# *Problem Solving, Innovation and Communications*

**Assignment #1**

# Due Date: *14th March 2025, 2pm*

This assignment is an individual assignment and counts for 50% of your overall mark.

The goal of the assignment is to write a paper about a specific creativity methodology, it must include two papers that use this technique, and details of an experiment you do yourself. I have created a skeleton for you, so this can be done in just four weeks as follows:

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| **Week 1:** | * Select a technique, either from the list below or somewhere else * Find two papers that use this technique using Google Scholar * Write a 100-200 word summary of this technique |
| **Week 2:** | * Read the first paper * Select an appropriate diagram from the paper * Write a 300-400 word summary of this paper |
| **Week 3:** | * Read the second paper * Select an appropriate diagram from the paper * Write a 300-400 word summary of this paper |
| **Week 4:** | * Select a simple scenario, agree with Damian * Do the technique on that scenario * Write a 350-450 word summary of the outcome |

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| Examples of Creativity Techniques   1. 10X Technique 2. 6-3-5 Method 3. Attribute Listing 4. Biomimicry 5. Brainstorming 6. Brainwriting Pool 7. CATWOE 8. COCD-Box 9. Delphi Technique 10. Doblin's 10 Types of Innovation® 11. EPV 12. Fishbone Analysis 13. Five Ws 14. Force Field Analysis 15. Harvey Cards 16. Kano Model Analysis 17. Lotus Blossom 18. Metaphorical Thinking 19. Metaplan Technique 20. Mindmaps 21. Morphological Analysis 22. O'Connor's Seven Essential Innovation Questions (SEIQ) Framework 23. Osborn Checklist 24. Pareto Diagramming 25. Persuasion Technique 26. PINC Filter 27. QFD 28. Relevance Tree Analysis 29. SCAMPER 30. Six Thinking Hats 31. Starbursting 32. SWOT 33. Synectics 34. Systematic Inventive Thinking 35. The Business Model Innovation Pattern Cards 36. The Excursion Technique 37. The Reframing Matrix 38. TRIZ 39. Unified structured inventive thinking 40. Zero Draft |

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| **Marking Scheme:**   |  |  | | --- | --- | | Selected a technique | 2% | | Who invented it | 2% | | When did they invent it | 2% | | Why was it developed | 2% | | Explain how it works | 12% | | Review of paper 1 | 25% | | Selection of diagram from paper 1 | 5% | | Review of paper 2 | 25% | | Selection of diagram from paper 2 | 5% | | Your own experiment | 15% | | Your reflections | 5% | |

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| **Submission of Assignment:**  You are required to electronically submit your assignment on or before the due date. To electronically submit your assignment, e-mail it to [Damian.X.Gordon@tudublin.ie](mailto:Damian.X.Gordon@tudublin.ie) with the subject heading: "PSIC Assignment 1", as well as submitting on Brightspace. |

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| **Lateness Policy**:  If you submit your assignment late, you will be marked normally, and then I will multiple your result by 0.6.  **Plagiarism Policy**:  If I catch you plagiarising, I will be my upmost to see that you are kicked off the course. |