Sturgeon Composite High School
Mathematics 10C
COURSE OUTLINE

PREREQUISITE: Grade nine mathematics pass – minimum mark recommended 65%

COURSE MATERIALS:
Calculator TI83/84 or any other recognized by Alberta Education.
Three ring binder, Pencil, red pen, 30 cm ruler (contains both metric and imperial), white eraser, lined paper, graph paper (0.5cm by 0.5cm), and geometry set.

TEXT:
Foundations and Pre-Calculus Mathematics 10 (Pearson)

COURSE CONTENT: Mathematics 10C consists of 3 units, with each unit being a General Outcome:

<table>
<thead>
<tr>
<th>Units</th>
<th>Unit Weighting</th>
<th>Time Allotted</th>
<th>Weight Toward Final Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outcome 1 - Measurement</td>
<td>25% of Term Work</td>
<td>4.5 weeks</td>
<td>17.5%</td>
</tr>
<tr>
<td>Outcome 2 - Algebra and Number</td>
<td>45% of Term Work</td>
<td>8.1 weeks</td>
<td>31.5%</td>
</tr>
<tr>
<td>Outcome 3 - Relations and Functions</td>
<td>30% of Term Work</td>
<td>5.4 weeks</td>
<td>21%</td>
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<tr>
<td>Final Exam</td>
<td>- - -</td>
<td></td>
<td>30%</td>
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</tbody>
</table>

ASSESSMENT: The final mark in Mathematics 10C will be based upon the following:

FORMATIVE: 0% of overall mark
Formative assessment including diagnostic testing is a range of formal and informal assessment procedures conducted by teachers during the learning process in order to modify teaching and learning practices to improve student attainment. This helps students identify their strengths and weaknesses and targets areas that need work.

SUMMATIVE WORK: 70% of overall mark
Summative assessment evaluates student learning at the end of a single or group of outcomes.

1. Quizzes, Assignments or Other Tasks (60% in total for all the outcomes of the unit)
   - 60% will be divided equally between all specific outcomes in each unit

2. Culminating Exam or Project (40% of each unit mark)
   - Multiple choice, numerical response, and written response questions on the specific outcomes in the unit or a Project that assesses understanding of the specific outcomes in the unit.

FINAL EXAM: 30% of the overall grade is based on the final exam.

BEHAVIORAL EXPECTATIONS: As outlined in the Student Agenda and by the individual teacher.

ADDITIONAL RESOURCES:
Alberta Education “My Child’s Learning, a Parent Resource”: http://www.learnalberta.ca/content/mychildslearning/
Math 10C Outcomes with Assessment Standards: https://education.alberta.ca/media/564037/m10c_standards.pdf
WHICH CLASS SHOULD I TAKE?

Mathematics - 1
For students who plan to enter post-secondary programs such as engineering, mathematics, sciences, some business studies, or other programs that require advanced math skills. The sequence is a co-requisite for Mathematics 31 and may be required for post-secondary calculus courses.

Mathematics - 2
For students wishing to study at the post-secondary level in diverse fields, including arts programs, some engineering and medical technologies (such as nursing), and some apprenticeship programs. This path will fulfill most students’ needs. Mathematics-2 is designed with a great deal of flexibility, so that the student can switch sequences in Grade 11 or Grade 12 if his or her interests change.

Mathematics - 3
For students who want to apprentice to a trade or enter the workforce directly after high school. It is designed to meet the entrance requirements for apprentices in most trades programs.

Please Note:
Mathematics 10-4 and 20-4 are the Knowledge and Employability courses that lead to a Certificate of High School Achievement instead of a High School Diploma.

Mathematics 31 is an introductory calculus course. Mathematics 30-1 is a pre-requisite or co-requisite for Mathematics 31.

It's not just about the mark...
Although a passing grade of 50% allows you to proceed to the next course in a sequence, one should also consider what interests them and what they would like to do at the end of high school.

For example students with a grade of at least 50% in Mathematics 10C can take either Mathematics 20-1, 20-2, or 20-3. Their decision will depend on which course would best meet their interests and goals beyond high school. For more information on the courses and course sequences consult the Senior High School Fact Sheets.

What If I Fail A Course? (Retro-Active Credits)
Students not achieving at least 50% in a course may repeat the course or, provided they received at least 40% and with the approval of the school principal, may transfer into a less challenging academic course. Students who successfully complete the next higher-level course in this alternative sequence will be granted credit for the prerequisite course in that alternative sequence.

Possible Routes:
- 40% to 49% in Mathematics 10C and successfully complete Mathematics 20-3 will receive retro-active credits in Mathematics 10-3.
- 40% to 49% in Mathematics 10-3 and successfully complete Mathematics 20-4 will receive retro-active credits in Mathematics 10-4.
- 40% to 49% in Mathematics 20-1 and successfully complete Mathematics 30-2 will receive retro-active credits in Mathematics 20-2.
- 40% to 49% in Mathematics 20-2 and successfully complete Mathematics 30-3 will receive retro-active credits in Mathematics 20-3.

Do I Need a Graphing Calculator?
Students taking Mathematics 10C, 20-1, 20-2, 30-1 and 30-2 require the enhanced features provided by a graphing calculator.

Students in Mathematics 10-3, 20-3 and 30-3 do not require a graphing calculator. A scientific calculator is sufficient for all concepts covered in the Mathematics - 3 program.

Approved Graphing Calculators
- Casio: fx 9750 G Plus, fx 9750 GII, fx 9860 GII
- Hewlett-Packard: HPPrime
- Sharp: EL-9900, EL-9600, EL-9600C

There's More On A Page Than First Appears...
You will see these symbols on several department documents. Use your smart phone or tablet to access supplemental embedded "virtual reality" content.

Need A Little Help With Your Work?
The math department sponsors the "Heinz Room" every Tuesday at lunch for individual math help. Come in and ketchup if you’re behind, before long you will truly be able to relish in better grades!

Heinz Room
Room 1103
Tuesdays at lunch