACHMENT 2 (e)**

**Course Specifications**

**Kingdom of Saudi Arabia**

**The National Commission for Academic Accreditation & Assessment**

**Spatial and Visual Analysis  
(PL471)**

January 2016

## Course Specifications

Institution: King Saud University	Date of Report: January 2016
College/Department : College of Architecture & Planning / Department of Urban Planning	

### A. Course Identification and General Information

1. Course title and code: Spatial and Visual Analysis (PL471)			
2. Credit hours: 2 Credit hours			
3. Program(s) in which the course is offered. (If general elective available in many programs indicate this rather than list programs) B.Sc. in Urban Planning and Design			
4. Name of faculty member responsible for the course: Dr. Ziad A Alameddine			
5. Level/year at which this course is offered: Level 9			
6. Pre-requisites for this course (if any): None			
7. Co-requisites for this course (if any): None			
8. Location if not on main campus: Main campus			
9. Mode of Instruction (mark all that apply)			
a. Traditional classroom	<input type="checkbox"/>	What percentage?	<input type="checkbox"/>
b. Blended (traditional and online)	<input type="checkbox"/>	What percentage?	<input type="checkbox"/>
c. e-learning	<input checked="" type="checkbox"/>	What percentage?	30%
d. Correspondence	<input type="checkbox"/>	What percentage?	<input type="checkbox"/>
f. Computer Lab	<input checked="" type="checkbox"/>	What percentage?	70%
Comments:			

## B Objectives

1. What is the main purpose for this course?

The main purpose for this course is to develop student's ability to observe, analyze, describe and document site conditions spatially and visually and identify site opportunities and constraints.

**On successfully completing the course, the student must be able to:**

- Carry out comprehensive spatial and visual analysis and evaluation of complex urban settings.
- Employ practical skills and express facts in graphical form including sketching, technical drawings and digital illustrations.

2. Briefly describe any plans for developing and improving the course that are being implemented. (e.g. increased use of IT or web based reference material, changes in content as a result of new research in the field)

The introduction of space syntax that encompasses a set of theories and techniques for the analysis of spatial configurations. This will be implemented through the use of Depthmap software that generates spatial and visual graphs for the analysis of urban spaces, namely, visibility graph analysis and axial map.

## C. Course Description (Note: General description in the form to be used for the Bulletin or handbook should be attached)

The course presents spatial and visual methods and techniques for analyzing built environments. During this course, students carry out analytical field studies on selected study areas, including legibility analysis, cognitive and mental mapping, permeability and accessibility analysis, visual sequence analysis, urban character analysis. In addition, the course introduces spaces syntax as a tool for spatial and visual examination to assists in understanding spatial and visual issues of existing urban settings.

1. Topics to be Covered		
List of Topics	No. of Weeks	Contact Hours
General background on visual spatial studies of urban areas	1	2
Principles of Responsive Environments/ Public Space /By Design	2	4
Visual and Physical Permeability	1	2
Visual Sequence	1	2
Urban Character	1	2
Urban Grain	1	2
Legibility	1	2
Cognitive and Mental mapping	1	2
Space Syntax (Axial Map) (Depthmap)	2	4
(Visibility Graph Analysis) (Depthmap)	3	6

2. Course components (total contact hours and credits per semester):						
	Lecture	Tutorial	Laboratory	Practical	Other:	Total
Contact Hours	14 hrs			14 hrs		28 hrs
Credit						2 credits

3. Additional private study/learning hours expected for students per week.	4 hrs
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4. Course Learning Outcomes in NQF Domains of Learning and Alignment with Assessment Methods and Teaching Strategy
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Course Learning Outcomes, Assessment Methods, and Teaching Strategy work together and are aligned. They are joined together as one, coherent, unity that collectively articulate a consistent agreement between student learning, assessment, and teaching.

The **National Qualification Framework** provides five learning domains. Course learning outcomes are required. Normally a course has should not exceed eight learning outcomes which align with one or more of the five learning domains. Some courses have one or more program learning outcomes integrated into the course learning outcomes to demonstrate program learning outcome alignment. The program learning outcome matrix map identifies which program learning outcomes are incorporated into specific courses.

On the table below are the five NQF Learning Domains, numbered in the left column.

**First**, insert the suitable and measurable course learning outcomes required in the appropriate learning domains (see suggestions below the table). **Second**, insert supporting teaching strategies that fit and align with the assessment methods and intended learning outcomes. **Third**, insert appropriate assessment methods that accurately measure and evaluate the learning outcome. Each course learning outcomes, assessment method, and teaching strategy ought to reasonably fit and flow together as an integrated learning and teaching process. **Fourth**, if any program learning outcomes are included in the course learning outcomes, place the @ symbol next to it.

Every course is not required to include learning outcomes from each domain.

	NQF Learning Domains And Course Learning Outcomes	Course Teaching Strategies	Course Assessment Methods
<b>1.0</b>	<b>Knowledge</b>		
1.1	Define the principles of spatial and visual analysis	Lectures and presentations	Midterm & Final exams
1.2			
<b>2.0</b>	<b>Cognitive Skills</b>		
2.1	Analyze urban issues related to urban built environments.	Lectures and presentations	Class follow up, assessment of individual reports and final exam
2.2	Predict opportunities and identify constraints	Lectures and presentations	Assessment of individual reports
<b>3.0</b>	<b>Interpersonal Skills &amp; Responsibility</b>		
3.1	None		
3.2			
<b>4.0</b>	<b>Communication, Information Technology, Numerical</b>		
4.1	None		
4.2			
<b>5.0</b>	<b>Psychomotor</b>		
5.1	None		

#### Suggested Guidelines for Learning Outcome Verb, Assessment, and Teaching

NQF Learning Domains	Suggested Verbs
<b>Knowledge</b>	list, name, record, define, label, outline, state, describe, recall, memorize, reproduce, recognize, record, tell, write
<b>Cognitive Skills</b>	estimate, explain, summarize, write, compare, contrast, diagram, subdivide, differentiate, criticize, calculate, analyze, compose, develop, create, prepare, reconstruct, reorganize, summarize, explain, predict, justify, rate, evaluate, plan, design, measure, judge, justify, interpret, appraise
<b>Interpersonal Skills &amp; Responsibility</b>	demonstrate, judge, choose, illustrate, modify, show, use, appraise, evaluate, justify, analyze, question, and write
<b>Communication, Information Technology, Numerical</b>	demonstrate, calculate, illustrate, interpret, research, question, operate, appraise, evaluate, assess, and criticize
<b>Psychomotor</b>	demonstrate, show, illustrate, perform, dramatize, employ, manipulate, operate, prepare, produce, draw, diagram, examine, construct, assemble, experiment, and reconstruct

Suggested **verbs not to use** when writing measurable and assessable learning outcomes are as follows:

Consider	Maximize	Continue	Review	Ensure	Enlarge	Understand
Maintain	Reflect	Examine	Strengthen	Explore	Encourage	Deepen

Some of these verbs can be used if tied to specific actions or quantification.

**Suggested assessment methods and teaching strategies are:**

According to research and best practices, multiple and continuous assessment methods are required to verify student learning. Current trends incorporate a wide range of rubric assessment tools; including web-based student performance systems that apply rubrics, benchmarks, KPIs, and analysis. Rubrics are especially helpful for qualitative evaluation. Differentiated assessment strategies include: exams, portfolios, long and short essays, log books, analytical reports, individual and group presentations, posters, journals, case studies, lab manuals, video analysis, group reports, lab reports, debates, speeches, learning logs, peer evaluations, self-evaluations, videos, graphs, dramatic performances, tables, demonstrations, graphic organizers, discussion forums, interviews, learning contracts, antidotal notes, artwork, KWL charts, and concept mapping.

Differentiated teaching strategies should be selected to align with the curriculum taught, the needs of students, and the intended learning outcomes. Teaching methods include: lecture, debate, small group work, whole group and small group discussion, research activities, lab demonstrations, projects, debates, role playing, case studies, guest speakers, memorization, humor, individual presentation, brainstorming, and a wide variety of hands-on student learning activities.

#### 5. Schedule of Assessment Tasks for Students During the Semester

	Assessment task (e.g. essay, test, group project, examination, speech, oral presentation, etc.)	Week Due	Proportion of Total Assessment
1	Participation in class and direct assessment	Weeks 1-14	10%
2	Midterm exam	Week 9	20%
3	Term project & final report	Week 9-14	30%
4	Final exam	Week 16	40%

## D. Student Academic Counseling and Support

1. Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice. (include amount of time teaching staff are expected to be available each week)

- Students are free to consult the course instructor during office hours that are indicated in the schedule outside his office



Kingdom of Saudi Arabia  
Ministry of Higher Education  
KING SAUD UNIVERSITY  
College of Architecture & Planning

Name: Dr. Ziad A Alameddine

المملكة العربية السعودية  
وزارة التعليم العالي  
جامعة الملك سعود  
كلية العمارة والتخطيط



الاسم: د. زياد أحمد علم الدين

Period Day	1	2	3	4	5	6	7	8	9
	9-10	10-11	11-12	1-2	2-3	3-4	4-5	5-6	6-7
Sunday	PL411 Computer Presentation			PL471 Spatial &Visual Analysis					
Monday	Office	PL430 Urban Design Project III							
Tuesday	Committee Meetings/Research Work						URD567 Urban Form		
Wednesday	Office	Arch 265 Computer Drafting Skills							
Thursday	Office	PL430 Urban Design Project III							

Second semester 1436-1437H



ARCHITECTURE & PLANNING EDUCATION EXCELLENCE



رئيس قسم التخطيط العمراني: د. عبد الله بن أحمد الخيال

## E. Learning Resources

1. List Required Textbooks

None

2. List Essential References Materials (Journals, Reports, etc.)

- Sue McGlynn, Graham Smith, Alan Alcock, Paul Murrain, Ian Bentley (2005): "Responsive Environments". Oxford: Elsevier Ltd.
- Department of the Environment, Transport and the Regions (2000): "By Design - Urban Design in the Planning System: Towards better practice". London: Commission for Architecture and the Built Environment.
- Gindroz, Ray (et al.) (2003): "The Urban Design Handbook: Techniques and Working Methods." New York: W.W. Norton & Company.

3. List Recommended Textbooks and Reference Material (Journals, Reports, etc)

None

4. List Electronic Materials (e.g. Web Sites, Social Media, Blackboard, etc.)

- Project for Public Spaces: [www.pps.org/](http://www.pps.org/)

5. Other learning material such as computer-based programs/CD, professional standards or regulations and software.

- Depthmap
- Auto Cad 2012 or latest version
- Power Point

## F. Facilities Required

Indicate requirements for the course including size of classrooms and laboratories (i.e. number of seats in classrooms and laboratories, extent of computer access etc.)
1. Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.) Computer lab is required to accommodate 20-25 students.
2. Computing resources (AV, data show, Smart Board, software, etc.) Smartboard and data show
3. Other resources (specify, e.g. if specific laboratory equipment is required, list requirements or attach list) None

## G Course Evaluation and Improvement Processes

1 Strategies for Obtaining Student Feedback on Effectiveness of Teaching <ul style="list-style-type: none"> <li>Direct inquires and interviews (students' questionnaires) conducted on-line by the university.</li> </ul>
2 Other Strategies for Evaluation of Teaching by the Program/Department Instructor <ul style="list-style-type: none"> <li>A regular Students' Course Survey</li> <li>A regular Department Course Survey</li> <li>Discussions with group of students after successfully pass the course.</li> </ul>
3 Processes for Improvement of Teaching <ul style="list-style-type: none"> <li>Reviewing similar courses taught in similar programs in other universities.</li> <li>Curriculum development, update and improvement.</li> </ul>
4. Processes for Verifying Standards of Student Achievement (e.g. check marking by an independent member teaching staff of a sample of student work, periodic exchange and remarking of tests or a sample of assignments with staff at another institution) <ul style="list-style-type: none"> <li>Final exam papers and grades are checked by the Chairman of the Department. Copy of students' works is included in course file for Accreditation Committee review.</li> </ul>
5 Describe the planning arrangements for periodically reviewing course effectiveness and planning for improvement. <ul style="list-style-type: none"> <li>The course is reviewed periodically by the Department to ensure course effectiveness.</li> <li>Updated sources and references for the course on a regular basis according to the recent developments in the specialty.</li> </ul>

**Faculty or Teaching Staff: Dr. Ziad A Alameddine**

**Signature:** \_\_\_\_\_ **Date Report Completed: 27/05/2016**

**Received by:** \_\_\_\_\_ **Dean/Department Head**

**Signature:** \_\_\_\_\_ **Date:** \_\_\_\_\_