



UNIVERSITI TEKNOLOGI MARA

PMA520: PACKAGING PRINTING

Course Name (English)	PACKAGING PRINTING APPROVED
Course Code	PMA520
MQF Credit	3
Course Description	This course introduces the student to the study of Printing Processes towards Packaging. The field of Packaging is mainly respond to the needs of Printing Industry. The courses will also awareness of the role of design in establishing and meeting the requirements of the products and their production methods. Other techniques of print on Packaging such as Photogravure, Thermo graphic, Die-cutting, Laminating, Stamping/Hot stamping, embossing and so on which are related to Packaging Products are also introduces.
Transferable Skills	Demonstrate ability to manage personal performance to meet expectations and demonstrate drive, determination, and accountability.
Teaching Methodologies	Lectures, Blended Learning, Lab Work, Field Trip, Practical Classes, Discussion
CLO	CLO1 To define the theory and practical of packaging in printing processes CLO2 To explain and differentiate the variety of packaging and suitability to the products CLO3 To construct the packaging based on the theory of packaging printing processes
Pre-Requisite Courses	No course recommendations
Topics	
1. 1. Introduction to Flexography 1.1) 1.1 Relief Printing Process 1.2) 1.2 Definition of Flexography 1.3) 1.3 Technical Specification	
2. 2. History of Flexography 2.1) 2.1 Movable Type and Letterpress 2.2) 2.2 The Development of Flexographic Process 2.3) 2.3 Technology and Machines	
3. 3. Flexography and Packaging 3.1) 3.1 Flexography – the processes of printing 3.2) 3.2 Packaging – the products of flexography printing 3.3) 3.3 Application of Flexography Printing in Packaging	
4. 4. Packaging and Products 4.1) 4.1 Type of Packaging 4.2) 4.2 Packaging for dry products 4.3) 4.3 Packaging for wet products 4.4) 4.4 Packaging for liquid products	
5. 5. Materials and Inks 5.1) 5.1 Type of Substrate 5.2) 5.2 Type of Ink	
6. 6. Printing Processes 6.1) 6.1 Design and production art 6.2) 6.2 Typography and Colour technique 6.3) 6.3 Technical drawing 6.4) 6.4 Pre press film, plate and block	

7. 7. Lay outs and Imposition 7.1) 7.1 Lay outs and imposition artwork 7.2) 7.2 Film positive and negative 7.3) 7.3 Direct imaging
8. 8. Cylinder Image Carrier 8.1) 8.1 Plate cylinder image carrier 8.2) 8.2 Rubber and photopolymer material 8.3) 8.3 Block and die cut material
9. 9. Comparative 9.1) 9.1 Offset Lithography Product 9.2) 9.2 Flexography Product 9.3) 9.3 Gravure Product 9.4) 9.4. Hybrid and Digital Printing
10. 10. Methods 10.1) 10.1 On Surface Print 10.2) 10.2 Reverse Print 10.3) 10.3 Extrusion Process 10.4) 10.4 Laminating Process
11. 11. Quality Control 11.1) 11.1 Quality Assurance 11.2) 11.2 Print Demerits 11.3) 11.3 Process Control 11.4) 11.4 Quality Paradigm
12. 12. Industry in Flexography 12.1) 12.1 Flexible Packaging 12.2) 12.2 Multilayer and Multipurpose Packaging 12.3) 12.3 Labelling
13. 13. Flexography Future 13.1) 13.1 Current Trend and Market 13.2) 13.2 Future Trend and Market Forecast
14. 14. Assessment 14.1) 14.1 Process Control Issues 14.2) 14.2 Material Development 14.3) 14.3 Hybrid Process

Assessment Breakdown	%
Continuous Assessment	100.00%

Details of Continuous Assessment	Assessment Type	Assessment Description	% of Total Mark	CLO
	Final Project	Final product and assessment	40%	CLO2
	Individual Project	Research, idea and concept	30%	CLO1
	Individual Project	Packaging sample and product development	30%	CLO3

Reading List	Recommended Text	<ul style="list-style-type: none"> • Edward Denison 2008, <i>Print and Production Finishes for Packaging</i>, Rockport Publishers [ISBN: 2940361975] • Paul Jackson 2012, <i>Structural Packaging</i>, Laurence King Publishing [ISBN: 1856697533] • Steven DuPuis, John Silva 2011, <i>Package Design Workbook</i>, Rockport Pub [ISBN: 1592537081] • Sarah Roncarelli, Candace Ellicott 2010, <i>Packaging Essentials</i>, Rockport Publishers [ISBN: 1592536034] • Andrew Gibbs 2010, <i>Box Bottle Bag</i>, Krause Publications [ISBN: 1600614191]
Article/Paper List	This Course does not have any article/paper resources	
Other References	This Course does not have any other resources	