

**CURRICULUM PLAN OF Dr. Nishant Verma**  
(EVEN SEMESTER 2020-21)

B.Sc. (LS) SEC-Chemistry, III Year

Semester – VI

**Name of Paper & Code:- SEC - GREEN METHODS IN CHEMISTRY, 2 Periods per week**

Contents	Allocation of Lecture	Month wise schedule to be followed	Tutorials/Assignment/ Presentation etc.
<b>Theory and Hands on Experiments:</b> Introduction: Definitions of Green Chemistry, Brief introduction of twelve principles of green chemistry with Examples, special emphasis on atom economy, reducing toxicity, Green Solvents, Green Chemistry and Catalysis and alternative sources of energy, Green energy and sustainability.	18 Lectures	January - February	-Syllabus Overview -Reference Books -Problem solving
<b>Examples of Green Synthesis/ Reactions and some real world cases</b> <b>1.</b> Surfactants for Carbon Dioxide – replacing smog producing and ozone depleting solvents with CO <sub>2</sub> for precision cleaning and dry cleaning of garments. <b>2.</b> Designing of Environmentally safe marine antifoulant. <b>3.</b> Rightfit pigment: synthetic azopigments to replace toxic organic and inorganic pigments. <b>4.</b> An efficient, green synthesis of a compostable and widely applicable plastic (poly lactic acid) made from corn.	12 Lectures	March - April	- Related Problems - Assignment - Home Register Overview - Student's difficulties - Previous Year Question Papers discussion