



FAKULTI PENGURUSAN DAN INDUSTRI HALAL

PROGRAM	Diploma in Technology Management
COURSE NAME	COMMERCIAL LAW
COURSE CODE	DDWG 3173
CREDIT HOUR	3
SYNOPSIS	This course aims to extend the understanding of critical issues and conceptual frameworks involved in the management of R&D innovation and activities. It provides the skills of innovation management, R&D and new product development (NPD) activities at operational level.
COURSE STRUCTURE	
CHAPTER	TOPICS
1	INTRODUCTION 1.1 Definition 1.2 Importance of innovation 1.3 The study of Innovation 1.4 Innovation in an organizational context 1.5 Models of innovation 1.6 Innovation as management process
2	MANAGING INNOVATION WITHIN FIRMS 2.1 Theories of organizations and innovation 2.2 Managing uncertainty 2.3 Organization characteristics that facilitate the innovation process 2.4 Classification of industrial firms 2.5 Organizational structure and innovation 2.6 Individual role in innovation process 2.7 Impact of IT systems on innovation
3	INNOVATION: PLANNING 3.1 Planning



	<p>3.2 Factors influencing innovation</p> <p>3.3 Types of innovation</p> <p>3.4 Innovation planning process</p> <p>3.5 Application of the planning process</p> <p>3.6 Factors facilitate innovation planning</p> <p>3.7 Technology stages and planning</p> <p>3.8 Developing climate for innovation</p>
4	<p>INNOVATION: IMPLEMENTATION</p> <p>4.1 Implementation; activities; requirements; task delegation)</p> <p>4.2 Key implementation issues</p> <p>4.3 Crafting portfolios for innovation</p>
5	<p>INNOVATION: EVALUATION AND CONTROL</p> <p>5.1 Evaluation and control process</p> <p>5.2 Control</p> <p>5.3 Implementing evaluation and control</p> <p>5.4 Auditing innovation management</p>
6	<p>MANAGEMENT OF R&D: CONCEPTS AND ISSUES</p> <p>6.1 Introduction to R&D</p> <p>6.2 R&D management and industrial context</p> <p>6.3 R&D investment and company growth</p> <p>6.4 Classification of R&D</p> <p>6.5 R&D management and business strategy</p> <p>6.6 Strategic pressures on R&D</p> <p>6.7 Technology leverage and R&D strategies:</p> <p>6.8 Fund allocation to R&D</p> <p>6.9 Level of R&D expenditure</p>



<p>7</p>	<p>MANAGEMENT OF R&D: CONCEPTS AND ISSUES.</p> <p>7.1 Successful technology management</p> <p>7.2 Changing nature of R&D management</p> <p>7.3 Acquisition of external technology</p> <p>7.4 Effective R&D management</p> <p>7.5 R&D link with product innovation process</p>
<p>8</p>	<p>MANAGEMENT OF R&D: IMPLEMENTATION</p> <p>8.1 Balancing research portfolios</p> <p>8.2 Evaluating R&D projects</p> <p>8.3 Locating R&D activities</p> <p>8.4 Managing International R&D</p> <p>8.5 Managing research teams</p> <p>8.6 Evaluation and assessment of R&D</p>
<p>9</p>	<p>NEW PRODUCT DEVELOPMENT</p> <p>9.1 New product</p> <p>9.2 Overviews of NPD theories</p> <p>9.3 Models of NPD</p> <p>9.4 Innovation management and NPD</p> <p>9.5 Consideration in developing NPD strategy</p> <p>9.6 NPD as a strategy for growth</p>
<p>10</p>	<p>NEW PRODUCT DEVELOPMENT: PRODUCT AND BRAND STRATEGY</p> <p>10.1 Capabilities, networks and platforms</p> <p>10.2 Product planning, product strategy</p> <p>10.3 Competitive environment, differentiation and positioning</p> <p>10.4 Competing with other products, brand management, brand strategy, market entry</p> <p>10.5 Launch and continuing improvement</p> <p>10.6 Withdrawing products and managing mature products</p>



11	NEW PRODUCT DEVELOPMENT: MANAGING NPD TEAMS 11.1 Putting NPD as a project 11.2 Key activities in NPD teams 11.3 NPD across different industries 11.4 Organizational structures and cross-functional teams 11.5 Marketing / R&D Interface 11.6 High attrition of new products
12	ORGANIZATIONAL LEARNING AND KNOWLEDGE MANAGEMENT 12.1 Technology trajectories and dynamic capabilities 12.2 The knowledge base of an organization 12.3 The learning organization 12.4 Combining commercial and technological strength 12.5 Degree of innovativeness 12.6 Technology strategy as link between innovation strategy and business Strategy 12.7 Organizational learning 12.8 Knowledge management in R&D department and teams 12.9 The use of organizational learning and knowledge management
13	STRATEGIC ALLIANCES AND NETWORKS 13.1 Definition 13.2 Complementary capabilities and embedded technologies 13.3 Forms of strategic alliances 13.4 Motives for establishing an alliances 13.5 Risk and limitations of strategic alliances 13.6 Use of alliances in implementing technology strategy
References:	1. Trott.P. (2017). Innovation management and New Product Development (6 th Edition). Essex: Prentice hall Financial Times.

