**Pre-Calculus Math 30-1**

September 2018 – January 2019

**TEACHERS:** A. Austin, M. Froese

This course is designed for students who intend to take Calculus in their Grade 12 year or are entering a field which requires Calculus. Post-secondary entrance into the Faculty of Science, Engineering and Business requires Pre-Calculus Mathematics 30-1. This course is an excellent option for students who enjoy Mathematics and are interested in developing a deep understanding of Math.

Each unit will be worth a different percentage; this value is determined by the amount of time spent on each topic as well as the importance the outcomes in that unit.   These percentages are what determine your overall teacher course mark in Math 30-1.

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| **Unit** |
| **Relations and Functions: Transformations, Operations on Functions (19%)**  Using graphs and related equations perform translations, stretches, reflections and combinations of transformations including the inverse. Using functions, graphically and algebraically, perform operations and composition on the functions. |
| **Relations and Functions: Exponents and Logarithms (20%)**  Graph and analyze exponential and logarithmic functions, solve equations, understand and apply the laws of logarithms. |
| **Relations and Functions: Polynomials, Rationals and Radicals (16%)**  Graph and analyze polynomial, radical and rational functions. Factor polynomial functions of degree 5 or less. |
| **Trigonometry (29%)**  In degree or radian; use angles in standard position, use the unit circle, solve problems using the six trig ratios (sin, cos, tan, csc, sec, cot), solve trig equations. Graph and analyze sine, cosine and tangents functions and prove trig identities. |
| **Permutations and Combinations (16%)**  Solve problems using permutations, combinations or both (including fundamental counting principle and factorial notation).  Binomial expansion, including using the binomial theorem. |

**COURSE EVALUATION**

**70%..........Unit Marks**

a)   Quizzes…………………………………………....25%

b)   Unit Exam (*Major Summative Assessment*)……...75%

**30%..........Diploma Exam:** Wednesday, January 23, 2018: 9:00 am to 12:00 pm.

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| https://lh6.googleusercontent.com/M9bunb34sSLSZH_rkwwu-nSWPLJKszpXjJkAlX2eNTM_6g10y0LS28kGA_ZWZP4e-Vi7PIELRh0FpfSymn9d1MH42eBbqPKnirMGHXjPu-6Mbc8VezFKi39regeuFjgffRA4KDBehttps://lh6.googleusercontent.com/M9bunb34sSLSZH_rkwwu-nSWPLJKszpXjJkAlX2eNTM_6g10y0LS28kGA_ZWZP4e-Vi7PIELRh0FpfSymn9d1MH42eBbqPKnirMGHXjPu-6Mbc8VezFKi39regeuFjgffRA4KDBe**LCHS Assessment Policy**  **(For the complete policy please see** [**https://goo.gl/ByAvQN**](https://goo.gl/ByAvQN)**)** | | |
| **Assessment Design and Evaluation** | **Late Assignments** | **Reassessment** |
| * All Assessments are based on the learning outcomes written by Alberta Education. * All grades are criteria based and indicate the level of student achievement in relation to mastery of the outcomes. * Students will receive feedback on work that is completed on time. | * Late assignments need to be submitted the following day; failure to do so will result in parent contact and an assigned flex. Failure to meet this deadline will result in a meeting with administration and a possible zero being calculated into the final grade. | * Students may request a reassessment. They must put in the request within two days of receiving the marked final unit assessment. The requirements and date of reassessment will be set by the teacher.   *See below for specific information regarding the reassessment policy in Math 30-1* |

**LCHS Math 30-1 Reassessment Policy**

Teachers will give students the opportunity to demonstrate new learning within each unit throughout the course. Class time will not be provided for the reassessment process.

* The request to reassess must be received within **two days** of receiving the exam mark.
* Reassessments for unit exams will be given **within two weeks** of the original assessment being returned.
* **Within one week** of the exam being returned, students must complete unit exam corrections and review them with their teacher. The exam corrections must be done on a separate sheet of paper for **each** incorrect question or problem on the exam:
  + Number the problem/question and rewrite it.
  + Write at least **two complete sentences** explaining what your error was and what you need to do to correct it.  Write enough to prove that you understand it now.
  + Show all work to correct the problem or question and include the right answer.
* Students can also complete or redo the original practice questions and/or quiz questions and/or work with web based resources: IXL practice questions, Khan Academy etc.
* Only a single reassessment will be provided for an individual unit exam.

**Reassessment mark will fully replace the original unit exam mark.**

**Course Materials**

* Binder with looseleaf
* Pencils, pens
* Textbook
* Calculator: TI-83 Plus, TI-84, TI-84 Plus, TI-NSpire (Staples, Walmart)
* Highlighters
* Dividers

**Course Expectations**

1. Come to every class on time. Excellent attendance is key to success in school.

2. Come to class prepared to learn with all materials.

3. Pay attention during instruction and take notes. Cell phones and head phones should not be used during instruction but listening to music during practice questions is fine.

4. Complete all work. Even if it isn’t for marks it should be done in order to learn.

5. Finally, prepare for exams early and do more than just what is assigned in class.

**Vacation Policy**

Reassessments will only be given to students who are in attendance the day of the reassessment and who have completed the necessary steps **on time** in order to rewrite an exam. Vacations are not an acceptable excuse to miss a rewrite exam. Rewrites will not be rescheduled due to vacations. Students will be expected to catch up on missed work via the website on their own time after they return from vacations. Additionally, a “package” will not be printed for students going on vacation. If students wish to stay caught up on school work before, during, or after their vacation, they can access all materials to do so on the [website](http://msaustinmath.weebly.com/) and will need to print those materials themselves.

[**Website**](http://msaustinmath.weebly.com/)

I post all notes and practice questions on my website. Students who are absent, for whatever reason, will be expected to get the notes and attempt the practice questions **before returning to class.** Clarification and questions can be asked outside of class time, ideally before attending class the following day.

**Contact Information**

I am most easily reached via email and encourage parents and students to email should questions or concerns arise;

amy.austin@wolfcreek.ab.ca