



UNIVERSITÀ DEGLI STUDI DI PALERMO

DEPARTMENT	Scienze Agrarie, Alimentari e Forestali		
ACADEMIC YEAR	2016/2017		
MASTER'S DEGREE (MSC)	AGRICULTURAL SCIENCES AND TECHNOLOGIES		
SUBJECT	CAD APPLICATIONS FOR AGRICULTURAL DESIGN		
TYPE OF EDUCATIONAL ACTIVITY	F		
AMBIT	21374-Altre conoscenze utili per l'inserimento nel mondo del lavoro		
CODE	18643		
SCIENTIFIC SECTOR(S)			
HEAD PROFESSOR(S)	ORLANDO SANTO	Professore Associato	Univ. di PALERMO
OTHER PROFESSOR(S)			
CREDITS	6		
INDIVIDUAL STUDY (Hrs)	0		
COURSE ACTIVITY (Hrs)	0		
PROPAEDEUTICAL SUBJECTS			
MUTUALIZATION			
YEAR	1		
TERM (SEMESTER)	1° semester		
ATTENDANCE	Not mandatory		
EVALUATION	Pass/Fail		
TEACHER OFFICE HOURS	ORLANDO SANTO Monday 10:00 12:00 Dipartimento SAAF, Edificio 4, Ingresso L, Piano 1, Stanza 139 Tuesday 10:00 12:00 Dipartimento SAAF, Edificio 4, Ingresso L, Piano 1, Stanza 139 Friday 10:00 12:00 Dipartimento SAAF, Edificio 4, Ingresso L, Piano 1, Stanza 139		

DOCENTE: Prof. SANTO ORLANDO

PREREQUISITES	Technical design knowledge
LEARNING OUTCOMES	<p>Knowledge and understanding capacity At the end of the course, student will have gained a basic literacy programs relating to the main computer designed for the proper management of project drawings, refining the understanding of rationale underlying the computerized design, in relation to experience of traditional design already carried out in Design course, to identify the most frequently used commands and create your own custom modus operandi.</p> <p>Capacity of applying knowledge and understanding At the end of the course, student will have developed the ability to use independently the main computerized drawing program, Autocad, in order to represent properly technical drawings two-dimensional and three-dimensional design.</p> <p>Opinion autonomy On passing the exam, student should have developed the ability to critically evaluate the application of different drawing techniques applied to computerized representation of a building.</p> <p>Communication skills On passing the exam, the student should have acquired sufficient property of graphic language, at least as far as communication skills expressed through proper use of programs used in teaching.</p> <p>Learning capacity Workshop activities, together with final work required, are designed to introduce students to the latest developments in terms of using a drawing program and computerized graphics final processing: the student should have acquired knowledge and base skills of the discipline to address hereafter, a study of these aspects independently.</p>
ASSESSMENT METHODS	<p>The evaluation will be done through an examination of the drawings made with the chosen drawing tool computerized and used during the course.</p> <p>Prepare projects 75% divided as follows Explanation of theoretical aspects (knowledge) Graphic applications (competence) Autonomous choice of representation mode (Judgement)</p> <p>Oral examination 25% divided as follows Theoretical questions (knowledge) Graphic applications (competence) Properties of exposure (communication skills)</p> <p>The final test is aimed at assessing if the student has knowledge and understanding mastered the software, and has acquired interpretative competence and independence of judgment in concrete cases. The pass mark will be reached when the student show mastery of use of the software in general terms and minimum application skills in order to solve real world problems. Below this threshold the examination will be insufficient. The more however the examinee demonstrates mastery and ability to use the various software, the more the assessment is positive.</p>
EDUCATIONAL OBJECTIVES	<p>The course aims to give the fundamentals of computer graphics as a tool for the design, aimed at the architectural design communication. The main issues addressed during the course will be related to the two-dimensional vector drawing.</p>
TEACHING METHODS	lectures and exercises. Lectures are in fact made with the pc
SUGGESTED BIBLIOGRAPHY	<p>Data la rapidissima obsolescenza dei testi relativi agli argomenti trattati durante il corso, la bibliografia e' limitata ai manuali dei software utilizzati durante le esercitazioni. Una bibliografia piu' specifica per eventuali approfondimenti sara' fornita di volta in volta durante lo svolgimento del corso.</p>

SYLLABUS

Hrs	Frontal teaching
5	Introduction to the course. Introduction to CAD: vector and raster graphics
6	Formats of the lines, texts and hatches. Setting the lines styles: definition, scale and capture of line styles. Text styles: True Type fonts and fonts of Autocad. Symbols and special texts. The use of hatching in the drawing. The styles of the hatch: preset and user-defined styles. Change the 'origin of hatches.

SYLLABUS

Hrs	Frontal teaching
6	<p>Formats of the lines, texts and hatches. Setting the lines styles: definition, scale and capture of line styles. Text styles: True Type fonts and fonts of Autocad. Symbols and special texts. The use of hatching in the drawing. The styles of the hatch: preset and user-defined styles. Change the 'origin of hatches.</p>
6	<p>Blocks: Using blocks. Creation of the blocks in the drawing. Create a library of external blocks to the drawing. Inclusion of external blocks to drawing</p>
4	<p>Dimension styles: Setting and Changing styles of units. interrogation menu (questions, inquiry) and object properties. Measurements of lengths, calculating surfaces, perimeter. Properties of elements drawn: querying and editing</p>
4	<p>Attributes blocks: Using blocks with attributes. Creating the block with attributes for the dimensioning of the openings. Modifying blocks with attributes. Signs on the extraction of attributes in text files. External References (Xrefs) and inserting raster images Inclusion of references to external files and their automatic updating.</p>
6	<p>Printing and Plotting Setting of the output device, the paper, the drawing scale and the thickness and color of the feathers. paper - model space. Pagination of the documents in paper space. Drawing in paper space and set the scale factor (zoom) display. Pagination of assembly drawings and details in a single table. Display of layers in different paper space viewports.</p>
3	<p>Elimination of unused items (PURGE). Export files The different versions of vector files and notes on the .dxf format. Virtual print</p>
5	<p>software for landscape design (Landcad, landscapedesign, ecc)</p>
Hrs	Practice
15	<p>Survey, representation and design of green areas</p>