Appendix 1

**M.Sc in the field of Food Safety and Toxicology**

**Proposed Learning Outcomes of the FSTX Programme (PLOs)**

1. Understanding the basic principles underpinning the science of toxicology and food safety.

2. Understanding the critical role basic science and toxicology, in particular, plays in food and drug safety evaluation and management.

3. Appreciate the current state-of-the-art methodology employed to investigate the effects of chemical and microbial hazards in food, and evaluate their potential risks to human health and the environment.

4. Understanding the basic concepts of risk analysis and develop practical skills in conducting quantitative chemical risk assessment; formulating/implementing effective risk management strategies in protecting human health and the environment by working with stakeholders with contending viewpoints and beliefs (the authorities, food producers/manufacturers and consumers).

5. Gaining in-depth knowledge of common chemical and microbial hazards in foods; understanding the impact of food borne pathogens and factors contributing to the increase in food incidence in our daily life.

6. Understanding the basic principles of core food quality and safety management tools in food industry (HACCP, GMP and Product Traceability) and code of ethics in food and health; developing practical skills in formulation/implementation of an effective HACCP Plan in a food establishment.

7. Apply critical thinking and integration of knowledge gained to the study of toxicology /food safety-related issues; demonstrate ability to conduct an independent scientific research project from conception to completion, involving planning, execution, data collection and analysis, conclusions and report write-up.

8. Demonstrating teamwork skills and interpersonal dynamics in group assignments and class exercises.

9. Acquiring systematic and logical approaches to problem solving and crisis handling; developing technical writing and communication skills through assignments, report write-up, role play, group discussions and oral presentations.

| **Education aims of the University's TPg**<br>To enable our students to develop their capabilities in: | **Programme Level Outcomes**<br>After completing the FSTX Programme, students will be able to: |
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| (i) Critical intellectual enquiry and acquiring up-to-date knowledge and research skills in a discipline/ profession | 1. Understanding the basic principles underpinning the science of toxicology and food safety<br>2. Understanding the critical role basic science and toxicology, in particular, plays in food and drug safety evaluation and management.<br>3. Appreciate the current state-of-the-art methodology employed to investigate the effects of chemical and microbial hazards in food, and evaluate their potential risks to human health and the environment.<br>4. Understanding the basic concepts of risk analysis and develop practical skills in conducting quantitative chemical risk assessment; formulating/implementing effective risk management strategies in protecting human health and the environment by working with stakeholders with contending viewpoints and beliefs (the authorities, food producers/manufacturers and consumers).<br>5. Gaining in-depth knowledge of common chemical and microbial hazards in foods; understanding the impact of food borne pathogens and factors contributing to the increase in food incidence in our daily life.<br>6. Understanding the basic principles of core food quality and safety management tools in food industry (HACCP, GMP and Product Traceability) and code of ethics in food and health; developing practical skills in formulation/implementation of an effective HACCP Plan in a food establishment. |
| (ii) Application of knowledge and research skills to practice or theoretical exploration, demonstrating originality and creativity | 4. Understanding the basic concepts of risk analysis and develop practical skills in conducting quantitative chemical risk assessment; formulating/implementing effective risk management strategies in protecting human health and the |

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| | environment by working with stakeholders with contending viewpoints and beliefs (the authorities, food producers/manufacturers and consumers).<br>6. Understanding the basic principles of core food quality and safety management tools in food industry (HACCP, GMP and Product Traceability) and code of ethics in food and health; developing practical skills in formulation/implementation of an effective HACCP Plan in a food establishment.<br>7. Apply critical thinking and integration of knowledge gained to the study of toxicology /food safety-related issues; demonstrate ability to conduct an independent scientific research project from conception to completion, involving planning, execution, data collection and analysis, conclusions and report write-up. |
| (iii) Tackling novel situations and ill-defined problems | 4. Understanding the basic concepts of risk analysis and develop practical skills in conducting quantitative chemical risk assessment; formulating/implementing effective risk management strategies in protecting human health and the environment by working with stakeholders with contending viewpoints and beliefs (the authorities, food producers/manufacturers and consumers).<br>6. Understanding the basic principles of core food quality and safety management tools in food industry (HACCP, GMP and Product Traceability) and code of ethics in food and health; developing practical skills in formulation/implementation of an effective HACCP Plan in a food establishment.<br>7. Apply critical thinking and integration of knowledge gained to the study of toxicology /food safety-related issues; demonstrate ability to conduct an independent scientific research project from conception to completion, involving planning, execution, data collection and analysis, conclusions and report write-up. |

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| | 9. Acquiring systematic and logical approaches to problem solving and crisis handling; developing technical writing and communication skills through assignments, report write-up, role play, group discussions and oral presentations. |
| (iv) Collaboration and communication of disciplinary knowledge to specialists and the general public | 3. Appreciate the current state-of-the-art methodology employed to investigate the effects of chemical and microbial hazards in food, and evaluate their potential risks to human health and the environment.<br>4. Understanding the basic concepts of risk analysis and develop practical skills in conducting quantitative chemical risk assessment; formulating/implementing effective risk management strategies in protecting human health and the environment by working with stakeholders with contending viewpoints and beliefs (the authorities, food producers/manufacturers and consumers).<br>8. Demonstrating teamwork skills and interpersonal dynamics in group assignments and class exercises<br>9. Acquiring systematic and logical approaches to problem solving and crisis handling; developing technical writing and communication skills through assignments, report write-up, role play, group discussions and oral presentations. |
| (v) Awareness of and adherence to personal and professional ethics | 4. Understanding the basic concepts of risk analysis and develop practical skills in conducting quantitative chemical risk assessment; formulating/implementing effective risk management strategies in protecting human health and the environment by working with stakeholders with contending viewpoints and beliefs (the authorities, food producers/manufacturers and consumers).<br>6. Understanding the basic principles of core food quality and safety management tools in food industry (HACCP, GMP and Product Traceability) and code of ethics in food and health; developing practical skills in formulation/implementation of an |

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| | effective HACCP Plan in a food establishment.<br>8. Demonstrating teamwork skills and interpersonal dynamics in group assignments and class exercises |
| (vi) Enhancement of leadership and advocacy skills in a profession | |

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