2015 - 2016 Grade 8 MYP Science Syllabus
International School of Tanganyika

Welcome to IST's grade 8 MYP science class! We teachers are excited to be teaching this class because of the fascinating topics we'll study together. It promises to be an exciting year of learning, as we explore our world from the macro (large) scale of the Universe to the micro (small) level of plant cells and organelles. In the outline below, you can find all the key information you need to get started on our journey of discovery.

I. Teachers

A. Brad Kremer: bkremer@istafrica.com

B. Kristine Greenlaw: kgreenlaw@istafrica.com

C. Susan Henderson: shenderson@istafrica.com

II. Expectations

A. Attendance: You are expected to be in class, on time, every day. If you miss work due to an excused absence, you may make up the missed work according to IST's policy (in your homework diary). Work missed due to an unexcused absence may not be made up, and it will likely have a negative impact on your grades. See your teacher with questions about what's an excused absence and what is not.

B. Behavior: Appropriate behavior can be summarized in a single rule - "Respect yourself, others, and your surroundings." If you have questions about what might be considered appropriate, ask your teacher **before** you act!

C. Work habits: First and foremost, always do your own work. Grade 8 science covers some fairly complex concepts, which should push you out of your comfort zone from time to time. We expect you to attempt every task we assign. Part of the learning process is 'failing well' - those times when you try something, but it just doesn't work. The worst kind of failure (failing badly) is when you don't even try. As long as you try, we teachers will help you achieve your potential - that's our job!

III. Units of Study

In grade 8 science, we will study our world from a macro scale down to the micro level. We begin with the beginning of time - the Big Bang - and end with a close-up look at the fascinating world of plants, which provide us oxygen, food, building and cooking materials, and shade!

A. The Big Bang: How did the universe we inhabit come into existence? How did some of the fundamental laws of nature come about? How are stars and galaxies formed?

B. Meet the Elements: How was the periodic table invented? Which patterns are exist in the structure of all matter? How do we use the language of chemistry to communicate?

C. Electricity and Magnetism: What exactly is electricity? How does it move? How do people control it and harness its power?

D. Plant Adaptations: Why do certain kinds of plants grow where they do? How do plants move and reproduce? How do plants obtain the water and nutrients they need to live?

IV. Grades

A. Achievement grades are based on the sum total of your performance under four assessment criteria, which we teachers will explain in more depth as we encounter them. Individual tasks will be assessed under one or two of these criteria, and report grades reflect your achievement across all four criteria combined. Click each criterion hyperlink to see a PDF rubric, including a glossary of command terms.

- Criterion A: Knowing and Understanding
- Criterion B: Inquiring and Designing
- Criterion C: Processing and Evaluating
- Criterion D: Reflecting on the Impacts of Science

B. Approaches to Learning (ATLs) are a central focus at IST this year, and ATLs will replace the effort grades on report cards. ATLs are the skills essential for 'learning how to learn' and which apply across all subject areas. You will receive an ATL rubric with each major summative assessment, and there may be several intermediate formative activities which teachers use to assess your ATL skills throughout the year. We will walk you through this process to clarify it as we go.

V. Digital Citizenship and Platforms

A. IST Gmail: You should only use your IST email when emailing teachers. It keeps your personal and scholastic lives separate, and your IST email account links directly with the other digital platforms we use in grade 8 science.

B. Google Drive and Google Classroom: These platforms interface almost seamlessly with your IST Gmail account, and they will help you develop those ATL skills around staying organized. Use them to keep most of your work organized in science class so that you don't lose anything important during the year. We will teach you how to use these during the first week of school.

C. Managebac: Managebac is IST's portal to classes and activities. We will post all major summative tasks in Managebac, and Managebac will make a personalized calendar for you that shows when all your tasks are due in all your classes. Your scores on summative tasks will also be recorded in Managebac, so that you can see your progress in real time.

D. Moodle: Moodle is our online resource center for grade 8 science - think of it as a digital library for your classes. Any resource that shows up in class will be posted on the class Moodle page. If you lose a document, you can find it on Moodle. All the unit notes are there, too, as well as several other resources that we teachers think are helpful. Some of them you'll recognize from class, while others are additional resources to extend your learning.

E. Turnitin.com: Turnitin.com isn't only for checking against plagiarism! You can submit multiple drafts and use the grammar check to improve your writing skills. Summative tasks submitted through Managebac can also go through Turnitin.com so that you don't have to

turn in work in two different places. Your teacher will walk you through this process when the time comes.