

**MSA University**  
**Faculty of Engineering**  
**ECE Department**

**Course Name:** Cryptography

**Course Code:** ECE 5432

**Semester:** Spring 2015

<b>Week</b>	<b>Topic</b>
<b>1</b>	Introduction; History of Cryptography
<b>2</b>	Cryptology and simple cryptosystems
<b>3</b>	Conventional encryption techniques (Simple DES)
<b>4</b>	DES continued; Linear and Differential Cryptanalysis
<b>5</b>	Modes of Operations for block ciphers
<b>6</b>	Hash Functions and Message Authentication Codes
<b>7</b>	Introduction to Number Theory
<b>8</b>	Fermat theorem and Euler Theorem
<b>9</b>	Diffie-Hellman Key Exchange Protocol
<b>10</b>	Public key Encryption using Discrete Logarithms
<b>11</b>	RSA Public Key Cryptosystem
<b>12</b>	Digital signatures and the digital signature standard