



## Add On Course-Syllabus

<b>Course Title:</b> Introduction to Programming with Green Foot		
<b>Department :</b> Computer Science		
<b>Total Hours :</b> 30 Hours	<b>Credit:</b> 2	
<b>Course Pre-requisites/ Co-requisites</b>	Basic knowledge of the development of graphical applications in Java and basic applet concepts such as event handling.	
<b>Objectives:</b>	<ul style="list-style-type: none"><li>➤ To construct design that explicitly visualizes important concepts of object-oriented programming.</li><li>➤ To help students with valuable skills about software development by experiencing it firsthand.</li><li>➤ To implement a live object world scenario for the students</li><li>➤ To concrete by creating tangible experiences, explicitly visualizing them and guiding users through interactions.</li></ul>	
<b>Expected Learning Outcome:</b>	<ul style="list-style-type: none"><li>➤ To know about the various Applications of Multimedia.</li><li>➤ To develop two- dimensional graphical applications</li><li>➤ To design multimedia animations</li><li>➤ To know the knowledge about working with videos in multimedia applications</li><li>➤ To implement interactive games.</li></ul>	
<b>Module 1</b>	<b>Getting to know GreenFoot</b>	<b>6 Hours</b>
Getting Started, Objects and classes, Interacting with Objects, return types, parameters, Greenfoot execution, Understanding the class diagram		
<b>Module 2</b>	<b>Adding and Improving Scenarios(little Crab)</b>	<b>6 Hours</b>
The little Crab Scenario, making the Crab move, Turning, adding random behavior, Adding Worms, creating new Methods, Keyboard Control, Ending the game, Adding Sound.		
<b>Module 3</b>	<b>Finishing and Sharing Scenarios</b>	<b>6 Hours</b>
Adding Objects automatically, Creating new Objects, Animating Images, Greenfoot Images, Instance Variables(fields), Exporting Scenario, Export to application, Export to a web page, Publishing on the Greenfoot Gallery.		

<b>Module 4</b>	<b>Making Music</b>	<b>6 Hours</b>
Animating a key, Producing the sound, Abstraction: Creating multiple keys, Using loops : The while loop, Using arrays.		
<b>Module 5</b>	<b>Creating Images and Sounds</b>	<b>6 Hours</b>
Preparation, Working with sound, Sound Recording and editing, Sound file formats and file sizes, working with images, Image files and file formats, Drawing Images, Combining images, files and dynamic drawing.		
<b>Book References</b> <ol style="list-style-type: none"> <li>1. Introduction to Programming with Greenfoot, Michael Kolling, Pearson Education.</li> </ol>		
<b>Web References</b> <ol style="list-style-type: none"> <li>1. Introduction to Programming with Greenfoot - <a href="http://www.greenfoot.org/book/">http://www.greenfoot.org/book/</a></li> <li>2. GreenFoot Tutorial - <a href="https://www.greenfoot.org/files/translations/tutorial.html">https://www.greenfoot.org/files/translations/tutorial.html</a></li> <li>3. You Tube tutorial channels- Tanner Crow, William Olivier</li> </ol>		
<b>Mode of Evaluation</b>	Assessment Test-1 Assessment Test-2 Assessment Test-3	20% 20% 20%
<b>Course Coordinators</b>	<ul style="list-style-type: none"> <li>• Mrs.A.Nesa Agnes Bellinta</li> <li>• Dr.J.Kavitha</li> </ul>	
<b>Course Instructors</b>	<ul style="list-style-type: none"> <li>• Mrs. Siva Mahalakshmi,</li> <li>• Miss.S.M.A.Hameed Farhana</li> <li>• Miss.P.Divya</li> </ul>	