DESCRIPTION OF THE EDUCATIONAL ACTIVITY

Academic year: ***2010-2011***

Course title: ***Manufacturing Technology***

Course number: ***----------***

Type of educational activity: ***mandatory subject***

Subject Group: ***ING-IND/16***

Year of study: ***2nd year "Laurea" (B.Sc. Mech Eng)***

Semester: ***1st-2nd***

Total number of credits: ***12***

Global workload (n. of hours) : ***300***

Number of hours allocated to: lectures, tutorials, laboratory, individual study: ***70, 30, 20, 180***

Name of lecturer: ***Gaetano Salvatore Palazzo***

Objectives of the course: **To give to the students the proper knowledge and tools to professionally approach problems related to manufacturing processes, by the means of theoretical and practical lessons. Software tools and laboratory tests are also used.**

Prerequisites: ***Engineering materials and technology***

Course contents:
Plasticity of metals; bulk and sheet metal forming processes (forging, rolling, drawing, extrusion, deep drawing, bending, blanking); material cutting: machining processes and equipment (tools materials and geometry, structures and kinematics of the machine tools); machining processes (turning, drilling, grinding, milling, broaching, filing, planing, slotting); working parameters optimization; NC machine tools and programming; joining processes and equipment; product manufacturing cycle.

Recommended reading: ***Notes from lectures***
F. Giusti, M. Santochi – Tecnologia meccanica e studi di fabbricazione – Ed. Ambrosiana
R. I. King – High Speed Machining Technology – Chapman and Hall

Teaching methods: ***lectures, exercises, laboratory applications***

Assessment methods: ***written test and oral examination***

Language of instruction: ***Italian (during office hours: available in English)***

Additional information: ***further information can be requested via e-mail: gspalzzo@unisa.it***