FRAMEWORK :

CONTENT : The Layout of the Course Structure

NOTES : Detailed explanation of every slide having a specific topic.

RESOURCES : Link to various articles, reports, you tube video etc for reference.

COURSE STRUCTURE :

- <u>Primer</u> : A quiz reflecting your existing knowledge, along with answers and explanations which will set the rapport for the course.

- <u>Introduction</u> :

❏ Plastic as a Material and its relevance in the present context.

- <u>History of Plastics</u> :

❏ Background
❏ Review of the plastics industry including growth trends and drivers that has made it survive the global and local market for centuries.

- <u>Types of Plastics and it Uses :</u>

❏ Manufacturing methods and technology,
❏ Environmental impact by Data and graph analysis.

- <u> Plastic as waste and on the contrary as gold in the economy :</u>

❏ Dependency for packaging
❏ Product Design
❏ Innovations
❏ Future impact in multidimensions
❏ Problems due to plastic waste.

PRACTICE EXERCISE ONE

- <u>Plastic Waste Management :</u>

- ❏ Regulations, directives and guidance documents issued by the government.
- ❏ Reduce, Reuse, Recycle and Recovery
- ❏ Global and Local perspectives on the Plastic recycling industry.
- ❏ Initiatives and measures proposed by the government for future, NGO's and pressure groups accelerating to more sustainable business and policy around plastics.
- ❏ Processes for recycling plastics - Separation technology, products widely made of recycled plastic.
- ❏ Various startups, businesses running from products made of recycling plastic : Utilization of the concept of Circular economy and resource efficiency,
- ❏ Design thinking on plastic waste : Plastic to road construction, plastic to toilet blocks etc

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PRACTICE EXERCISE TWO

- <u>Alarming Impact of plastics on Marine Life, Effect on Wildlife, Human Health and Environment</u> :

- ❏ Researchers and industries addressing these challenging problems.

KNOWLEDGE TEST ONE

- <u>Alternative to Plastic :</u>

- ❏ Materials that can be adopted and manufactured as alternatives, availability and affordability in the market and in the local context.

- <u>Summary and Conclusions</u> :

KNOWLEDGE TEST TWO