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MHF4U Course outline

# Overall expectations

By the end of this course, students will have sufficiently demonstrated an understanding of the knowledge required by the Ministry of Education of Ontario, including:

Characteristics of functions

Relationship between polynomial and rational functions and graphs

Relationship between logarithmic and exponential functions and graphs

Relationship between trigonometric functions and graphs

# Suggested Studying Time

Lectures: 2 hours \* 18 = 36 hours

Assignments: 3 hours \* 5 = 15 hours

Exams: 2 hours \* 6 = 12 hours

Total: 63 hours

# EVALUATION:

Assignment (5) – 40%

Tests (Best 4 of 5) – 40%

Final Exam – 20%

# Resource Link:

<https://github.com/derekkailiu/MHF4U-Mar-Apr-2018>

**SCHEDULE**

|  |  |  |  |
| --- | --- | --- | --- |
| Week 1 | March 20th  4pm – 6pm |  | * Topic discussed: Basic characteristics of functions * Review of past knowledge * Connecting Graphs and Equations of Polynomial Functions |
| March 22nd  4pm-6pm | Assignment 1 |
| March 27th  4pm-6pm |  |
| March 29th  4pm-6pm |  |
| Week 2 | April 3rd  4pm-6pm | Assignment 2  **DUE:** Assignment 1 | * Solving Polynomial and Rational Equations * Connecting Graphs and Equations of Rational Function * Solving Inequalities |
| April 5th  4pm-6pm | Test 1 |
| April 7th  10am-12pm  1pm-3pm |  |
| April 8th  10am-12pm  1pm-3pm | Test 2 |
| Week 3 | April 9th  4pm-6pm | Assignment 3  **DUE:** Assignment 2 | * Evaluating Logarithmic Expressions * Connecting Graphs and Equations of Logarithmic Functions * Solving Exponential Equations   Solving Logarithmic Equations |
| April 12th  4pm-6pm |  |
| April 14th  10am-12pm  1pm-3pm | Test 3 |
| Week 4 | April 15th  10am-12pm  1pm-3pm | Assignment 4  **DUE:** Assignment 3 | * Understanding Rates of Change * Combining Functions * Using Function Models to Solve Problems |
| April 21st  10am-12pm  1pm-3pm | Test 4 |
| Week 5 | April 22nd  10am-12pm  1pm-3pm | Assignment 5  **DUE:** Assignment 4 | * Understanding and Applying Radian Measure * Connecting Graphs and Functions of Trigonometric Functions * Solving Trigonometric Equations |
| April 24th  4pm-6pm |  |
| April 25th  4pm-6pm |  |
| April 26th  4pm-6pm | Test 5 |

Note: Final Exam Date to be announced prior to week 5

This schedule is subject to modification as required