



Christian Brothers University

INTRODUCTION TO CORRUGATED PACKAGING

June 25-29, 2007

Sponsored by the International Corrugated Packaging Foundation

<http://www.careersincorrugated.org/>

CURRICULUM

DAY	SESSION (Duration)	TOPICS	ADDITIONAL INFO
1	Introduction to Corrugated Packaging (45 minutes)	Paper and paperboard; paper types; paperboard cartons; corrugated packaging; different levels of packaging including use of corrugated box	B-1-1.pdf
	Overview of CBU Packaging & Other Engineering Labs (100 minutes)	Lab tour; drop tester; shock machine; vibration table; compression table; sample table; temperature/humidity chamber; altitude chamber; universal testing machine; instrumentation; CNC machines; injection molding machine	B-1-2.pdf
	Field Trip to Buckeyes (180 minutes)	Paper pulp manufacturing; various lab tests	B-1-3.pdf
2	Corrugated Fiberboard (100 minutes)	Corrugated fiberboard; fiberboard components including flutes; fiberboard manufacture; properties; tests; carrier rules and regulations; box design variations	B-2-1.pdf
	Hands-on Lab (50 minutes)	Crush tester; altitude chamber; temperature/humidity chamber	B-2-2.pdf B-2-2.wmv
	Field Trip to Weyerhaeuser (180 minutes)	Corrugated board manufacture; box design and manufacture	B-2-3.pdf
3	Container Design (100 minutes)	Corrugated fiberboard construction, grades, and adhesives; McKee formula; corrugated board properties and tests; Mullen burst test; edgewise compression test; box dimensions; loading orientation; flute direction, joints, selection; box styles and design variations; carrier rules/regulations and box certificate	B-3-1.pdf
	Hands-on Lab (50 minutes)	Container design software	B-3-2.pdf
	Field Trip to FedEx Packaging Lab (180 minutes)	Container testing	B-3-3.pdf

4	Distribution Environment (50 minutes)	Warehouse and handling; package sorting and handling; manufacturer self operated distribution system; common carriers; third party logistics; transportation modes	B-4-1.pdf
	Hands-on Lab (50 minutes)	Compression test; shock test; drop test; vibration test; sample table	B-4-2.wmv
	Field Trip to Wurzburg (180 minutes)	Packaging suppliers; special applications of corrugated boards	B-4-3.pdf
5	Materials (100 minutes)	History of evolution of packaging materials; modern materials; glass and metals; paperboard and corrugated fiberboard; plastics	B-5-1.pdf
	College Study Options (50 minutes)	Various packaging related options; various engineering and related disciplines	B-5-2.pdf
	Keynote Address (30 minutes)	Sustainability	B-5-3.pdf
	Career Opportunities (90 minutes)	Panel discussion with industry representatives	B-5-4.pdf