**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> |
| 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 * 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/1wkDjKy7eK14tkHDRgHvOuOGWP1uX-5yX/view?usp=drive_web&authuser=0> * <https://drive.google.com/file/d/1m9Bxdn6YjtQgzfMz27Iat-DtJ3Lk9R0y/view?usp=drive_web&authuser>=0 |
| 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 * 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/13NSK7_nXVELMKOx3NFC9iPjI2iE4b9_v/view?usp=drive_web&authuser=0> * <https://www.youtube.com/watch?v=dKYplCzul3c> |
| 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 | * Mathematics in the Modern World. Philippine Edition. Rex Bookstore, Inc.2018 * <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> |
| 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 |