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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.
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| 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.
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| 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.
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\*Contributes to the development of additional competencies