

**Programme:** M. A. Economics

**Course Code:** ECO 127  
**PRACTICE**

**Title of the Course:** OPTIONS: THEORY &  
**PRACTICE**

**Number of Credits:** 4

**Total Contact Hours:**48

**Effective from AY:** 2018-19

<b><u>Prerequisites for the course:</u></b>	Basic knowledge of Concepts in Financial Economics	
<b><u>Objective:</u></b>	This course is unique and practical oriented. The objective is to acquaint the students the actual skills of using options theory in various real life situations.	Contact Hours
<b><u>Content:</u></b>	<p><b>1. The basics of options</b> The need for options – Introduction to different types of options – stock options, index options, currency options, etc. Characteristics of options : call options, put options, European and American, Long call options and put options, Short call options and put options. Advantages of options compared to futures, forwards and stocks.</p> <p><b>2. Pricing of options</b> Factors affecting the price of the options. Intrinsic value and Extrinsic value. Options status relative to the underlying asset : In the money (ITM) At the money (ATM), Out of the money (OTM).</p> <p><b>3. Option valuations</b> Theoretical values of option, Black-Scholes options pricing model.Option Greeks : variables that affect the options values – Delta, Gamma, Theta, Rho,Vega.</p> <p><b>4. Options strategies</b> Different strategies of options for bullish, bearish and neutral market situations. Bullish strategies : long calls and short puts, bull call spreads and put spreads. Ratio call spreads. Bearish strategies : long puts, short calls bear put spreads, Neutral strategies : covered call writing, straddles, strangles, butterfly.</p> <p><b>5. Applications of Options</b> The functioning of the option market : stock options, index options, currency options, commodity options</p>	10  08  10  10  10
<b><u>Pedagogy:</u></b>	lectures/ case analysis/assignments/class room interaction/ analysing live options markets in the real time.	
<b><u>References/Readings</u></b>	<ul style="list-style-type: none"><li>Burghardt, Galen, (2003), The Eurodollar Futures and Options Handbook, McGraw-Hill.</li><li>Figlewski. S., W. Silber and M. Subrahmanyam,</li></ul>	

	<p>(1990), Financial Options, : From Theory to Practice, Business One Irwin.</p> <ul style="list-style-type: none"> <li>• Gastineau, G. L., (1988), The Stock Options Manual, 3rd edition, McGraw-Hill.</li> <li>• Graeme Guthrie,(2009) Real Options in Theory and Practice, Oxford University Press.</li> <li>• Hull , J., (2012), Options, Futures and Other Derivative Securities, 8th edition.</li> <li>• Jarrow, R. A. And A. Rudd, (1983), Option Pricing, Dow Jones – Irwin.</li> <li>• McMillan, L.G.,(1993), Options as a Strategic Investment, 3rd edition, New York Institute of Finance.</li> <li>• Natenberg, S., (1994), Options Volatility and Pricing : Advanced Trading Techniques, 2nd edition, Probus.</li> <li>• Sheldon Natenberg, (1994) Option Volatility &amp; Pricing : Advanced Trading Strategies and Techniques, McGraw-Hill.</li> <li>• Stoll, H. And R. Whaley, (1993), Futures and Options : Theory and Application, Thomson South Western</li> <li>• Taleb, Nassim, (1997), Dynamic Hedging : Managing Vanilla and Exotic Options,</li> <li>• Wiley.</li> </ul>	
<b><u>Learning Outcomes</u></b>	The students will be able to understand and analyse the options in Indian markets and will be in a position to analyse financial options, currency options and commodity options.	