

**Course Syllabus (Final – term – Semester 2)**

**Learning Group: Mathematics**

**Subject code**

**Subject: Math**

**Year Level: 12**

**Total: 1.0 credit**

No.	Topics	Contents	Objectives	Reference
1	Applications of integration	1.1 Introduction to integration 1.2 Indefinite integration 1.3 Definite integration 1.4 Integration of basic functions 1.5 Integration of trigonometric functions 1 1.6 Integration of trigonometric functions 2 1.7 Integration of exponential functions 1.8 Integration of logarithmic functions	<ul style="list-style-type: none"> <li>• By the end of this chapter, students should be able to                             <ul style="list-style-type: none"> <li>➤ Discuss on the usefulness of integration in solving problems satisfactorily</li> <li>➤ Identify steps of finding an area using integration</li> <li>➤ Calculate an area between a curve and the x-axis correctly</li> <li>➤ Calculate an area between a curve and the y-axis correctly</li> <li>➤ Calculate an area between a curve and a line which is in the form of <math>f(x)</math></li> <li>➤ Calculate an area between a curve and a line which is in the form of <math>f(y)</math></li> <li>➤ Calculate an area of a region bounded by a curve <math>y = f(x)</math> and a line <math>y = mx + c</math> where <math>m \neq 0</math></li> <li>➤ Use their knowledge on the test appropriately</li> </ul> </li> </ul>	

**Course Syllabus (Final – Semester 2)****Learning Group: Science****Year Level: 12****Subject code****Total: 1.0 credit****Subject: Science**

<b>Chapter/ Unit</b>	<b>Topics</b>	<b>Contents</b>	<b>Objectives</b>	<b>Reference</b>
4	The Structure of the Atom	4.1 Historical Development of Atomic Models 4.2 Isotopes and their importance 4.3 Radioactive Decay 4.4 Periodic table of Elements	<ul style="list-style-type: none"><li>• By the end of this chapter, students should be able to describe, explain the: Historical Development of Atomic Models Isotopes and their importance Electronic Structure of the Atom</li></ul>	Pages 17-28
5	Chemical Bonding  Fractional Distillation of Crude Oil	5.1 Relative Atomic Mass 5.2 Relative Molecular Mass 5.3 The Mole and Number of Particles 5.4 the Mole and the Mass of a Substance 5.5 Formation of Compounds 5.6 Ionic Bonds 5.7 Covalent Bonds 5.8 Properties of Ionic and Covalent Bonds	<ul style="list-style-type: none"><li>• By the end of this chapter, students should be able to describe, explain the:<ul style="list-style-type: none"><li>➤ Relative Atomic Mass</li><li>➤ Relative Molecular Mass</li><li>➤ The Mole and Number of Particles</li><li>➤ the Mole and the Mass of a Substance</li><li>➤ Chemical Formula of Substance</li><li>➤ Formation of Compounds</li><li>➤ Ionic Bonds</li><li>➤ Covalent Bonds</li><li>➤ Properties of Ionic and Covalent Bonds</li></ul></li></ul>	Pages 29-45  Pages 112-146

**Course Syllabus (Final – term – Semester 2)****Learning Group: Social****Subject code****Subject: Economics****Year Level: 12****Total: 1.0 credit**

<b>Chapter/ Unit</b>	<b>Topics</b>	<b>Contents</b>	<b>Objectives</b>	<b>Reference</b>
5	Market Intervention	5.1 Price Intervention 5.2 Quantity intervention – Quota 5.3 Sales Tax 5.4 Per-Unit Subsidy Concept Map Revision	<ul style="list-style-type: none"><li>• By the end of this chapter, students should be able to<ul style="list-style-type: none"><li>➤ Understand substitution effect of goods and services demand.</li><li>➤ Understand the linkage in demand for related goods and ability to predict results</li><li>➤ Analyze sine qua non of demand forecasting.</li><li>➤ Discuss the most important factors in decision to supply goods and services.</li><li>➤ Explain the factors of production by category.</li><li>➤ Understand the aspects of process of production and profitability that have short and long-term effects on quantity supplied.</li></ul></li></ul>	Page 40 – 72