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|  | 1st year | 2nd and 3rd year | Ready to graduate |
| Identify and Define Problems | * Recognize simple problems in academic and real-world settings. * Describe problems clearly and concisely. * Demonstrates a limited ability in identifying a problem statement or related contextual factors. | * Analyze complex disciplinary problems, breaking them down into components. * Evaluate the causes of problems within professional and disciplinary contexts. * Demonstrates the ability to construct a problem statement with evidence of most relevant contextual factors, and problem | * Identify and define complex interdisciplinary or societal challenges. * Synthesize information to define high-impact problems that require innovative solutions. * Demonstrates the ability to construct a clear and insightful problem statement with evidence of all relevant contextual factors. |
| Design and Implement Solutions | * Generate basic solutions to straightforward problems. * Apply simple problem-solving strategies. * Identifies one or more approaches for solving the problem that do not apply within a specific context. | * Create innovative solutions by applying critical thinking and creativity. * Adapt solutions based on new information or evolving circumstances. * Identifies multiple approaches for solving the problem, only some of which apply within a specific context. | * Design and implement interdisciplinary solutions. * Evaluate the success and scalability of solutions, refining as necessary. * Identifies multiple approaches for solving the problem that apply within a specific context. |
| Evaluate and Reflect on Solutions  \*Cultivating Well-being | * Reflect on the effectiveness of solutions and identify areas for improvement. * Compare outcomes to expected results. * Evaluation of solutions is superficial (for example, contains cursory, surface level explanation) and includes the following: considers history of problem, reviews logic/ reasoning, examines feasibility of solution, and weighs impacts of solution. | * Assess the effectiveness of solutions in achieving goals. * Critique and refine solutions based on feedback and evolving needs. * Evaluation of solutions is adequate (for example, contains thorough explanation) and includes the following: considers history of problem, reviews logic/ reasoning, examines feasibility of solution, and weighs impacts of solution. | * Engage in continuous improvement efforts by evaluating solutions over time. * Advocate for sustainable, long-term problem-solving strategies that address broader societal impacts. * Evaluation of solutions is deep and elegant (for example, contains thorough and insightful explanation) and includes, deeply and thoroughly, all of the following: considers history of problem, reviews logic/ reasoning, examines feasibility of solution, and weighs impacts of solution. |

\*Contributes to the development of additional competencies