

ASSOCIAÇÃO ESCOLA GRADUADA DE SÃO PAULO
“GRADED SCHOOL”

HIGH SCHOOL COURSE DESCRIPTIONS 2013 - 2014

Av. Presidente Giovanni Gronchi, 4710 - Morumbi

CEP: 05724-002 - São Paulo - SP - Brazil

Phone: +55 11 3747-4800

Fax: +55 11 3742-9358

<http://www.graded.br>

Accredited by the Southern Association of Colleges and Schools
28 years as an International Baccalaureate School

TABLE OF CONTENTS

GRADUATION REQUIREMENTS

American Diploma	04
Brazilian Diploma	06
International Baccalaureate Diploma	08
Grading System	10

COURSE DESCRIPTIONS

ARTS

Musica	12
Theatre	13
Visual Arts	14
Media, film, Photo	16

Brazilian Social Studies	18
---------------------------------------	----

History	19
----------------------	----

Interdisciplinary	22
--------------------------------	----

LANGUAGES & LITERATURE

English	23
Portuguese	25
PFL	27
French	30
Spanish	31

Mathematics	32
--------------------------	----

Physical Education and Health	36
--	----

Science	37
----------------------	----

HIGH SCHOOL ADMINISTRATION

High School Principal	Blair Peterson
High School Assistant Principal, Activities Director	David Bair
Director of Teaching and Learning	Colleen Broderick
Director of Brazilian Studies	Angelina Fregonesi
Counselor - Grades 9 & 10	Luciana Andrade
Counselor - Grades 11 & 12 (Last Names A - K)	Todd Daniel
Counselor - Grades 11 & 12 (Last Names L - Z)	Cory Miller
IB Coordinator	Sherry McClelland
Athletic Director	Ricardo Vieira

GRADED'S MISSION STATEMENT

Graded is an American school that serves an international community of learners by inspiring individual excellence in a collaborative setting, fostering intercultural competence and empowering students to become engaged, ethical citizens in a dynamic world.

GRADUATION REQUIREMENTS

The Associação Escola Graduada de São Paulo, “Graded,” is accredited by AdvancED, is recognized by the Brazilian Ministry of Education and is an International Baccalaureate school. Graded’s academic program is college-preparatory, designed to prepare students for entry into colleges and universities in the United States, Brazil, and almost any other country in the world.

Programs of study are available which lead to three different diplomas. The American Diploma, equal in value to those issued by accredited high schools in the United States, must be earned by all Graded graduates. The Brazilian Diploma is required for entry into Brazilian universities and universities in countries which have cultural agreements with Brazil (Please see the Brazilian Studies department for the complete list). Also available is the International Baccalaureate Diploma, earned by successful completion of external examinations and having expectations beyond those of the traditional high school student.

AMERICAN HIGH SCHOOL DIPLOMA

Required for the American Diploma are:

- 8 semesters of academic work beyond grade 8;
- enrollment in a foreign language each year;
- a minimum of 24 credits;
- completion of a minimum of 3 IB courses and exams.
- students in grades 9 and 10 must be enrolled in 8 courses each semester
- students in grades 11 and 12 must be enrolled in at least 7 courses each semester

Department	Required Credits	Notes
English	4.0	
Mathematics	3.0	
History/Social Studies	3.0	The IB History graduation requirement is in effect through June 2014. This requirement does not apply to students graduating after June 2014.
Brazilian History & Culture	.5	Required for non-Brazilian Diploma students, and must be taken in 9th Grade or in 10th Grade for transferring students.
Science	3.0	
Visual and Performing Arts	1.5	
Physical Education	1.5	One semester in 9th Grade and one full year in 10th Grade
Health	.5	One semester and ideally will be taken in 9th Grade
Foreign Language	1.0 - 4.0	Enrollment each year of attendance
Total	24	

**Exceptions must be approved by the High School Principal.*

The following language requirements apply:

- While enrolled in the high school, students must study a language in addition to English. This requirement may be fulfilled by Portuguese, French, Spanish or another language course offered in school. Exceptions must be approved by the High School Principal.
- Graded strongly recommends that all students study Portuguese. Exceptions must be approved by the Brazilian Studies Director.
- Candidates for the IB Diploma are allowed to study a Language A or B independently to fulfill the foreign language requirement if that language is not available at school. If an instructor is contracted outside of school, the student needs to complete the sign-up process and obtain the syllabus from the IB Coordinator. The language teacher must meet with the IB Coordinator to plan an appropriate program.

- Students enrolled in the English Language Learning (ELL) program and students with a documented language disability may be exempted from studying a language other than English.

Click [here](#) to access a sample transcript of a student who is earning the United States Diploma.

BRAZILIAN HIGH SCHOOL DIPLOMA

Equivalency of courses/programs:

- 9th grade: 9o. ano do Ensino Fundamental
- 10th grade: 1o. ano do Ensino Médio
- 11th grade: 2o. ano do Ensino Médio
- 12th grade: 3o. ano do Ensino Médio

*Requirements for the Brazilian equivalent High School course, **Ensino Médio:***

- Satisfactory completion, at the end of grade 9, of all requirements for the **Conclusão do 9º ano do Ensino Fundamental.**
- Six semesters of academic work beyond grade 9, and,
- Satisfactory completion of all requirements for the AD.

Specific credit requirements for the Brazilian Diploma, earned in grades 9 to 12, include those prescribed below.

BRAZILIAN SOCIAL STUDIES

Grade 9	Brazilian Social Studies	1 semester
Grade 10	Brazilian Social Studies	1 semester
Grade 11	IB Brazilian Social Studies SL I	1 year
Grade 12	IB Brazilian social Studies SL II	1 year

PORTUGUESE LANGUAGE

Grade 9	Portuguese 9	1 year
Grade 10	Portuguese 10	1 year
Grade 11	IB Portuguese Language & Literature HL I IB Portuguese B HLI/SL I*	1 year
Grade 12	IB Portuguese Language & Literature HL II IB Portuguese B HL II/SL II*	1 year

* Students may take IB Portuguese B only in exceptional cases, based on placement.

SCIENCE

- Class of 2014 - Students must take one Science course in each year of High School, covering Biology, Chemistry, and Physics, in grades 10-12.
- Class of 2015 and Beyond - The biology, chemistry and physical science requirements will be met through the grade 9 and 10 courses.

MATHEMATICS

- Students must be enrolled in an appropriate math course every year.

PHYSICAL EDUCATION

- Two semesters of P.E./Health in grade 9, and total of two semesters in grades 10, 11, or 12, a total of 4 semesters.

ARTS

- Students in grade 9 must take at least one semester in the Visual and Performing Arts and two additional semesters in grades 10, 11 or 12.

Click [here](#) to access a sample transcript of a student who is earning the United States and Brazilian Diplomas.

INTERNATIONAL BACCALAUREATE DIPLOMA

The International Baccalaureate Diploma Program is a rigorous pre-university program for highly motivated students in grades 11-12. Created over 1968, the rationale for such a sweeping and comprehensive program was twofold: first, to provide a common curriculum and university entry credential for students who often moved from country to country, and secondly, and perhaps more importantly, was the more idealistic motive that prevailed -- one that insisted students could share an academic experience that emphasizes critical thinking, intercultural understanding and exposure to a variety of viewpoints.

THE IB DIPLOMA PROGRAM:

The IB Diploma Program is a comprehensive two-year course of study with the strengths of a liberal arts program, but with 3 requirements that set IB apart from other advanced placement programs:

- **ToK (Theory of Knowledge)** is an interdisciplinary course intended to stimulate critical reflection and analysis, and to encourage appreciation of other cultural perspectives.
- **CAS (Creativity, Action, and Service)** requires students to share their talents and energy with others, especially in community service. The **EE (Extended Essay)** is a 4000-word investigative essay on a topic of special interest to the student. For the full diploma, students take 6 subjects, normally two-year courses, with 3 at Higher Level [HL] and 3 at Standard Level [SL].



Graded offers the following IB subjects, depending on enrollment:

Group 1: Studies in Language and Literature:

- Literature HL, SL (offered in English)
- Language & Literature HL, SL (offered in English, Portuguese, and Spanish).

Group 2: Language Acquisition:

- Language B HL, SL (offered in Portuguese, Spanish, French)

*** Other languages A or B may be pursued through independent study. Students wishing to study a language A or B may hire a tutor, who will get the appropriate course outlines and criteria from the IB Coordinator.*

Group 3: Individuals and Societies:

- History HL, SL
- Economics HL, SL
- Brazilian Studies SL
- Psychology SL

Group 4: Sciences:

- Biology HL, SL
- Chemistry SL
- Physics HL, SL

Group 5: Mathematics:

- Math Studies SL
- Math SL
- Math HL

Group 6: The Arts & Electives:

- Film Studies HL
- Visual Arts HL, SL
- Theatre Arts HL, SL

To meet the IB Diploma elective requirement students may take a second subject from Groups 1 to 4.

Students declare their desire to be candidates for the full IB Diploma or IB Courses early in the second semester of Grade 10. Based on teacher recommendations, student and family plans, appropriate IB program balance, and current student performance, a counselor and the IB Coordinator help the student and parents decide which combination of course and diploma options seem like the most appropriate match for each student.

The IB Diploma is awarded to students whose total points for six subjects range from a minimum of 24 (with special diploma-pass restrictions for grades below the minimum passing mark of 3) to 45 with successful completion of all other program requirements - CAS, ToK, and the Extended Essay. Up to 3 bonus points can be earned in the ToK and Extended Essay components.

Credit toward the IB Diploma is based on internal coursework and external exams from IBO. IB courses are designed for two years and the IB Diploma course of study must be completed during the student's final two years. In certain instances a student may complete an SL course in one year and take the exam after his/her junior year.

Graded students desiring challenging courses are encouraged to take individual IB courses even if they choose not pursue the full IB Diploma. All Graded students take a minimum of three IB courses and exams. These students will receive official IB course certificates. Students may choose to complete the Extended Essay, ToK, and CAS as separate components apart from doing a full IB Diploma. These components do not count as part of the graduation requirement of three IB courses and exams.

Bilingual IB Diploma

Students who take two Group I Literature/Language courses and successfully complete all other program requirements will receive a bilingual diploma.

IB Exams

Students enrolled in IB courses MUST take the IB exams in order to receive Graded course credit. Written exams are normally given in one or two sessions of two to four hours per subject in May of their exam year. (IB oral exams are given earlier in the senior year.) The IBO allows Diploma students to take a maximum of two SL exams in grade 11.

The mark scheme for exams ranges from 7 (excellent) to 1 (poor) with a 4 considered passing. Students are responsible for verifying that they have registered for the correct exams; parents are responsible for any extra IB fees incurred due to student delays or errors in exam registration.

IB Fees

In addition to the annual subscription fees paid by the school, Graded shares the cost of the IB exam and registration fees by contributing 40% of these costs, and parents 60%. The parent portion of fees ranges from U\$160 to U\$600, payable to the school in December, when it appears on the tuition bill. An explanatory letter and detailed invoice are sent to parents in October. For further details, please consult the IB Coordinator.

A Note regarding IB French B, Portuguese B and Spanish B

For students taking IB French B, Portuguese B and Spanish B courses, it may not always be possible to schedule these singleton courses for every student, given the number of potential conflicts. Thus, some students may need to hire their own tutor for such a language course, as is the practice for some other independently studied IB languages at Graded.

Click [here](#) to access a sample transcript of a student who is earning the United States and IB Diplomas.

Grades

The High School uses the following numerical grading system:

HS Percentages	Descriptor
90-100	The student work demonstrates meeting the criteria for the learning goal(s) in original and insightful ways. Work reflects a consistent and thorough understanding of the explicitly taught content and skills. Strong evidence of analysis, synthesis, and/or evaluation.
80-89	The student work demonstrates mastery of the learning goal(s). There are no major errors or omissions regarding any of the content and skills that were explicitly taught. Some evidence of analysis, synthesis and/or evaluation; may demonstrate originality and insight.
70-79	The student work demonstrates an acceptable mastery of the content and skills. The student exhibits understanding in standard ways to show learning. Little to no evidence of analysis, synthesis and/or evaluation.
65-69	The student work demonstrates a limited understanding of the required content and skills, reflecting limited achievement towards the learning goal(s), or clear difficulties in some areas. The student may require support to complete more complicated tasks and encouragement to show learning.
Below 65	The student work shows minimal or very limited achievement towards the learning goal(s). The work reflects a difficulty in communicating understanding for the required content and skills and with no evidence of application, even with support. Area of concern.

COURSE CREDITS

Generally, a 0.5 credit refers to a semester course; a 1.0 credit refers to a year-long course.

WEIGHTED COURSES

Certain IB and AP courses are weighted. The courses are weighted because of the overall rigor of the course. This means that the standards are higher and the amount of work is greater. These courses will require students to spend more time working outside of the classroom. For example, it is very common for the students to have vacation assignments in these courses. Weighted courses receive an additional 5 points when calculated for the semester and final/end-of-year grade point average. These additional 5 points are only used in the calculation of class rank and GPA. The GPA as listed on the transcript will be weighted. Courses will not be weighted for a grade below 70.

All 1 Year Standard Level (SL) Courses (IB History) - 5 points

All Higher Level (HL) Courses - 5 points

All Advanced Placement Courses - 5 points

ELECTIVE COURSES

The availability of electives is based on student enrollment, interest, and scheduling feasibility. Some courses listed in this book may not be available every semester or every year. Eight is the minimum number of students required to run a course.

COURSE RECOMMENDATIONS

Enrollment in a course is dependent upon a student's grade in the prerequisite course(s), graduation requirements, student's work ethic, teacher and/or department recommendation or permission, and scheduling feasibility. We encourage students to gather as much information as possible when making decisions on courses for grades 11 and 12. The teacher recommendation is an important factor to consider. Specific departments may take into consideration additional criteria (see individual departmental criteria).

SCHEDULING:

Given the size of Graded's High School, and the multiple diplomas we offer, a disproportionately large number of courses are on offer. Though we do our best to schedule every student's first choice for courses, it is often impossible for every course to be scheduled. When planning schedules, students must include second and third choices, and be flexible if all choices can't be scheduled.

- It is the student's responsibility to check correct grades and courses or transcripts. You may make an appointment with your counselor to verify credits.
- Schedule changes may be necessary. Not all courses can be guaranteed.

ARTS

MUSIC

Senior Band

credit: 1.0

Pre-requisite: Junior Band or instructor's permission

Senior Band is a year-long course devoted to the study of music written and arranged for wind and percussion instruments. Students of varying levels of ability and experience are invited to participate, but are expected to have already mastered basic playing fundamentals, have a firm grasp on the technical demands of their instrument, and be able to read standard music notation with fluency. Concert band literature representing various styles, historical periods, and traditions will be studied, and students will also work in chamber music ensembles. Attendance at concert performances is mandatory. Members of the Senior Band are also eligible to audition for the Jazz Band, which rehearses outside of regular school hours.

(This course may be repeated for credit.)

Jazz Band

credit: 0.5

Pre-requisite: By audition only. Concurrent enrollment in an appropriate music ensemble class meeting during the academic day is also required.

Jazz Band is a year-long class that meets outside of the normal school day. Enrollment is limited to those students who can demonstrate the necessary facility on their instruments, and who are also enrolled in another music ensemble class meeting during the regular academic day. Music following the standard jazz big-band format is rehearsed and performed. The genre also strictly dictates the number and types of instruments accepted into the class, which typically includes up to five saxophones, four trumpets, four trombones, piano, guitar, bass, and drums. Jazz styles studied include swing, latin, and rock, and basic jazz improvisation techniques will be covered. Attendance at all performances is mandatory.

(This course may be repeated for credit.)

Beginning Orchestra

credit: 1.0

No previous experience required.

Beginning Orchestra is a year-long course. This is an introductory course for string instrument players. Students will learn to play the violin, viola, cello, or bass in a group setting, and learn the theory for their respective level. Attendance at concert performances is mandatory.

Orchestra

credit: 1.0

Pre-requisite: Beginning Orchestra or teacher approval.

Orchestra is a year-long course. This course brings together students of varied levels and grades to play orchestral repertory. Students will improve their playing skills, and the necessary theory and technical development will be taught according to need. Attendance at concert performances is mandatory. Advanced students are encouraged to play in select ensembles, and may apply and prepare auditions for the AMIS International Orchestra Festival, and participate in the Graded Fiddlers group.

(This course may be repeated for credit.)

High School Choir

credit: 0.5

Pre-requisite: previous choral experience recommended but not required.

This course is designed for students with a special interest in singing. It addresses basic to advanced vocal techniques and teaches and reinforces the fundamentals of group singing. Students will focus on

improving intonation, choral blend, and musical interpretation within two, three and four-part harmony. The choir learns repertory of varied musical styles, and coursework includes sight-reading and music theory. Attendance at concert performances is mandatory. Advanced students will have the opportunity to apply and prepare for auditions for the AMIS International Honor Choir Festival. (This course may be repeated for credit.)

Digital Music Making

credit: 0.5

Pre-requisite: Instructor Permission

Digital Music Making is a semester-long class devoted to basic music composition, arranging, and other applications using Macintosh computers and piano keyboards. Various music software programs will be introduced, and there will be a culminating project utilizing some of these tools. Prospective students are expected to have a functional knowledge of music notation and basic music theory concepts, and are encouraged to be concurrently enrolled in a music ensemble class. (This course may be repeated for credit.)

Beginning Guitar

credit: 0.5

No previous experience required.

Guitar is a semester-long introductory course for guitar players. Students will learn to play basic chords and fingering on acoustic guitar in a group setting. They will also learn the music theory, appreciation, and history, and will learn to listen to and read music.

T H E A T R E A R T S

Acting I

credit: 0.5

We all see actors performing in theatre, television and film. How do they do it? How do they create the illusion of becoming someone else in another place and time? This course teaches the basic skills of acting, concentrating on the three basic tools of an actor: body, voice and emotion. Through theatre games, improvisations, characterization exercises and script work, students will acquire skills to present themselves onstage or on camera (or for that matter, in any public situation) with confidence and showmanship. They will learn excellent teamwork skills. Most of all, they will have fun creating characters and becoming “someone else”!

Acting II

credit: 0.5

Pre-requisite: Acting I or instructor permission

Acting 2 will be a progression in building the core skills an actor needs for performing on the stage. This class builds on skills explored in Acting 1. Students will explore physical acting through pantomime and movement training, work with improvisational exercises to inform and enhance performances onstage, and learn about various methodologies and traditions of acting styles in Western theater and World theater from Kabuki to Musicals. As students have come to learn in Acting 1, acting onstage in front of a live audience is vastly different than what they see from actors in films. In Acting 2 we will delve deeper into the differences between stage and screen acting. Lastly, we will create auditions: what does it take to get the role in a performance? How do we create a theatrical resume? How can we best showcase our skills to a director who is casting a show? This course is for acting students who have a desire to continue to hone their acting skills and drive their passion for theater.

Stagecraft

credit: 0.5

Theatre is not only about acting. It's also about the technical areas of theatre such as lighting, sound, scenery, props and stage management. This course is largely practical in all of these areas, and students will learn the skills of tech theatre by helping organize and run all of the events in the theatre. After acquiring some experience, students will have an opportunity to design scenery, lighting or sound. Students will learn to run all the equipment in the theater and will help to organize and maintain all of the backstage areas. No previous experience is necessary.

(This course may be repeated for credit)

IB Theatre I SL

credit: 1.0 (each course)

IB Theatre II SL

"Theatre", said Alfred Hitchcock, "is life without the boring parts". In IB Theatre Arts, we look at theatre passionately as well as objectively and we examine the impact theatre can have on our lives. IB Theatre is a two-year course focusing on performance skills and productions, theatre history, theories of theatre, and critical evaluation. Students study a variety of genres of theatre and must participate in productions both onstage and backstage. Students learn to research, experience world Theatre techniques, and learn to think like a director by analyzing plays and articulating their own ideas for these plays. Students learn all areas of theatre production and have the opportunity to explore their own interests and passions through individual projects.

IB Theatre requires commitment and hard work, but is immensely rewarding.

VISUAL ARTS

Art I

credit: 1.0

This is a foundation course introducing students to a variety of media and techniques. Students will build a strong background if they plan to follow the two-year IB Art and Design program. Students will build skills, understand media, & develop creative thinking in two and three-dimensional areas. They will be introduced to art history and periods of art related to topics being covered, and will keep a sketchbook of studies and do reflective writing about their work.

Drawing

credit: 0.5

This course introduces the use of drawing technique, developing a variety of skills in Line, Form, Volume, and Shape. It explores a wide range of drawing tools, methods, and skills related to direct observational studies. The primary focus of this course is figure drawing, portraiture, perspective, and applied perspective. A sketch book will be kept for assignments, practice studies, and reflections on the student's work. A digital portfolio will be developed which demonstrates process and reflection, as well as highlights studio art.(This course may be repeated for credit.)

Painting

credit: 0.5

In this one-semester course, students will work with values in shading and in creating surface texture with acrylic paint using line and color. They will work in color theory, light in color, emotion in color monochromatic color, color theory, and applied techniques in acrylic paint.

The development of representational skills is balanced with the study of the Impressionists, Expressionists/Fauves, Cubists, and Surrealist artists. Students are expected to support their work with research into these various periods.

Slide presentations will be given in class. (This course may be repeated for credit.)

Ceramics & Sculpture I

credit: 0.5

This course trains students in the fundamentals of working with clay and wire and provides an introduction to three-dimensional thinking. Students are exposed to a wide range of exercises meant to increase creativity while learning to express them in a visual form. Students will glaze and fire their works. This is a great course for beginning art students, and an important addition for advanced students who have not worked three-dimensionally.

Ceramics & Sculpture II

credit: 0.5

Pre-requisite: Ceramics & Sculpture I, and teacher permission

This course trains students to use the potter's wheel as well as different sculpture techniques. It continues to build appreciation for a esthetic three-dimensional forms.

IB Visual Arts HL I

credit: 1.0

Pre-requisite: Art I Drawing or teacher permission

This rigorous program is for students with a strong interest in art. Students complete intensive studio work (70%) and develop a research workbook (30%). Six criteria are addressed for studio work and four for the research workbook. In the first year the student learns how to: explore and experiment with ideas, develop an understanding of media and paper, make connections between their work and that of other artists/cultures/social contexts, show the process of this integration in studio work and in their research workbook.

The first semester of this course is heavily teacher directed; in the second semester students begin to set goals and themes to explore and develop into project work. Research readings, slide/video presentations, and museum & gallery visits are an important part of the course and of the students' artistic development.

IB Visual Arts HL II

credit: 1.0

Pre-requisite: IB Art and Design HL I

In the second year of the two-year Art and Design HL program, students set goals for themselves of themes/topics to pursue over the year. Students choose media and topics from ones they have previously explored, researched, and developed. The work produced over the two-year period, along with the research workbook and a portfolio of studies, will be presented to an external examiner for the April IB examination, which is set in an exhibition mode. A vernissage takes place to present the student's work to the community.

This exciting course helps students learn the process, as well as the making of art.

MEDIA & FILM & PHOTOGRAPHY

Computer Graphic Design

credit: 0.5

More and more, our exposure to information and visual media takes place on a computer screen. Likewise, the world of photography has become increasingly digital, and image manipulation is done entirely on personal computers. Computer Graphic Design is an entry-level course in digital design where students learn to communicate in the visual language of our digital lifestyle. The curriculum combines elements of design theory and principles (including proximity, alignment, repetition, and contrast) with the capabilities of Adobe's Photoshop to establish a firm foundation for designing posters, logos, magazine covers, book layouts, 3D designs, creative art work, and brand identities.

Multimedia and The Art of Film

credit: 0.5

Pre-requisite: Computer Graphics or teacher permission

Multimedia and The Art of Film is a semester course that explores the technical process of creating dynamic moving images with video and motion graphics along with the study of film, both short and long, to help develop critical skills in the analysis and evaluation of film. Students will sharpen their powers of observation, establish habits of perceptive watching, and discover complex aspects of film art that will further enhance their enjoyment of watching films while aiding them toward the production of their own media-rich short films. Topics include cinematography, editing, basic lighting setups, and special effects. Participants will use Apple's Final Cut Pro, Motion, and possibly Soundtrack Pro.

IB Film HL I

credit: 1.0 (each course)

IB Film HL II

Pre-requisite: Instructor's permission.

IB Film HL follows the IB program standards over two years of study. It is open to juniors only. The primary goal of the course is to educate and empower students to become active participants in visual culture, going beyond a passive mode of consumption. The course emphasizes the following areas: film history, film theory, textual analysis, race/class/gender issues in media, film production, and creative writing. The student will be expected to switch back and forth between rigorous academic activity and hands-on creative assignments with cameras and editing systems.

Students will work on personal projects as well as collaborative work. This is a perfect class for anyone interested in film, the relationship between art and commerce, photography and storytelling.

Photography I

credit: 0.5

In this course, students will learn to view photography as an art form while learning the technical basics of black-and-white photography. Students are challenged with the task of capturing images in terms of light, composition, and creative content. This is an excellent course for both beginning and more advanced art students who are beginning photographers. Students will develop a research notebook.

Students need to provide their own cameras.

The preferred model is CANON EOS REBEL K2+ EF28 LENS 28-90mm f/3.5

(A few cameras are available for rent)

Photography II

credit: 0.5

Pre-requisite: Photo I.

Students continue the study of black-and-white photography and darkroom skills learned in Photo I, with more advanced techniques, creativity and alternative processes that can enhance the outcome of the final project. Students deal with artistic movements to develop more independent work. Students will develop a research notebook.

Students need to provide their own cameras.

The preferred model is CANON EOS REBEL K2+ EF28 LENS 28-90mm f/3.5

(A few cameras are available for rent)

Photography III

credit: 0.5

Pre-requisite: Photo II.

Students will develop a portfolio of work, using a variety of techniques, and presentation skills. Students will develop a research notebook.

Students need to provide their own cameras. The preferred model is CANON EOS REBEL K2+ EF28 LENS 28-90mm f/3.5 (A few cameras are available for rent)

Publications Design/Yearbook

credit: 1.0

Pre-requisite: teacher permission required

Topics covered in this course include graphic design, layout, and desktop publishing. Computer software, such as Photoshop and InDesign will be used. Students will receive intense hands-on experience as they organize, gather information and edit Graded's yearbook, *Aquila*. Students will have some editorial authority and will be expected to put in after-school hours in order to meet deadlines. This course provides students with a nearly professional experience and a wonderful opportunity to publish their own work.

(This course may be repeated for credit.)

BRAZILIAN SOCIAL STUDIES

Os cursos, ministrados em Língua Portuguesa, têm como objetivo garantir a apreensão do conhecimento da História e da Geografia do Brasil em seus diferentes momentos e experiências históricas, como também aprofundar temas referentes às transformações do espaço geográfico brasileiro e do mundo que nos cerca. Para tanto, analisa-se o passado, buscando compreender as condições e as razões dos acontecimentos, identificar seus movimentos de resistência, confrontar perspectivas históricas conflituosas e examinar as permanências existentes no cotidiano da atualidade brasileira. Dentro dessa perspectiva, trabalham-se conceitos básicos do ensino da História, como: tempo/espaço, semelhança/diferença, cultura/trabalho. Quanto à Geografia, integram-se os diversos temas, especialmente aqueles ligados à Geografia Física e à Geografia Humana, procurando demonstrar como a natureza vai sendo modificada e reestruturada pela técnica e pela ação do homem.

Nosso objetivo principal é contribuir, a partir do ensino da História e da Geografia do Brasil, para que o aluno possa adquirir instrumentos intelectuais e de caráter social que possibilitem a formação de uma consciência crítica e atuante.

Estudos Sociais Brasileiros 9

credit: 0.5

Pré-requisito: alunos matriculados no 9º ano, 8a. série do Ensino Fundamental.

Este curso de um semestre tem como principal objetivo desenvolver estudos a respeito da História do Brasil, focalizando o período do Brasil República. São trabalhados os principais aspectos políticos, econômicos, sociais e culturais do período republicano, analisando-se, a partir de textos, iconografia e documentos primários e secundários, o processo de formação e consolidação da república brasileira. Têm especial importância aspectos como a relação entre as elites nacionais e o poder, a participação popular nos principais movimentos sociais e culturais, as transformações econômicas do país ao longo do século XX e a produção e divulgação da cultura nacional.

Estudos Sociais Brasileiros 10

credit: 0.5

Pré-requisito: alunos matriculados no 10º ano, 1a. série do Ensino Médio.

Este curso trabalha a formação e a dinâmica da população brasileira. Estuda-se a evolução do processo de distribuição populacional no Brasil e seus principais elementos: conflitos, crises, momentos de expansão e retração, movimentos culturais e políticos. Ao final do curso, o aluno deverá conhecer os processos de urbanização no Brasil e as causas do crescimento da população brasileira, assim como sua estrutura, distribuição e mobilidade no seu espaço geográfico.

IB Brazilian Social Studies SL I**credit: 1.0**

Pré-requisito: alunos matriculados no 11º ano, 2a. série do Ensino Médio.

O curso de IB Brazilian Studies SL tem duração de dois anos, dividido em Geografia (IB BSS SL I) e História (IB BSS SL II). Este curso tem como objetivo iniciar a preparação dos alunos para os exames do IB e dos vestibulares, na área de Estudos Sociais Brasileiros. Nos estudos em Geografia, busca-se compreender que o espaço geográfico brasileiro é produto de uma organização socioeconômica que se transforma a partir da história, analisar os diversos aspectos da sociedade e do espaço geográfico brasileiro e avaliar criticamente a realidade social e ambiental do Brasil contemporâneo.

IB Brazilian Social Studies SL II**credit: 1.0**

Pré-requisito: alunos matriculados 12º ano, 3a. série do Ensino Médio.

O curso de IB BSS SL II estuda a História do Brasil e aprofunda conceitos a respeito da realidade brasileira, por meio de leituras e análises de diferentes textos e autores. Para tanto, estudam-se a formação do Estado brasileiro, a organização política do Brasil-República e o Brasil no contexto mundial contemporâneo.

No final da 3a série, os alunos serão avaliados nos exames do IB, cujos conteúdos envolvem tanto a Geografia (IB BSS SL I) quanto a História (IB BSS SL II) do Brasil.

Brasil: Desafios da Atualidade**credit: 0.5**

Segundo semestre letivo - Alunos de 10º, 11º e 12ºs anos

Este curso visa proporcionar aos alunos um panorama geral das principais questões contemporâneas presentes no Brasil e no mundo. Os temas selecionados em cada semestre são trabalhados em forma de debates, leitura de artigos de jornal, elaboração de textos críticos e analíticos e análise de filmes. Por meio deles, objetiva-se incentivar a reflexão crítica dos alunos a respeito de seu próprio tempo histórico.

Curso de interesse para vestibulandos.

SOCIAL STUDIES

Brazilian History and Culture**credit: 0.5**

Brazilian History and Culture is an introductory semester course required for all non-Brazilian Diploma students. Our main goal is to understand Brazilian culture from different perspectives, using the students' experiences abroad to enrich our approach. The units are: Introduction to Brazil in the World Today; Brazil on the Map; Ethnic Roots of Brazil: Indigenous, European and African; and Brazilian Political History. Students will be exposed to critical analysis of documents and sources.

Colonial History of the Americas**credit: 1.0**

This course is a requirement for all 9th grade students.

It has been over 500 years since Christopher Columbus first made landfall in the New World. In that time the Western Hemisphere has grown and changed in ways unimaginable for its original inhabitants. This course will explore the roots of this growth and change, looking at the first contact between Europeans and indigenous Americans, conflict, and the establishment of the first towns and villages. The course will be organized geographically and chronologically, first exploring New Spain, then the English and Dutch colonies, and New France (Canada). Race, religion, and trade will be main themes of this course. The institution of slavery in North and South America will be studied comparatively.

Ideas that Shaped the Modern World

credit: 1.0

This course is a requirement for all 10th grade students.

The focus of this course is to understand many of the central ideas that have shaped, and continue to shape, economic, political, scientific, and social thought in the modern world. Once understood, these ideas are applied to world historical events, as well as events and trends occurring today. We study the ideas of Hobbes, Locke, Voltaire, Marx, Smith, Gandhi, King, Thoreau, Darwin, and Malthus. This course will give students much knowledge that will allow them to be thoughtful, critical participants in our global society. Also, the work done this year will provide students with many of the skills and much of the information needed to succeed in future history courses.

IB History SL*

credit: 1.0

Only for seniors in the 2013-2014 school year

This is a one-year course on the driving forces of the twentieth century, such as totalitarianism, and nationalism, fascism and communism. Areas of emphasis include the First and Second World Wars and the origins of the Cold War. Classes are presented in a lecture/discussion format. Students must take extensive notes, access the Internet, research and write clear, analytical essays, and evaluate and interpret various sources of evidence, including primary and secondary sources.

In addition to the IB exam taken in May, an internal assessment project (formal research paper) is required.

IB History SL I

credit 1.0

This is a two-year course that studies three themes from European history in depth: origins of war and rise and rule of single party states and the Cold War. Classes are presented in a lecture/discussion format. Students must take extensive notes, access the Internet, research and write clear, analytical essays, and evaluate and interpret various sources of evidence, including primary and secondary sources. Students must take IB History SL II the following year.

IB History SL II

credit 1.0

This course continues where IB History SL II left off. Students continue to refine skills as they continue their study of previous topics and investigate Cold War. In addition to the IB exam taken in May, an internal assessment project (formal research paper) is required.

IB History HL I

credit: 1.0 (Begins 2014 - 2015 school year)

Pre-requisite: Teacher recommendation and department permission.

IB History HL I is the first year in a two-year sequence which leads to the externally moderated IB exam. During the first year, students examine European history following both a chronological and thematic approach. The course focuses on developments in Europe during first half of the 20th century. Particular attention is given to the causes and effects of World War I, the quest for peace in the 1920s and 1930s, the rise of single party states, the establishment of communism, and the causes and immediate effects of World War II.

IB History HL II

credit: 1.0

Pre-requisite: IB History HL I.

IB History HL II is the second year in the two-year sequence which leads to the externally moderated IB exam. This course examines the recent history of the Middle East both chronologically and thematically. It mainly focuses on developments in the region as a consequence of the creation of the state of

Israel. Particular attention is given to the effects of World War I and II on the establishment of Middle Eastern states, rulers of Egypt post-World War II, the various conflicts between Israel and her neighboring states, the roles of the U.S. and U.S.S.R. in the Middle East, and the Camp David Accords.

In addition to the IB Exam taken in May, an internal assessment project (formal research paper) is also required.

IB Economics SL I

credit: 1.0

Pre-requisite: Enrollment in grades 11-12 and teacher permission.

The IB Diploma Programme standard level economics course aims to provide students with a core knowledge of economics, encourage students to think critically about economics, promote an awareness and understanding of internationalism in economics and encourage students' development as independent learners. Alongside the empirical observations of positive economics, students of the subject are asked to formulate normative questions and to recognize their own tendencies for bias.

IB Economics SL II

credit 1.0 (Begins 2014 - 2015 school year)

Pre-requisite is IB Economics SL I

This course is continues where IB Economics SL leaves off. Students complete the required commentaries and prepared for the IB examinations in May.

IB Economics HL I

credit: 1.0

Pre-requisite: Enrollment in grades 11-12 and teacher permission.

The IB Diploma Program economics higher level course aims to provide students with a core knowledge of economics, encourage students to think critically about economics, promote an awareness and understanding of internationalism in economics and encourage students' development as independent learners. Alongside the empirical observations of positive economics, students of the subject are asked to formulate normative questions and to recognize their own tendencies for bias.

IB Economics HL II

credit 1.0 (Begins 2014 - 2015 school year)

Pre-requisite is IB Economics I

The course picks up where IB Economics HL I leaves off. Students will complete the required commentaries and prepare for the IB examinations in May.

IB Psychology SL I

credit 1.0

IB Psychology examines the interaction of biological, cognitive and sociocultural influences on human behavior, thereby adopting an integrative approach. Understanding how psychological knowledge is generated, developed and applied enables students to achieve a greater understanding of themselves and appreciate the diversity of human behavior. The ethical concerns raised by the methodology and application of psychological research are key considerations in IB Psychology.

The SL courses involves two exam papers in May and an internal assessment.

IB Psychology SL II**credit 1.0 (Begins 2014 - 2015 school year)***Pre-requisite IB Psychology SL I*

The course picks up where IB Psychology SL I leaves off. Students will complete the required commentaries and prepare for the IB examinations in May.

IB Psychology HL I**credit 1.0**

IB Psychology examines the interaction of biological, cognitive and sociocultural influences on human behavior, thereby adopting an integrative approach. Understanding how psychological knowledge is generated, developed and applied enables students to achieve a greater understanding of themselves and appreciate the diversity of human behavior. The ethical concerns raised by the methodology and application of psychological research are key considerations in IB Psychology.

At HL level only, students analyse qualitative psychological research in terms of methodological, reflexive and ethical issues involved in research. HL students also analyze data using an appropriate inferential statistical test. The HL course involves three exam papers in May in addition to an internal assessment.

IB Psychology HL II**credit 1.0 (Begins 2014 - 2015 school year)***Pre-requisite is IB Psychology HL I*

The course picks up where IB Psychology HL I leaves off. Students will complete the required commentaries and prepare for the IB examinations in May.

International Relations I**credit: 0.5***Pre-requisite: Enrollment in grades 10-12.*

The focus of this course is to provide students with a comprehensive understanding of the discipline of international relations (IR). Students will use their newly acquired knowledge to analyze three essays that outline different IR scholars' predictions concerning war and peace in this century: *The Coming Anarchy* by Robert Kaplan, *The Clash of Civilizations* by Samuel Huntington, and *The Pentagon's New Map* by Thomas Barnett. Each book has an interesting take on the future of the world and provides students with much material for discussion. Interspersed with the core curriculum will be a number of real-world case studies designed around major problems facing today's IR scholars and world leaders alike. *(This course does not qualify for the 3.0 History credits required for graduation.)*

International Relations II**credit: 0.5**

The focus of this course is to provide students with a comprehensive understanding of the discipline of international relations (IR). Students will use their newly acquired knowledge to analyze three essays that outline different IR scholars' predictions concerning war and peace in this century: *The Coming Anarchy and Center Stage for the 21st Century* by Robert Kaplan and *The Clash of Civilizations* by Samuel Huntington. Each book has an interesting take on the future of the world and provides students with much material for discussion. Interspersed with the core curriculum will be a number of real-world case studies designed around major problems facing today's IR scholars and world leaders alike. *(This course does not qualify for the 3.0 History credits required for graduation.)*

Introduction to Philosophy**credit: 0.5**

How do we make sense of our ever more complex world? This course encourages students to discover the sources of values that have formed their lives as well as to develop a critical and creative perspective on

themselves and their future. We will examine the underpinnings of pivotal texts considered journeys in truth. From “simple” stories like *The Little Prince* and Tolstoy’s *The Three Questions* to the key texts of Plato’s *Allegory of the Cave* and Hesse’s *Siddhartha* to excerpts from films such as *The Matrix* and *Malcolm X*. In this course students will ask the big questions and need to be willing to engage in dialogue in order to develop a philosophical mind.

INTERDISCIPLINARY

IB Theory of Knowledge I

credit: 1.0

IB Theory of Knowledge II

credit: 0.5

The ToK course encourages critical thinking about knowledge itself, to try to help young people make sense of what they encounter. Its core content is questions like these: what counts as knowledge? How does it grow? What are its limits? Who owns knowledge? What is the value of knowledge? What are the implications of having, or not having, knowledge? At Graded School, the course is taught in three semesters: the first two are devoted mostly to Knowledge Issues and Ways of Knowing, and the third to an Area of Knowledge, as well as preparation of the required formal presentation and paper. Administration of the Extended Essay and of the CAS program is also managed at regular intervals throughout the course.

ENGLISH LANGUAGE LEARNING

English for Academic Purposes (EAP) I

(EAP-I) English for Academic Purposes I is an adjunct course to help ELL students in English 9, Biology and History. In EAP-E, the students acquire strategies to be successful in listening, speaking, reading and writing in English. The students develop the academic language needed to understand course-specific teacher lectures and to read and write for different purposes. The academic language functions needed in the content class include explaining, informing, comparing, describing, classifying, proving, persuading, and evaluating. In addition to the development of academic language, the course focuses on the cognitive strategies such as elaboration of prior knowledge, making inferences, using resource materials, and summarizing.

English for Academic Purposes (EAP) II

(EAP-II) English for Academic Purposes II is an adjunct course to help ELL students in English 10, Colonial History and Chemistry. The major goal of the course is to provide students with the language skills they need to be successful in the mainstream classes and with the specific academic skills in the areas of speaking, listening, reading and writing to handle cognitively demanding course work. As the students need to have the ability to perform high-level thinking skills in the language of instruction, many activities are planned to develop the specialized language skills required in grasping and expressing logical thoughts.

Academic Support 9

credit: 1.0

Academic Support 10

Academic Support 11/12

Pre-requisite: previous identification of specific learning difficulty.

This course offers students additional support in the development of specific skills necessary for successful completion of the high school curriculum. Students will be taught essential compensatory

skills for lifelong learning. Inquiry and organizational skills, time management, group dynamics, auditory processing and social skills for success form the foundation of this course.

Peer Group Connection

credit: 1.0

Pre-requisite: Students apply in grade 11 and the PGC leaders are selected by the PGC teachers. Students must be enrolled in grade 12 and come with a willingness to learn! Attendance at the initial training retreat prior to the beginning of school is mandatory.

This course builds leadership skills while seniors mentor Grade 9 students. The class provides students with knowledge of and experience in group dynamics. Students learn organization and problem-solving skills and have first-hand opportunities to use these skills when they lead bi-weekly small group activities and discussions with grade 9 students. Leaders will also plan and facilitate out-of-school events such as the Freshman Retreat, other community service events, and Family Night.

LANGUAGES & LITERATURE

ENGLISH

English 9

credit: 1.0

Pre-requisite: English 8 or equivalent.

English 9 students strengthen knowledge and skills gained in eighth grade to increase their understanding and appreciation of various literary forms and genres. English 9 is a literature- and writing-based course in which the writing process, grammar and mechanics, vocabulary, and literary devices are taught through the context of literature and writing. Over the course of the year, students will develop a digital portfolio that reflects both process and product. In the early stages of the course, the class focuses intensively on writing in response to short texts, moving on to longer works and an emphasis on more extensive analysis. Texts studied throughout the year may include works of nonfiction, short stories, Shakespeare's *Romeo and Juliet*, and Harper Lee's *To Kill a Mockingbird*. By studying and discussing a variety of texts, students sharpen their thinking, listening, speaking, and writing abilities, fostering confidence and developing necessary skills for communicating well. As with other English courses, before the school year begins comparable texts may be substituted for those listed.

English 10

credit: 1.0

Pre-requisite: English 9 or equivalent.

Grade 10 English builds upon skills learned in English 9. Students continue to study various literary genres and continue to develop as effective readers, writers, and thinkers. Among other texts, we read J.D. Salinger's *Catcher in the Rye*, William Shakespeare's *A Midsummer Night's Dream*, Sophocles' *Oedipus Rex*. We study Arthurian literature and the Bible as literature, as well as a selection of short stories and a range of poetry. In the first semester students will focus on archetypes of the hero, culminating in a multi-media project. During second semester they will study texts with a journey motif, culminating in a personal journey podcast. In addition to a focus on reflective, creative and academic writing, students study grammar and vocabulary both in context and through developmentally appropriate workbooks. Finally, students will develop speaking skills through class discussions and oral presentations. As with other English courses, before the school year begins comparable texts may be substituted for those listed.

Note: As Graded is committed to the IB program both in its philosophy and practice, all Grade 11 and Grade 12 English classes are IB classes. As juniors, students must choose between the following two-year programs, both in Group I of the IB Diploma Program: IB Language and Literature (SL & HL) or IB

Literature (SL & HL). Placement is determined by the recommendation of the English Department in consultation with the student, the counselor, and the IB Coordinator.

IB English: Language & Literature I (SL and HL)

credit: 1.0

The two-year IB Language & Literature program aims to develop and refine the four primary language skills of listening, speaking, reading and writing. Students read a wide range of texts, promoting an appreciation of the richness and subtleties of the English language and the clear expression of ideas. Students are taught to recognize and analyze aspects of style and register, and to incorporate these aspects into their own writing. The study of texts includes an exploration of the relevant English-speaking cultures, encouraging students to examine how cultural contexts influence language use. The first year of the program includes close reading of literature as well as major units on close reading of literature and on mass media and language. This latter unit includes book chapters, videos, audio recordings, magazine articles, cartoons, and news items.

IB English: Language & Literature II (SL and HL)

credit: 1.0

Pre-requisite: IB English: Language & Literature I (SL or HL).

The second year of IB Language & Literature is an extension of both the philosophy and scope of year one. It includes an in-depth study of the contexts of literary texts, as well as a major unit on non-literary language in cultural context. Students are required to take the IB English Language and Literature exams in May.

IB English: Literature I (SL and HL)

credit: 1.0

The IB Literature course is a two-year program for students with a particular interest in studying literature and writing. Fast-paced and rigorous, this class encourages personal appreciation of literature and helps students understand techniques involved in literary criticism. Students develop powers of expression, practicing the skills involved in writing and speaking in a variety of styles and for a variety of audiences. The curriculum includes thirteen texts, introducing students to a range of literary works of different periods, genres, and styles, and broadening their perspectives through works from other cultures and languages. Through the many written and oral assignments, students develop the ability to think well and engage in close, detailed analysis of texts. Besides these useful skills, the course aims to promote an enjoyment of and lifelong interest in literature and writing. There are seven texts in Grade 11, which include Tim O'Brien's *The Things They Carried*, Lorrie Moore's *Birds of America: Stories*, William Shakespeare's *Othello*, Jane Austen's *Pride and Prejudice*, Euripides's *Medea*, Gabriel García Márquez's *Chronicle of a Death Foretold*, and the poetry of Anna Akhmatova. In the first year of the Literature program, students complete two IB assessments: the IB Written Assignment and the Individual Oral Presentation.

IB English: Literature II (SL and HL)

credit: 1.0

Prerequisite: IB English: Literature I (SL or HL)

The second year of the IB Literature program is an extension of both the philosophy and scope of year one. The remaining six texts in the program include Michael Ondaatje's *Running in the Family*, William Shakespeare's *Hamlet*, Toni Morrison's *Beloved*, F. Scott Fitzgerald's *The Great Gatsby*, J.M. Coetzee's *Disgrace*, and the poetry of Elizabeth Bishop. Students complete the second IB oral assessment, the Individual Oral Commentary, and take the IB English Language A: Literature exams in May of Grade 12, which includes a Paper One (poem or prose commentary) and Paper Two (comparative essay of novels).

PORTUGUESE

Português 9

credit: 1.0

Curso obrigatório para alunos de Diploma Brasileiro do 9º ano do Ensino Fundamental

Este curso visa ao aperfeiçoamento das habilidades de comunicação escrita e oral. Os estudos literários baseiam-se em autores brasileiros significativos do século XX à contemporaneidade. Explora-se também a linguagem do cinema, do teatro e de letras de música. Recebe especial incentivo a visão crítica do aluno sobre a realidade. No trabalho com a linguagem escrita, os alunos elaboram narrativas, poemas, entrevistas e dissertações, enfatizando-se o uso da linguagem formal.

Os estudos gramaticais abrangem, além da revisão de morfologia, a sintaxe de período simples e de período composto.

Português 10

credit: 1.0

Curso obrigatório para alunos de Diploma Brasileiro do 10º ano, 1ª série do Ensino Médio

Este é o momento em que se iniciarão os estudos literários de maneira sistematizada. A partir de leituras de obras das mais relevantes da literatura de língua portuguesa, trabalham-se as habilidades ligadas à análise literária; aliado a esse estudo, há um programa de redação criativa e argumentativa, visando a dar continuidade ao processo de desenvolvimento da expressão escrita vivenciado pelo aluno durante seu percurso acadêmico.

Os estudos gramaticais se baseiam nas dificuldades detectadas nas produções orais e escritas dos próprios alunos, assim como no aprofundamento de itens da Gramática Normativa, tais como Regência, Crase, Colocação Pronominal, entre outros.

É importante notar que a escolha das obras a serem lidas, bem como das propostas de produção textual e os recortes gramaticais acontecem orientadas por um eixo de estudos, o que interliga todas as atividades, na busca da construção do conhecimento de modo significativo. No primeiro semestre letivo, o eixo é "Identidade Nacional: a realidade que me cerca". Para o segundo semestre, os alunos trabalharão com o tema "Indivíduo que sou: eu no mundo, eu *versus* o mundo".

Após ser aprovado(a) no 10º ano, o(a) aluno(a) deve solicitar a seu/sua professor/a de Português uma recomendação para ingressar no curso de IB – Bacharelado Internacional - que seja mais adequado a suas características. Para os alunos que sejam falantes nativos de português, o encaminhamento - salvo decisões contrárias de caráter acadêmico-pedagógico - é para o curso de IB HL/SL Língua e Literatura I. Aos estudantes estrangeiros, recomenda-se o curso de Português Língua B HL ou SL.

IB Português: Língua e Literatura I (SL and HL)

credit: 1.0

Pré-requisito: conclusão do curso de Português 10

O primeiro de dois anos de um programa de Bacharelado Internacional, este curso aborda leitura, análise e interpretação de textos desde o prisma da visão sensível e inteligente do próprio aluno. As obras literárias estudadas são consideradas como ponto de partida para que o estudante amplie e aprofunde seu olhar sobre si mesmo como indivíduo e que estenda esse olhar ao mundo que o rodeia, em busca de valores éticos. O curso visa também ao aprimoramento das habilidades linguísticas, por meio do estudo de uma ampla gama de textos, de temas culturais e de estruturas de linguagem, com o objetivo de levar o aluno a expressar-se adequadamente nos diversos níveis do discurso. Os estudos linguísticos são voltados para a compreensão, interpretação e produção de textos variados, além do trabalho com a gramática e as variedades linguísticas.

IB Português: Língua e Literatura II (SL and HL)**credit: 1.0***Pré-requisito: conclusão do curso de IB Português Língua e Literatura I*

Segundo ano do Bacharelado Internacional, este curso dará continuidade ao trabalho anterior, aprofundando os estudos literários em prosa, verso e teatro. Importante notar que a literatura é não só fonte de conhecimento, mas também inspiração para o texto do aluno e possibilidade de ampliação de sua visão de mundo. Os alunos deste curso farão os exames finais do IB (escritos e orais). Espera-se que demonstrem ser usuários competentes de diferentes níveis de linguagem do português contemporâneo, capazes de adequar a escrita a diversas situações e gêneros discursivos, além de demonstrarem conhecimento da realidade que os cerca, revelando um repertório de informações sobre a realidade socioeconômica brasileira e o contexto mundial.

CURSOS ELETIVOS DE LÍNGUA PORTUGUESA**Redação para vestibulares****credit: 0.5***Pré-requisito: alunos de 11o. e 12o. anos, de Português como primeira língua, interessados nos vestibulares*

Curso voltado para a prática de redação, tendo como fio condutor as exigências dos atuais vestibulares. Com base nos critérios de avaliação empregados pelos principais vestibulares brasileiros, as propostas de redação dos últimos anos são analisadas e desenvolvidas, como oportunidade para a prática do aluno. Nesse processo, é priorizada a escrita e reescrita dos textos e a avaliação constante, pelo próprio aluno, de sua produção, em termos de adequação às propostas, argumentação e linguagem.

PORTUGUESE AS A FOREIGN LANGUAGE

In our PFL program, students learn about the Portuguese language and Brazilian culture, in order to understand differences and similarities between their own first language and culture of origin. There are many opportunities to exchange experiences, for conversation and reflection, using Portuguese as a tool. As students improve their speaking, listening, reading and writing skills, they feel more and more integrated into this culture and society, and confident about actively taking part in Brazilian social and cultural life.

Survival Portuguese**credit: 0.5**

Offered during the second semester of the school year for new students, this course emphasizes oral skills, helping students get by in the new culture and language. Survival social skills serve as the main vehicle for language acquisition.

Portuguese Foreign Language I**credit: 1.0**

This course aims to help students get around, find information and talk about themselves in the context of the target language and culture. Program goals also involve developing students' basic practical communication and comprehension abilities (listening, speaking, reading and writing), and the understanding of language and culture, as well as fostering a positive attitude toward communication in a foreign language.

Portuguese Foreign Language II**credit: 1.0***Pre-requisite: Portuguese FL I and teacher or department recommendation.*

This course consolidates the contents of PFL 1 and provides opportunities for students to talk about past experiences and about their lives, families, and cultures in a more fully articulated discourse. It also aims

to develop students' basic abilities to understand and convey information, ideas etc. by listening/reading or speaking/writing Portuguese; and to foster a positive attitude toward communication through dealing with everyday topics.

Portuguese Foreign Language III

credit: 1.0

Pre-requisite: Portuguese FL II and teacher or department recommendation.

This course gives students plenty of opportunity to develop their oral skills through a variety of activities. It also enables them to reflect on Brazilian social issues, in order to raise their awareness and help them develop more informed opinions about the country in which they live, on a comparative basis with their own cultures.

It also aims at equipping the learners with the everyday language/communication skills required to function fluently, accurately, and appropriately in Portuguese in a variety of real-life situations. It enables students to acquire and refine the language skills learned in previous courses (PFL I/II) and to prepare students for their immediate needs in real life.

Portuguese Foreign Language IV

credit: 1.0

Pre-requisite: Portuguese FL III and teacher or department recommendation.

This course aims to give students opportunities to learn even more about Brazilian culture and society. Students begin to recognize certain language subtleties such as differences in register, tone, etc. At this stage students are able to communicate well in any daily given circumstance. They also start approaching and getting to know various different products of the Brazilian culture through authentic texts. Reflection on the similarities and differences among cultures is a key point of this course, leading students to a broader understanding of the language they are learning and the country they are living in.

Portuguese Foreign Language V

credit: 1.0

Pre-requisite: Portuguese FL IV and teacher or department recommendation.

This course enables students to build confidence in the use of the Portuguese language. Students are stimulated to reflect on Brazilian issues and their importance in the world. These may be of a political, social, cultural and literary nature. At this level, students are encouraged to analyze and produce literary and poetic language in Portuguese.

Portuguese Foreign Language VI

credit: 1.0

Pre-requisite: Portuguese FL V and teacher or department recommendation.

This course enables students to build confidence in the use of the Portuguese language at a more advanced level. Students are stimulated to reflect on Brazilian issues and their importance in the world. It also provides students with activities to consolidate a variety of written types of text.

IB Portuguese B SL Português: Língua B SL

credit: 1.0

IB Portuguese B HL II Português: Língua B I HL

credit: 1.0

IB Portuguese B HL II Português Língua B II HL

credit: 1.0

Pre-requisite: teacher and/or department recommendation

Os cursos de Português IB B SL/HL tem como princípios norteadores a inserção do aluno na produção cultural do Brasil e outros países lusófonos, o aprofundamento do estudo das estruturas da língua portuguesa e a prática das habilidades: escrita, compreensão, leitura e oralidade.

A partir dos princípios norteadores acima mencionados, o curso se delineará por meio de análises comparativas entre a língua (história e desenvolvimento) e cultura maternas, e a língua portuguesa (história e desenvolvimento) e a cultura brasileira, estudo da produção literária em língua portuguesa (no mínimo, duas obras para o curso HL) e análise dos aspectos histórico-culturais, comparação com produções cinematográficas e o estudo da linguagem em seu sentido mais amplo, isto é, desde a linguagem comunicacional até a linguagem literária e cinematográfica.

Mais especificamente, o aluno do curso Português IB exercitará elementos de coerência e coesão do texto escrito e oral, o estudo dos vários registros (informal x formal), adequação da linguagem e forma ao gênero textual correspondente e desenvolvimento de vocabulário.

O curso é oferecido como um Higher Level Course de dois anos, assim como um Standard Level Course, de um ano. Nesse caso, o conteúdo será similar, com as adaptações necessárias ao menor tempo de trabalho.

****A reminder regarding IB French B, Portuguese B and Spanish B:**

For students taking IB French, Portuguese B and Spanish courses, it may not always be possible to schedule these singleton courses for every student, given the number of potential conflicts. Thus, some students may need to hire their own tutor for such a language course, as is the practice for a number of other IB languages at Graded.

FRENCH

The French language program at Graded School provides a rich experience of French culture and discovery of the francophone world. Students are invited to be in contact with all French speaking countries through Internet research, movies and educational videos.

Note: *Students in French II, III, & all IB French levels may take the DELF (Diplome Elementaire de Langue Française, Unité A1 to B2).*

French I

credit: 1.0

Students in French I will become increasingly comfortable with the nature of French as a foreign language. Most class time is spent on oral drills through spontaneous question-and-answer exchanges between teacher and student and among the students themselves. Vocabulary is acquired constantly and structures vary according to the material presented. Students are encouraged toward oral expression used in daily life situations, through listening, understanding, asking, answering, and reading.

French II

credit: 1.0

Pre-requisite: French I or placement test, and teacher recommendation.

French II is a continuation of French I, with a cursory review of the fundamentals previously presented. The development of oral, comprehension and written skills continues. The student will feel comfortable speaking in the present, future, and past tenses through listening, understanding, conversation, and reading.

French III

credit: 1.0

Pre-requisite: French II or placement test, and teacher recommendation.

French III focuses on language development and preparation to use the language appropriately in a range of situations, contexts and purposes. Through listening, dialogues, conversation, films, reading short stories and texts, students will improve listening, speaking and writing skills.

IB French B I SL or HL**credit: 1.0**

Pre-requisite: French II or III or placement test, and teacher recommendation.

The IB French B SL course is designed to delve more deeply into language structures acquired during the preceding years. At this point, the ability to communicate opinions and feelings in French is the main focus, especially related to literary texts and characters. Literary themes will be discussed and analyzed, while cultural aspects regarding the Francophone world will be focused on novels, short stories, and poetry.

IB French B HL II**credit: 1.0**

Pre-requisite: French B SL or placement test, and teacher recommendation.

Students will continue to improve their language structure. At this level, they will learn how to express their own thoughts and opinions by giving arguments, by criticizing, by defending their viewpoints more deeply. This ability will increase in oral and written expression. French literature will play an important role at this level: oral discussions and presentations, written approaches of important literary texts and essays will often be required of the students.

SPANISH

Graded's Spanish courses I, II, & III are based on the standards of the European Council in its *European Language Standards*. At all three levels there is a rigorous and progressive integration of grammar and lexical elements, and their use in everyday situations and in working contexts, and communication skills.

Spanish I**credit: 1.0**

This course offers an opportunity to learn Spanish through real-life situations and through lessons emphasizing speaking and listening. Students study the culture and traditions of Spanish speaking countries, working with texts, TV, newspapers, magazines, and interacting with the different Hispanic cultures of the world.

Tras cursar el Español I se espera que el alumno sea capaz de:

- Comprender frases y expresiones de uso frecuente relacionadas con áreas de experiencia que le son especialmente relevantes (información básica de uno y de su familia, compras, lugares de interés, ocupaciones, etcétera).
- Comunicarse e la hora de llevar a cabo tareas simples y cotidianas que no requieren más que intercambios sencillos y directos de información sobre cuestiones que son conocidas o habituales.
- Describir, en términos sencillos, aspectos del pasado de uno y su entorno, así como cuestiones relacionadas con sus necesidades.

The course is conducted entirely in Spanish.

Spanish II**credit: 1.0**

Pre-requisite: Spanish I or placement test, and teacher recommendation.

Tras cursar el Español II se espera que el alumno sea capaz de:

- Entender las ideas principales de textos sencillos y reportarlas a los demás de forma clara y coherente.
- Relacionarse con los compañeros de clase tratando de utilizar el español como herramienta de comunicación.
- Producir textos sencillos sobre temas relacionados a su entorno, así como desarrollar progresivamente la autonomía y la capacidad de autocorrección.

Spanish III

credit: 1.0

Pre-requisite: Spanish II or placement test, and teacher recommendation.

Tras cursar el Español III se espera que el alumno sea capaz de:

- Entender las ideas principales de textos complejos que traten de temas tanto concretos como abstractos, incluso si son de carácter técnico, siempre que estén dentro de su campo de conocimiento.
- Relacionarse con hablantes nativos con un grado suficiente de fluidez y naturalidad, de modo que la comunicación se realice sin esfuerzo por parte de los interlocutores.
- Producir textos claros y detallados sobre temas diversos, así como defender un punto de vista sobre temas generales, indicando los pros y los contras de las distintas opciones.

IB Spanish B SL

credit: 1.0 (each course)

IB Spanish B HL I

IB Spanish B HL II

Pre-requisito: Español III o prueba de suficiencia, junto con una recomendación del profesor.

Este es un curso avanzado para hablantes de español como lengua extranjera. Sus fines son desarrollar la lectura y comprensión de textos escritos de la más diversa índole, así como la práctica de los más disímiles géneros escritos no literarios (cartas, discursos, panfletos, columnas de opinión, reportajes, etc.). El curso también está destinado a profundizar y consolidar en el alumno la capacidad de expresión oral expositiva y polemizadora en un lenguaje variado y rico.

IB Spanish: Lengua y Literatura I SL/HL

credit: 1.0 (each course)

IB Spanish: Lengua y Literatura II SL/HL

Pre-requisito: Los alumnos deberán demostrar una amplia fluencia oral y escrita y recibir la recomendación del profesor.

Este curso ofrece la oportunidad de aprender la lengua española con mayor profundidad y está encaminado más específicamente al estudio de las literaturas española e hispanoamericana. Los alumnos, al mismo tiempo, analizarán y realizarán trabajos de reflexión sobre la evolución histórica de la cultura hispánica.

Los alumnos también producirán diferentes tipos de textos que implicarán el desarrollo de distintas habilidades y prácticas de escritura. La preparación para el examen de Bachillerato Internacional incluirá la realización de composiciones, pruebas gramaticales y lecturas del programa de BI.

M A T H E M A T I C S

We believe mathematics is vital to the development of an analytical, questioning mind. All students can discover and appreciate mathematical ideas and can learn to see them as their own. We offer an individualized program challenging students at all levels to develop mathematical curiosity and appropriate communication skills. Our foremost concerns are for young people to stretch to their fullest potential, become independent learners, be adept at using technology, and be confident in mathematical endeavors.

Integrated Math I**Credit: 1.0***Pre-requisite: Grade 8 Math; pre-algebra*

Students will discover the fundamental concepts of algebra, geometry, statistics and probability. Students will apply these concepts to practical and complex problems. The algebra content of the course will develop proficiency in fundamental skills in algebra: computational rules, solving equations, inequalities, factoring, exponents and linear equations including graphing of lines. The geometry content of the course will develop a strong foundation of introductory geometry: defining basic terms, triangle and polygon properties, congruence, similarity, areas, volumes, circles and transformations. The statistics content will introduce students to basic statistical measurements: presentation of data, measures of central tendency and simple measures of spread. The probability content will introduce student to basic probabilities of a single event: theoretical and experimental probability, sets and Venn diagrams. The interconnectivity between the branches of mathematics and their application to real world problems is a constant theme of the course.

Students are required to have a TI-84 or TI-Nspire (non CAS) calculator.

Integrated Math I Extended**Credit: 1.0***Pre-requisite: Grade 8 Math; Algebra I and department recommendation.*

Students will extend their knowledge of the concepts of algebra, geometry, statistics and probability. Students will apply these concepts to practical and complex problems. The algebra content of the course will develop proficiency in more complex skills in algebra: linear equations and inequalities, properties of exponents, quadratic equations including their graphs and factoring and the introduction of functions. The geometry content of the course will develop knowledge of further geometry, coordinate geometry, right triangle trigonometry, congruent triangles, properties of special triangles and an introduction to proofs. The probability content will introduce students to probabilities involving two events, including mutually exclusive events and independent events. The interconnectivity between the branches of mathematics and their application to real world problems is a constant theme of the course.

Geometry / Algebra 2 Modified**Credit 1.0***Pre-requisite: Successful completion of Algebra I in High School*

This course is designed for students who completed Integrated Math I in High School intending to do IB Mathematical Studies course in Grades 11 and 12. Topics will include Geometry; parallel and perpendicular lines, triangles, area and volume, polygons, circles and Algebra; functions, quadratics, exponents, triangle trigonometry and graphs.

Students wanting to take IB Math Standard Level must complete Algebra II / Trigonometry. Students are required to have a TI-84 or TI-Nspire (non CAS) calculator

Algebra II/Trigonometry**Credit: 1.0***Pre-requisite: successful completion of Algebra I, Geometry and department recommendation.*

Students wishing to study IB Math Standard Level should complete this course as a minimum. This course is a rigorous second-year high school algebra-based course. It is meant to prepare students for advanced work and college preparatory math. Topics include review algebra, linear and non-linear equations and functions, polynomials, problem-solving matrices, rational expressions, irrational and complex numbers, quadratics, analytic geometry, exponential and logarithmic functions, trigonometry, and probability.

Students are required to have a TI-84 or TI-Nspire (non CAS) calculator.

Algebra II/Trigonometry Honors**Credit: 1.0**

Pre-requisite: Successful completion of Algebra I Honors and department recommendation based on grades, interest, and ability to analyze appropriate higher-level problems.

Topics covered are those from Algebra II/Trigonometry, but the pace, breadth, and depth of this course will be on a more rigorous level.

Students are required to have a TI-84 or TI-Nspire (non CAS) calculator.

IB Math Studies I**Credit: 1.0**

Pre-requisite: Geometry/Algebra 2 Modified

This is the first year of the IB Mathematical Studies (SL) program. The emphasis is on real world applications of mathematics and building confidence in its use to solve problems. Topics include descriptive statistics, number, sequences, functions, mathematical models and statistical applications.

Students are required to have a TI-84 or TI-Nspire (non CAS) calculator.

IB Math Studies II**Credit: 1.0**

Pre-requisite: IB Mathematical Studies I

This is the second year in the IB Mathematical Studies (SL) program. Students continue with concepts learnt in Mathematical Studies I. Topics include probability, geometry and trigonometry, logic and sets and an introduction to differential calculus. Completion of a project to be evaluated by IB is also required.

Students are required to have a TI-84 or TI-Nspire (non CAS) calculator.

Students are required to take the IB Mathematical Studies exam.

IB Mathematics SL I**Credit: 1.0**

Pre-requisite: Successful completion of Algebra II/Trigonometry and department recommendation.

Geometry / Algebra 2 Modified is not sufficient as a prerequisite for this course.

This course is offered simultaneously as a pre-calculus course and as the first year of the IB Mathematics SL program. Students will reinforce and build upon previously learned skills in analytical geometry, polynomial functions, inequalities, exponents, logarithms and trigonometry. This course also introduces vectors, probability and statistics.

Students are required to have a TI-84 or TI-Nspire (non CAS) calculator.

Students are required to take the IB Math SL exam.

IB Mathematics SL II**Credit: 1.0**

Pre-requisite: Successful completion of IB Math Standard Level I and department recommendation.

This is the second course in the two-year IB Math SL program. It is a challenging course which allows students to study mathematics in greater detail and prepare more fully for college work. Topics include: vectors, series, limits, differential calculus, integral calculus, probability and statistics, further topics in analytical geometry. Completion of a Math Exploration to be evaluated by IB is also required.

Students are required to have a TI-84 or TI-Nspire (non CAS) calculator.

Students are required to take the IB Math SL exam.

AP Calculus AB**Credit: 1.0**

Pre-requisite: Math SL II or Higher Level I and department recommendation

The Advanced Placement AB Calculus course is a requirement for all students taking Mathematics Higher Level. It is designed to represent college-level mathematics, and is intended for students who have a strong background in college-preparatory mathematics, including algebra, axiomatic geometry,

trigonometry, and analytic geometry. The course explores limits of functions, differentiation, integration and their wide application to both theoretical and practical problems.

Students are required to have a TI-84 or TI-Nspire (non CAS) calculator.

Students are required to take the AP Calculus AB exam in May.

IB Mathematics HL I

Credit: 1.0

Pre-requisite: Algebra II/Trigonometry Honors, and department recommendation based on grades, interest, and ability to analyze appropriate higher level problems.

This is the first year of a two-year IB course in mathematical analysis. A challenging and rigorous course, HL I allows students to study mathematics in greater depth, helping them to prepare more fully for college work. Topics include advanced trigonometry, vectors, complex numbers, series, analytic geometry, and probability.

Students are required to have a TI-84 or TI-Nspire (non CAS) calculator.

Students in grade 11 must also enroll concurrently in AP Calculus AB.

IB Mathematics HL II/AP Calculus BC

Credit: 1.0

Pre-requisite: IB Math HL I and AP-AB Calculus, and department recommendation based on grades, interest, and ability to analyze appropriate higher-level problems.

This course is a culmination of both the IB and AP mathematics curricula. The study of infinite series and approximation theory allows students to simultaneously prepare for the optional topic on the IB HL Math exam and for the AP-BC Calculus exam. Students also study probability and statistics in depth, and revisit in greater detail all the topics from IB Math HLI and AP-AB Calculus, including vectors, matrices, complex numbers, trigonometry, transcendental functions, polar & parametric graphing, and differentiation & integration, and their applications.

Students are required to have a TI-84 or TI-Nspire (non CAS) calculator.

Students are required to take the IB Math HL exam; the AP Calculus BC exam is optional.

PHYSICAL EDUCATION AND HEALTH

Physical Education in the Upper School is an integral part of the total school program and makes a significant contribution to the educational achievement and well being of students, helping them to reach their full potentials. We foster the harmonious development of the individual, facilitating the integration of physical, mental, emotional and social aspects of the student.

Grade 9 - Physical Education

credit: 0.5

This required semester program encourages students to appreciate the value of developing a lifelong healthy lifestyle. Aside from physical conditioning and fitness training there are specific units covered in the ninth grade. These units include: badminton, ultimate frisbee, softball, and futsal.

Grade 10 - Physical Education

credit: 1.0

This year-long required program encourages students to appreciate the value of developing a lifelong healthy lifestyle. Aside from physical conditioning and fitness training there are specific units covered, including; floor hockey, tennis, fitness, volleyball, soccer and basketball.

HS Health (Grade 9)**credit: 0.5**

The goal of this required course is to provide students with the knowledge, skills, and behaviors to choose a healthy lifestyle. The physical, mental, emotional and social aspects of health are addressed in the following units: 1) Communication Skills, 2) Drug Abuse, 3) Relationships (family, friends, dating), 4) Reproductive Health (STD's and contraception), and 5) Abusive Relationships & Sexual Assault. Students participate in small and large group discussions and role-play scenarios. They also complete oral presentations, written reflections and activities. Students acquire skills needed for effective communication, decision making, goal setting, conflict resolution, and making healthy choices.

SCIENCE

American diploma students must take at least three science courses (one each of Biology, Chemistry, & Physics) to complete graduation requirements, while Brazilian diploma students need four science courses. We recommend that students take one science course per year. Students wishing to take more than one course a year must get approval from the Guidance Office. There are no pre-requisites for Biology and Chemistry. Students in grades 9 or 10 wishing to take Physics must have instructor approval. Candidates for IB Physics SL/HL and IB Biology must also have instructor approval.

Integrated Science I

This course is designed for the 9th grade science experience, integrating concepts from biology, chemistry, physics and the Earth & space sciences. The laboratory-intensive course provides multiple opportunities for students to develop and hone fundamental laboratory techniques and inquiry-based skills. Students probe natural phenomena through the lens of real-world contexts, to include Environmental Dynamics, Genetic Unity & Diversity, Food, Nutrition & Fitness and The Quest for Energy. This course provides rigorous preparation for the IB Diploma Program in science.

Integrated Science II

Integrated Science II aims to ground the study of chemistry and physics in practical everyday experiences. Each unit is presented thematically including topics such as alchemy, smells, weather, optics, fire and toxins. Through an inquiry based approach, students will discover connections between course concepts and the world around them. With completion of both Integrated Science I and II, students will be prepared to enter any IB science course.

Physics**credit: 1.0***Pre-requisite: Geometry*

A conceptually based physics course designed to give any student the ability to understand and explain physical laws and principles. Emphasis will be placed on a real world appreciation of the laws and principles. Topics include: graphical analysis of motion, kinematics and dynamics of linear, rotational, and simple harmonic motion; momentum, energy and conservation laws; heat and thermal physics; electro-magnetism; wave behavior and optical phenomena.

IB Physics SL I/II**credit: 1.0****IB Physics HL I/II**

Pre-requisite: Passed Alg 2/Trig in 10th Grade and Strong recommendation from your Math teacher.

A two-year course in Physics designed to fully meet IB requirements and prepare the students to complete the IB Physics examination. The course covers Classical Mechanics, Electromagnetism, Thermodynamics, Waves, Energy, Power and Climate change; and Modern Physics. Both the number of topics covered and the depth of study of each topic is greater than standard physics courses. The core syllabus gives a non-calculus development and presentation of physical laws and principles, emphasizes both theoretical and practical aspects of physics, and requires the completion of the Lab Portfolio for external moderation. Two option topics will be discussed to fulfill IB requirement.

Students are required to take the IB Physics exam.

IB Biology SL I/II**credit: 1.0****IB Biology HL I/II**

Pre-requisite: Biology, Chemistry, and teacher approval.

A two-year laboratory course in biological science, designed to prepare the student for the IB examination and IB internal assessment. The core knowledge in biology to be included is: statistical analysis, chemistry of life, cells, human physiology, plants, genetics, evolution and ecology. The courses may also cover option areas in human health and nutrition, physiology of exercise, evolution, neurobiology and behavior, microbes and bio-technology, ecology and conservation. This is an extensive laboratory class which allows the student to develop and understand biological concepts through personal experience, with ample opportunities for research and discovery.

Students are required to take the IB Biology exam.

IB Chemistry SL I**credit: 1.0**

Pre-requisite: Biology, Chemistry, and/or teacher approval.

A two-year course in chemistry designed to fully meet IB requirements and prepare the students to complete the IB Chemistry examination. The course covers quantitative chemistry, atomic structure, periodicity, bonding, energetics kinetics, equilibrium, acids and bases, oxidation and reduction, organic chemistry, and measurement and data processing. Both the number of topics covered and the depth of study of each topic is greater than standard chemistry courses. The courses will also cover two options that will connect the core chemistry topics with real-world applications. This is an extensive laboratory class and requires the completion a of the lab portfolio for external moderation.

IB Chemistry SL II**credit: 1.0 (Begins 2014 - 2015 school year)****Human Anatomy and Physiology****credit: 1.0**

Pre-requisite: Biology- Offered on sufficient demand. Grades 11 – 12.

Grade 10 only with instructor approval.

Human Anatomy and Physiology is intended to give students a working knowledge of the human body. The course is divided into two semesters, the first one an introduction to the human body with focus on the systems involved with nutrition and the science of exercising (digestive, muscular, circulatory and respiratory systems). On the second semester our focus will be on our interaction

with the environment we live in and how we react to outside stimulus, looking at the nervous, endocrine and immune systems. Towards the end of the semester we will then focus on human reproduction and development. Each of the body's systems will be studied with an emphasis on anatomical histology and structure, physiological functions, disease and health. The interaction and dependency of the systems will also be emphasized. Prospective students should note that detailed dissection of fetal pigs and other mammalian organs will constitute a major aspect of lab work.