I. Course Summary
This is a year-long, four-credit course that covers basic high school physics and chemistry concepts and the nature of science and engineering with a focus on English language development throughout. This science course is for emergent bilingual students that have emerging English language skills. It prepares students for biology, chemistry, physics and other science electives.

II. Units of Study
Students learn about atomic structure, types of energy transformations, forces, and motion. Students use observations, laboratory investigations, and problem solving to analyze and understand the science of everyday phenomena. Instruction will develop vocabulary, sentence structures and discourse patterns in English with a specific focus on those found in science. The four modalities of language (speaking, listening, reading and writing) will be integrated into daily lessons with an emphasis on speaking and writing.

III. Standards and IB MYP Aims
WIDA Standard 4: English Language Learners will communicate information, ideas and concepts necessary for academic success in the content area of Science.

Minnesota K-12 Academic Standards in Science

MYP/IB:
In accordance with the MYP Model, the aims of language acquisition in this course are to:

a. gain proficiency in an additional language while supporting maintenance of their mother tongue and cultural heritage
b. develop the student’s communication skills necessary for further language learning, and for study, work and leisure in a range of authentic contexts and for a variety of audiences and purposes
c. enable the student to recognize and use language as a vehicle of thought, reflection, self-expression and learning in other subjects, and as a tool for enhancing literacy
d. enable the student to understand the nature of language and the process of language learning, which comprises the integration of linguistic, cultural and social components

IV. Texts
Science Explorer series on Chemistry and Motions, Forces and Energy, Prentice Hall, 2009
Gateway to Science, Thomson-Heinle, 2008
Additional texts as provided by the teacher

V. Methods of Assessment
Grades will be given at the conclusion of each quarter with a progress grades given midway through the quarter. Grades will consist of 70% summative assessments and 30% formative assessments, as stated by the Highland Park Senior High Grading Policy.
In this class, students will complete a variety of IB MYP assessments such as laboratories, quizzes and notebook entries. These assessments will give students a chance to demonstrate their skills and understanding while also providing information for the teacher to help improve learning.

### LANGUAGE ACQUISITION CRITERION

<table>
<thead>
<tr>
<th>Criterion A</th>
<th>Comprehending Spoken and Visual Text</th>
<th>Answering questions about a speech, picture, song, or other type of text. Explaining the meaning of a text.</th>
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</thead>
<tbody>
<tr>
<td>Criterion B</td>
<td>Comprehending Written and Visual Text</td>
<td>Reading assignments and written reflections about the text.</td>
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<tr>
<td>Criterion C</td>
<td>Communicating in Response to Spoken, Written, and Visual Text</td>
<td>Speaking and writing for specific purposes</td>
</tr>
<tr>
<td>Criterion D</td>
<td>Using Language in Spoken and Written form.</td>
<td>Presentations, laboratories, and speeches.</td>
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**VI. Other Class Expectations**

**Homework Expectations**
Late work will be accepted up to 3 days late with a 10% reduction in score. Assignments will be posted on Schoology.

**Classroom Expectations**
Students are expected to behave in a safe, respectful and responsible way at all times.

**Extra Assistance**
Students make an appointment for extra help before school with Ms. Narabrook or after school with Ms. Bolopue.

**Materials**
- notebook and folder for this class only
- pens, pencil with eraser

**Course Outline Signature:**
I have read and understand the expectations, policies, and procedures in the course syllabus.

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Student Signature  
Parent/Guardian Signature