

# الأصول العلمية والعملية للخطر والتأمين

دكتور

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استاذ الاحصاء والتأمين المشارك  
كلية المجتمع - جامعة الملك سعود

دكتور

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استاذ الاحصاء والتأمين  
كلية المجتمع - جامعة الملك سعود

الطبعة الأولى

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# الطبعة الأولى

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:*(Risk Concept)*

Personal and General Expectation  
Scientific Guess

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**:(Nature of Risks)**

Noneconomic Risks

.Economic Risks

Financial Loss



*:(Nature of Economic Risks)*

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Speculative Risks

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Pure Economic Risks

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Static Risks

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(Dynamic Risks

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## Objective Doubt

subjective doubt

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:(Hazards)

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**:(Physical Hazards)** -

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**:(Morale Hazards)** \_\_\_\_\_ -



:(Moral Hazard) \_\_\_\_\_ (

**: (Nature of Hazards)**

. Personal Hazards

Property )

(and Liability Hazards

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*:(Perils)*

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*:(Loss)*

**:(Personal Perils)**

<b>PERSONAL Perils</b>		
Death		.
Sickness		.
Disability		.
Superannation or Old Age		.
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**:(Preprety and Liability Perils)**

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<b>Property and Liability Perils</b>		
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ward Employees		-
ward Strangers		-
ward Properties		-

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*(Measurements of Risk)*

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*:(Degree of Risk)*



Utils

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(Costs of Unexpected –

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:(Costs of Uncertainty

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أحتمال الخسارة (Probability of Loss):

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Expected Probability  
Realized Probability

Law of Large Numbers  
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Speculative

Irrational

:*(Expected Loss)*

Amount at Stake or Risk





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*:(Expectatiol of Loss)*

Amount at Stake

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:(Risk Severity)

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*(Risk Management)*

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Risk Control

.(Risk Manager )

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(Policies of Management)

## Risk Avoidance

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Unplanned Risk Assumption

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Planned Risk Assamprtion

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Contingency Reserve -

Loss

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Prevetion and Control

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Sprinkles



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**:(Construction Gontracts)**

Gost of Risk

Transferor

Transferee

Goat of Risk

Transferor

Transferee



**:(Leases)**

Lessee

Lessor

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**:(Carriers Contracts)** .

Carrier

**:(Bailment Contracts)**

Bailor

Bailee

**:(Forming Organizaytions)**

:*(Risk Reduction)*

.Accurate Prediction

Risk Aversion

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**:(Segregation & Diversification)**

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**:(Pooling of Risks)** (

Risk Exposures

Averages

General Average



**:(Insuring of Risk) (**



*:(Quantitative Approaches)*

Linear	Game Theory	Programming
	Queuing Theory	Programming
Statistical		Models Mathematical

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## **(Insurance)**

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Retetion Insurance  
*:(Insurance Defined)*

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Perils

Uncertainty

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**:(Risk Transfer Assumption)**

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Loss Expected

Objective

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:(Prediction)

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Low of large

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:(Pooling)

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Tidal Waves

:(Discrimination)

Classify Homogenous  
Discrimination

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Personal Insurance :

Commercial

Insurance

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(Life Assurance)	.
(Marine Insurance)	.
(Fire Insurance)	.
(Accident Insurance)	.

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(Life Insurance)	(
(Property Insurance)	(

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Insurer

Insured

Beneficiary

## Life Insured

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Ceding Insurer

Reinsures

Risk Distribution

Risk Transfer

.Insurance Risk

Coverage

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(Treaty Reinsurance)

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(Facilitate Reinsurance)

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Reinsurance

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Proportional

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# Proportional Reinsurance

## Excess Loss Reinsurances

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Self Insurance



**:(Legal Principals of Insurance)**

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**:(Principal of Utmost Goodfaith**

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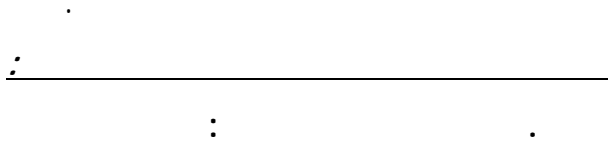
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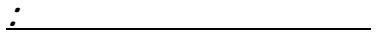
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**:(Principal of Insurable )**



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**:(Principal of Contribution )**

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(Life Assured)

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**(Whole Life Assurance)**

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**(Term or Temporary)**

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**Deferred Whole Life Assurance)**

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**(Deferrd Temporary Insurance)**

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**:(Pure Endowment Insurance)**

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**:(Life Annuities)**

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**:(Endowment Assurance)** -

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**:(Assurance**

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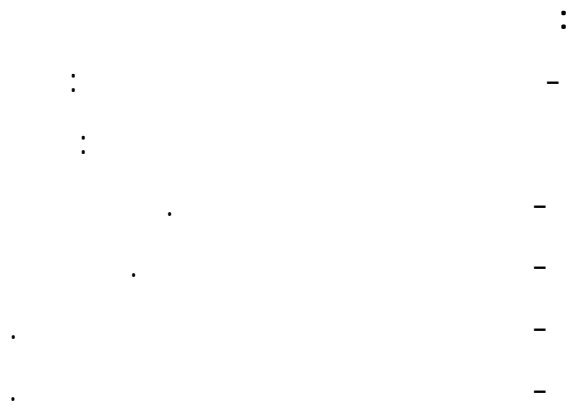
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**(Builders Risk Policiec)** .

**(Freight Ins)** .

**(Cargo Insurance)** .

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.(Vovage Policies)

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**:(T.L.O)** \_\_\_\_\_

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(F.A.A)

Free of all Average

(F.P.A)

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**W.P.A**

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(Stone & Cox Year Book )



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# الباب الرابع التأمينات العامة ورياضاتها

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Independent Events -  
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### Independent Events

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 $P(A \cup B) = P(A) + P(B) - P(A \cap B)$   
 $P(A \cup B \cup C) = P(A) + P(B) + P(C) - P(A \cap B) - P(A \cap C) - P(B \cap C) + P(A \cap B \cap C)$   
 $P(A \cup B \cup C \cup D) = P(A) + P(B) + P(C) + P(D) - P(A \cap B) - P(A \cap C) - P(A \cap D) - P(B \cap C) - P(B \cap D) - P(C \cap D) + P(A \cap B \cap C) + P(A \cap B \cap D) + P(A \cap C \cap D) + P(B \cap C \cap D) - P(A \cap B \cap C \cap D)$

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•••••98948	•••••1052	797	70782	43
•••••98907	•••••1083	812	74980	44
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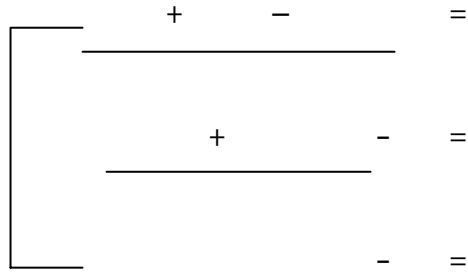
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