UNIVERSITÀ DEGLI STUDI DI PALERMO

DEPARTMENT	Ingegneria
ACADEMIC YEAR	2020/2021
BACHELOR'S DEGREE (BSC)	MECHANICAL ENGINEERING
SUBJECT	CAD LABORATORY
TYPE OF EDUCATIONAL ACTIVITY	F
AMBIT	10812-Tirocini formativi e di orientamento
CODE	14507
SCIENTIFIC SECTOR(S)	
HEAD PROFESSOR(S)	MANCUSO ANTONIO Professore Ordinario Univ. di PALERMO
OTHER PROFESSOR(S)	
CREDITS	3
INDIVIDUAL STUDY (Hrs)	0
COURSE ACTIVITY (Hrs)	0
PROPAEDEUTICAL SUBJECTS	
MUTUALIZATION	
YEAR	3
TERM (SEMESTER)	1° semester
ATTENDANCE	Not mandatory
EVALUATION	Pass/Fail
TEACHER OFFICE HOURS	**MANCUSO ANTONIO** Friday 09:00 11:00 Stanza del docente (Ed.8, I Piano, Scala F10). Per motivate ragioni e ammesso il ricevimento su Teams (codice stanza 3e6igac)

PREREQUISITES	Technical drafting knoledge and machine design elements.
LEARNING OUTCOMES	Knowledge and understanding: the student at the end of the course will be able to model both single objects and assembled systems by means of 3D CAD software. Applying knowledge and understanding: the student will be able to apply the better modeling strategy according to real objects. Making judgments: the student will be able to interpreter the available information in order to set up the better modeling strategy and representation. Communication skills: the student will be able to communicate with skilled people about representation techniques, assembly strategies and CAD modeling. Learning ability: the student will be able to make use of several design software. These knowledge will allow him to continue the studies with greater autonomy and later on, to face the profession with a wealth of fundamental knowledge essential in the planning stages.
ASSESSMENT METHODS	The oral exams is aimed to evaluate the student ability in solving modeling problems concerning the exercises developed during the course.Simple object should be modelled by the student at least.
EDUCATIONAL OBJECTIVES	The course is aimed to provide the ability in the representation and modeling of objects by means of commercial software like for instance Rhinoceros, CREO, SolidWorks. The educational objective concerns the student's ability in solving problems applying a general scientific methodology. During the course, in fact, the students will be involved in problem solving according to the modern design criteria. They will be asked to make choices, apply methods and synthesize all the information in a draft computer made or hand sketched. These educational objectives are functional to the continuation of the studies.
TEACHING METHODS	frontal lessons and classroom exercises
SUGGESTED BIBLIOGRAPHY	Sederberg, Thomas W., "Computer Aided Geometric Design" (2012). All Faculty Publications. 1. https://scholarsarchive.byu.edu/facpub/1 Dispense fornite dal docente

SYLLABUS

Hrs	Frontal teaching
5	Parametric curves and surfaces
7	Feature based CAD system

Hrs	Practice
15	CAD design development