**SCIENCE 30**

February 2017-June 2017

**TEACHERS:** Mr.Sonnenberg/Mr. Schultz

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The Science 30 course offers students the opportunity to study in four different scientific disciplines. Students will learn about aspects of biology, chemistry, physics, and energy. This course will conclude with a diploma exam weighted at thirty percent of the student’s final grade. The Science 30 course will allow students to work both individually and collaboratively, while at the same time utilizing multiple intelligences to aid in their success.

This accelerated course will require students to complete all course assessments in time for the April Diploma Exam. All course information can be found on the following Science 30 class website: <http://lchblendescience30.weebly.com/> . Most importantly be sure to access the course calendar on the website home page. All students will be provided a hard copy calendar. A copy will also be posted in the classroom. With the accelerated option it will be crucial students ensure they are meeting deadlines.

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| **Unit** |
| **UNIT 1: LIVING SYSTEMS RESPOND TO THEIR ENVIRONMENT** **(25%)**- In this unit you will discover how the circulatory system enables the human body to interact with its environment, how the human body uses defense mechanisms to protect itself from disease-causing organisms and adverse environments, and how some human diseases are inherited. |
| **UNIT 2: CHEMISTRY IN THE ENVIRONMENT (25%)** - In this unit you will discover that chemistry is an essential component of environmental studies, how acids and bases affect the chemistry of aqueous systems and have important environmental effects, and how organic compounds can have both positive and negative effects. |
| **UNIT 3: ELECTROMAGNETIC ENERGY (25%)** - In this unit you will discover that field theory is one of the most important ideas in modern science, how field theory can be used to explain the operation of many important electric devices, how the electromagnetic spectrum is a continuous range of electromagnetic waves with specific characteristics and similar properties, and how the study of the history and structure of the Universe uses the entire electromagnetic spectrum. |
| **UNIT 4: ENERGY AND THE ENVIRONMENT (25%)**- In this unit you will discover that the global demand for energy must be reconciled with the need to maintain a viable biosphere, that the Sun is Earth's main source of energy, that mass is converted to energy in nuclear reactions and that the interaction of the gravitational fields of Moon and Earth is the source of tidal energy.  |

**COURSE EVALUATION**

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

a) Unit Assessments (Quizzes, Assignments, Projects, Labs)……...40%

b) Final Unit Assessment (*Unit Exam*)………………………………….60%

**30%..........Diploma Exam**



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| **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 with 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 Science 30* |

**LCHS Science 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.*

- Reassessments **for unit exams** will be given **within two weeks** of the original assessment being returned.

- Only a **single reassessment** will be provided for an **individual final unit assessment**.

- **Conferencing to determine an action plan** for improved learning between the student and teacher must occur **within two days** of the student receiving the marked assessment.

- **Students must provide evidence** that new learning has occurred as agreed upon from the student teacher conference and submitted a **minimum of one day prior to the reassessment.** (Evidence will be determined based on a student reassessment project and presentation of that project to the teacher)

**- Reassessment mark will fully replace the original final unit assessment mark.**

**INTERVENTIONS FOR STUDENT SUCCESS**

**Science 30 allows students to complete all assigned work to meet expected learner outcomes. Marks of “INCOMPLETE” will be placed into Power Teacher until the student completes the learning task. For students who do not hand in the assigned work prior to last day of regular scheduled classes for the Term or**

**• In addition, Lacombe Composite High School Science dept. has incorporated strategies of intervention for the success of all students.**

**Meetings with teachers to find solutions, working with parents, use of flex time, opportunity to improve grades (additional work/project followed by a reassessment), working through exam week, work with admin for solutions, online resources, homework, reminders on FYI board for due date.**