**Technology-Enhanced Flexible Learning**

**Final Exercise: Recalibrated Syllabus**

**Teacher:** Ethel D. Nabor

**Course:** GEC MATH -Mathematics in the Modern World

**Course Outcomes:**

* Create a timeline in the history of mathematics and choose an approach to appreciate the nature of mathematics.
* Compare and contrast problems identified methods of problem solving strategies for routine and non-routine problems.
* Assess their strengths and weaknesses in solving problems in the different areas in General Education Curriculum mathematics in order to consider their readiness in the study of their chosen programs.

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| **Learning Outcomes** | **Topics** | **Teaching Learning Activities** | **Assessments** | **Materials** |
| Know the nature of mathematics. | * Characteristics of mathematical language
* Patterns and Numbers in Nature and the World;
* The Fibonacci Sequence;
* Characteristics of mathematical language
 | * Online discussion (Showing solution)
* Pre-recorded Video
* Reading online source and e-copy book/PDF
* View a solution from Youtube and pre-recorded solution
* Utilize Google chat, Gb Messenger in establishing connections
 | * Graded Homework/Activity
* Weekly quizzes
* Instructor-created exams
 | * Mathematics in the Modern World. Philippine Edition. Rex Bookstore, Inc.2018
* <https://drive.google.com/file/d/1vI_PTs5p8QAuYDvMlBLJDiCho2rsi-Uv/view?usp=drive_web&authuser=0>
* <https://drive.google.com/file/d/1ouUupJbJMenuBR57FH73HT6HkEueyTCw/view?usp=drive_web&authuser=0>
* <https://www.youtube.com/watch?v=SY0ixs-_IGc>
* <https://www.youtube.com/watch?v=KV8Hqi-YoqE>
* <https://www.youtube.com/watch?v=Mm-ZZzafP2Q>
* <https://www.youtube.com/watch?v=NV_tvZ5Mb3k>
* <https://www.youtube.com/watch?v=MSw0JDbfNhA>
* <https://www.youtube.com/watch?v=MassxXy8iko>
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| Appreciate practical, intellectual, and aesthetic dimensions of mathematics. | * Polya’s 4-steps in problem solving
* Problem solving strategies;
* Mathematical problems involving patterns; and
* Recreational problems using mathematics.
 | * Online discussion (Showing solution)
* Pre-recorded Video
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* <https://drive.google.com/file/d/1m9Bxdn6YjtQgzfMz27Iat-DtJ3Lk9R0y/view?usp=drive_web&authuser>=0
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| Demonstrate reasoning and problem-solving skills. | * Inductive and deductive reasoning;
* Simple interest and compound interest;
 | * Online discussion (Showing solution)
* Pre-recorded Video
* Reading online source and e-copy book/PDF
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* <https://www.youtube.com/watch?v=dKYplCzul3c>
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| Apply mathematical tools in daily life. | * Data and Statistics: a conceptual approach
* Sampling procedures: probability and non-probability
* Measures of Central Tendency and Dispersion;
* Shapes of Distribution: Kurtosis and skewness;
* Measures of relative position;
* Probabilities and normal distribution;
* Linear regression and correlation.
 | * Online discussion (Showing solution)
* Pre-recorded Video
* Reading online source and e-copy book/PDF
* View a solution from Youtube and pre-recorded solution
* Utilize Google chat, Gb Messenger in establishing connections
 | * Graded Homework/Activity
* Weekly quizzes
* Instructor-created exams
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* <https://www.youtube.com/watch?v=KIBZUk39ncI>
* <https://drive.google.com/file/d/1kDQhh7f2UpcKZy4RYIBDyFsZIvfyJli3/view?usp=drive_web&authuser=0>
* <https://drive.google.com/file/d/14VdqaaZ8H9aVwgqlMQfxFuVb9qMInFSC/view?usp=drive_web&authuser=0>
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| Produce action research. | * Data and Statistics: conceptual approach
 | * Online video session
* Open forum
* Utilize Google chat, Gb Messenger in establishing connections
 | * Performance Task
 | * Research books
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