

**HONOURS CERTIFICATE PROGRAMME PROPOSAL  
AY 2021-2022**

**Department: Caius Research Laboratory**

1. Frontiers in Biology Research: An interdisciplinary approach (One credit).
2. INTELLECTUAL PROPERTY RIGHTS: An Overview and Applications (Two Credit)
3. Understanding Urban Sustainable living for a cleaner and greener planet. (Two Credit)

<b>General Information of the Activity</b>	
1.	<b>Department and Hub</b> Caius Research Laboratory Biological Science
2.	<b>Title of the Activity</b> <b>Frontiers in Biology Research: An interdisciplinary approach</b>
3.	<b>Name of the Professor taking the course and Email address</b> Dr. Priya Sundarrajan Email: priya.s@xaviers.edu
4.	<b>Name/s of the Resource person/s</b> From different fields of Biology/Physics and Chemistry
5.	<b>Name of the Dept Coordinator and Email address</b> Dr. Priya Sundarrajan Email: priya.s@xaviers.edu
6.	<b>Name of the Hub Coordinator and Email address</b> Dr. Priya Sundarrajan Email: priya.s@xaviers.edu
7.	<b>Number of credits for the activity and number of hours</b> one
8.	<b>Fees</b> 750/-
9.	<b>Eligibility</b> FY, SY, TY Students of Science faculty
10.	<b>Number of students</b> 20
11.	<b>Duration and Time</b> September to December 2021, 6-7 one – two hours lectures after class.

<b>Details of the Activity</b>	
1	<b>Title:</b> Frontiers in Biology Research: An interdisciplinary approach
2	<b>Learning Objectives:</b> <ol style="list-style-type: none"> <li>a. Introduce students to different areas of research in Biology</li> <li>b. Inculcate the spirit of research in students.</li> <li>c. To introduce the students to different techniques in research.</li> </ol>
3	<b>Learning Outcomes:</b> <b>After Completing the course, the students will be able to</b> <ol style="list-style-type: none"> <li>a. Appreciate the interdisciplinary approach to research in different areas of Biology</li> <li>b. Understand some techniques used in research</li> <li>c. Apply the knowledge gained to understand their courses better</li> </ol>
4	<b>Description</b> The program is a lecture- workshop series, aimed to introduce the different tools and techniques in frontier areas of Biology. An interdisciplinary approach involving Physics, Chemistry etc.
5	<b>Evaluation:</b> Continuous, Report at the end of the program
5	<b>Modules if any:</b> <b>Different techniques and fields of biology will be covered:</b> Biotechnology. Immunology, Genetics, Nanotechnology etc. to name a few.

<b>General Information of the Activity</b>	
1.	<b>Department and Hub</b> Caius Research Laboratory
2.	<b>Title of the Activity</b> <b>INTELLECTUAL PROPERTY RIGHTS: An Overview and Applications</b>
3.	<b>Name of the Professor taking the course and Email address</b> Dr. Priya Sundarrajan Email: priya.s@xaviers.edu
4.	<b>Name/s of the Resource person/s</b> Adv. Raj Mohan Amonkar Adv. Manmohan Amonkar Adv. Jacob Kadantot
5.	<b>Name of the Dept Coordinator and Email address</b> Dr. Priya Sundarrajan Email: priya.s@xaviers.edu
6.	<b>Name of the Hub Coordinator and Email address</b> Dr. Priya Sundarrajan Email: priya.s@xaviers.edu
7.	<b>Number of credits for the activity and number of hours</b> Two, Thirty
8.	<b>Fees</b> Rs. 1000/-
9.	<b>Eligibility</b> SY, TY Students of Any discipline
10.	<b>Number of students</b> 20-25
11.	<b>Duration and Time</b> The course will start from September 2021 – January 2022. Lectures will be of two hours duration after classes, Once or twice a week depending on the availability of resource persons
<b>Details of the Activity</b>	
1	<b>Title:</b> INTELLECTUAL PROPERTY RIGHTS: An Overview and Applications
2	<b>Learning Objectives:</b> To understand the basic concepts of various aspects of IPR

3	<p><b>Learning Outcomes:</b></p> <p>The students who have successfully completed this course should:</p> <ul style="list-style-type: none"> <li>• have an understanding of the fundamental principles relating to copyright, patents, designs, trademarks and traditional knowledge</li> <li>• be able to identify, apply and assess principles relating to each of these areas of intellectual property.</li> </ul>
4	<p><b>Description:</b></p> <p>The course is structured as an introductory course with the aim of ushering and familiarizing students and professionals to the concepts of Intellectual property, its Protection, Enforcement.</p>
5.	<p><b>Evaluation:</b></p> <p>Continuous, Assignments and Presentations</p>
6,	<p><b>Modules if any:</b></p> <p>General Principles of Intellectual Property Rights  Trademarks  Patent  Copyrights  Industrial Designs  Trade Secrets  Traditional Knowledge and Plant Varieties</p>

<b>General Information of the Activity</b>		
1.	<b>Department and Hub</b>	<b>Caius Research Laboratory Biological Hub. This program will be interdisciplinary credit</b>
2.	<b>Title of the Activity</b>	Understanding Urban Sustainable living for a cleaner and greener planet. The Program is in collaboration with the NGO RUR GreenLife
3.	<b>Name of the Professor taking the course and Email address</b>	Dr. Priya Sundarrajan priya.s@xaviers.edu
4.	<b>Name/s of the Resource person/s</b>	Dr. Aparna Pandey, RUR Green Life and other experts from the field
5.	<b>Name of the Dept Coordinator and Email address</b>	Dr. Priya Sundarrajan Email: priya.s@xaviers.edu
6.	<b>Name of the Hub Coordinator and Email address</b>	Dr. Priya Sundarrajan Email: priya.s@xaviers.edu
7.	<b>Number of credits for the activity and number of hours</b>	Two, Thirty
8.	<b>Fees</b>	Rs.1000/-
9.	<b>Eligibility</b>	FY, SY, TY Students of all steams
10.	<b>Number of students</b>	20-25
11.	<b>Duration and Time</b>	Duration: 30 hours Honours Program Pattern: 12 Sessions of two – 2.5 hours each. After class hours, via Zoom in online mode

<b>Details of the Activity</b>	
1	<b>Title: Understanding Urban Sustainable living for a cleaner and greener planet</b>
2	<p><b>Learning Objectives:</b></p> <ol style="list-style-type: none"> <li>1. To understand local and global sustainability practices</li> <li>2. To understand waste footprint and impact of current waste management practices</li> <li>3. To understand local business as solution providers to waste management issues.</li> </ol>
3	<p><b>Learning Outcomes:</b></p> <p><b>After completing the course the students will be able to attain</b></p> <ol style="list-style-type: none"> <li>1. Complex problem solving (Waste management is a global crisis, and doing our part, adopting alternatives and making choices is the need of the hour)</li> <li>2. Green mindset (Every business right now is moving from a "for-profit" motto, to "for-purpose" motto. Students can leverage this course to show recruiters what new ideas they bring in helping their companies be more sustainable, participate in their Sustainability/CSR wings and help be green champions within the organization)</li> <li>3. Critical thinking &amp; Innovation</li> <li>4. Creativity &amp; Adaptability (we live in a VUCA world- Volatile, Uncertain, Complex &amp; Ambiguous, which serves as a platform for creative thinkers and dynamic decision makers. Through this course, the awareness and methods of tackling small challenges would trampoline their ability to take on bigger challenges in the future)</li> </ol>
4	<ol style="list-style-type: none"> <li>1. <b>Description:</b> The course will be focused on the students obtaining awareness and methods of tackling small challenges would trampoline their ability to take on bigger challenges in the future.</li> </ol>

5	<p>Modules if any:</p> <p>Session 1: Understanding Sustainability - Triple Botton/line</p> <p>Session 2: Understanding sustainability - Circular Economy</p> <p>Session 3: Interdependence amongst life forms - Biodiversity and Mangrove Ecosystems</p> <p>----Assignment----</p> <p>Session 4: Understanding waste streams and segregation at source</p> <p>Session 5: Presentation of waste audit by students</p> <p>-----Assignment-----</p> <p>Session 6 : Science of Composting</p> <p>Session 7: Case studies and live examples of composting in urban setup</p> <p>Session 8: Sustainable Eating -Food Matters</p> <p>-----Assignment-----</p> <p>Session 8: Trash Talk- untying with disposables</p> <p>Session 9: Sustainable fashion</p> <p>Session 10: Group discussion</p> <p>Session 11: Organic cleaners for home</p> <p>Session 12: Making sustainable soaps and shampoos</p> <p>Session 13: Key takeaways and idea-sharing about Green living.</p> <p>----- Assignment to make one of the above demos at home-----</p>
6	<p><b>Evaluation: continuous Assignments and Presentations</b></p>