|  |  | **Course Outline and Evaluation Summary**  **Course Code** | |  |
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|  | Title of Course: Grade 12 University Preparation Earth and  Space Science - SES4U1 | 416-395-3210 | |
|  | Department: Science |  | |

| **Course Description** |
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| This course develops students’ understanding of Earth and its place in the universe. Students will investigate the properties of and forces in the universe and solar system and analyse techniques scientists use to generate knowledge about them. Throughout the course, students will learn how these forces, processes, and materials affect their daily lives. |

| **Course Evaluation**  Course evaluations incorporate one or more of the achievement categories (KICA). A brief description of each category can be found [here](https://www.dcp.edu.gov.on.ca/en/assessment-evaluation/categories-of-knowledge-and-skills). The final grade is calculated using the weighted percentages below. | | | | | |
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| **Term Work:** | **A variety of tasks where you show your learning and have marks assigned using the Achievement Categories/Strands** | | **Summative**  **Evaluation:** | **Marked summative tasks which assess your learning on the entire course** | |
| 70% | 20 % | Knowledge & Understanding | 30% | 15% | Summative project |
| 25 % | Thinking & Inquiry |
| 10 % | Application | 15% | Final Exam |
| 15 % | Communication |

| **Learning Skills** |
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| Learning skills provide Information to help students understand what skills, habits & behaviors are needed to work on to be successful. These are not connected with any numerical mark. A brief description of each skill can be found [here](http://www.edu.gov.on.ca/eng/policyfunding/growsuccess.pdf#page=17).  **Responsibility, Organization, Independent Work, Collaboration, Initiative and Self-Regulation**  E – Excellent G – Good S – Satisfactory N – Needs Improvement |

| **Required Materials:** Any educational resource required for this course will be provided by the school. It is the student’s responsibility to come to class with these materials. |
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| **School/Departmental/Classroom Expectations** |
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| **Attendance:** The student is expected to attend class on time. Parents/guardians will be contacted if lates/attendance becomes an issue/hindrance. If the student knows about an absence in advance, they should contact the teacher.  **Plagiarism/Cheating:** A mark of 0 will be assigned for any work submitted that does not belong to the student. A mark of 0 will be assigned to a student who was found to have cheated. Parents/guardians will be informed.  **Missed Work:** If a student is absent from class, (e.g. illness, sports team) it is **their** responsibility to find out what they have missed and to catch up. The student is responsible for completing all of the work that was missed due to an absence. If a student misses an assignment or test without a legitimate explanation and documentation, marks up to and including the full value of the evaluation may be deducted. Make-up tests must be arranged to be written.  **Late Work:** Late work may result in a deduction of marks up to and including the full value of the evaluation. |

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| **Course Assessment Tasks** | | | |
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| ***Unit/Topic/Strand*** | ***Big Ideas*** | ***Major Assignments / Evaluations*** | ***Estimated Duration*** |
| ***Astronomy (Science of the Universe)*** | * The development of more sophisticated technologies has enabled us to achieve a deeper, more thorough understanding of the origin and evolution of the universe. * Scientific theories about the universe are refined and altered as new evidence is discovered. | Assignments  quizzes  tests | 22 hours |
| ***Planetary Science (Science of the Solar System)*** | * Space exploration and the technologies that have been developed to facilitate it have had positive and negative effects on society, the economy, and the environment. * Space exploration presents many hazards. * Interactions among bodies within the solar system have an impact on the existence of life. | Assignments  quizzes  tests | 22 hours |
| ***Recording Earth’s Geological History*** | * Earth is very old, and its atmosphere, hydrosphere, and lithosphere have undergone many changes over time. * Changing conditions on Earth over time have had positive and negative effects on life on the planet. | Assignments  quizzes  tests | 22 hours |
| ***Earth Materials*** | * Exploration for and extraction and refining of materials from below the surface of Earth have positive and negative effects on the economy, society, and the environment. * Different types of rocks have different origins, properties, characteristics, and uses. | Assignments  quizzes  tests | 20 hours |
| ***Geological Processes*** | * Earth’s lithosphere is constantly changing as the result of natural phenomena and human activity. * Specialized technologies have enabled us to increase our knowledge and understanding of Earth’s structure and have improved the ability of scientists to monitor and predict changes in the lithosphere. | Assignments  quizzes  tests | 16  hours |
| Culminating Task(s) | Summative Project | Exam | 8 hours |