

Instructor: Ms. Emily Schroeder

Room C-18

My name is Bond, Ionic Bond; Taken, not shared!

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<http://www.geocities.com/emokat>

Tutoring: Everyday lunch
& most days afterschool

Saint Vincent Saint Patrick High School Biology Syllabus

What in the world isn't Biology?

This laboratory science course is a survey course in biology so that our students can better understand their relationship to the "living world" around them. This course covers the important aspects of biology related to plants and animals. The course will begin with a look into the "micro" world of biology and evolve toward a study of comparative animal and plant anatomy and the various biological systems. Students will begin to get an appreciation for how humanity affects the environment and grasp how all the organisms of the earth, from bacteria to humans are needed on this planet in order for life to thrive. While studying each of the various topics, students will have a practical approach to the subject in laboratory experiments. Biology is the only science in which multiplication is the same thing as division.

Textbook and Other Required Materials:

- 1) Modern Biology (Holt, Rinehart, and Winston 2002)
- 2) Modern Biology Workbook (Holt, Rinehart, and Winston 2002)
- 3) Three-ring binder and paper to neatly keep homework, worksheets, and quizzes for further exam study (can be a shared binder)
- 3) Scientific calculator, pencils, pen, and straight edge ruler.
- 4) Marbled Composition Notebook (\$1 to Ms. Schroeder or buy own) to keep notes and homework organized (100 sheets, 9 ¾ X 7 ½) No spiral notebooks.

Course Overview: BIG IDEAS

- 1) Students will learn concepts, applications, relevant issues, and history of Biology.
- 2) Students will perform analytical experiments and understand Biology as a laboratory science.
- 3) Students will understand and develop their critical thinking skills in problem solving using scientific methods of evaluation and mathematical formulae.
- 4) Students will use standard resources available to biological studies

When asked if she wanted a PB and J sandwich for lunch, Jane said no I don't want a Lead and Jelly sandwich

Individual Student Goals

Class Preparation: Students are required to come to class prepared to work. This includes having read the text before doing the homework problems, completing the nightly homework, bringing proper materials to class (as per list above), showing a willingness to use classroom instruction time, and cooperating with fellow students.

Class procedure: includes homework review, presentation and discussion of new material, and laboratory practice and application. Students are expected to read the text before doing the homework problems. They will benefit from taking good notes and participating in class discussions. Working solutions on the board and at the desks will engage students in the learning process.

Group Learning: There are a range of student abilities and talents, and cooperative learning becomes an important resource for all students. Students will be working as groups in the laboratory with potentially hazardous or corrosive materials. Mickey Mouse's favorite element is Plutonium.

Because of this, a high degree of self-discipline is required to maintain a safe learning environment. A laboratory safety contract will be strictly enforced.

Grading Rubric for student learning:

The "A" Student

*Consistently superior comprehension and performance on assessments
Exhibits work with exceptional insight or special creative talents
Tends toward self-direction in activities and participates in class activities as listener,
questioner or commentator
Completes all assignments*

The "B" Student

*Consistently strong comprehension and performance on assessments but
may have difficulties synthesizing concepts
Work is consistent but offers little insight or special creative talents
Shows occasional initiative but tends to rely on teacher direction
Participates in class activities as listener but is a less frequent questioner or
commentator
Completes all assignments*

The "C" Student

*Inconsistent or fair comprehension and performance on assessments Difficulties
applying and synthesizing concepts
Generally addresses the explicit but seldom offers little insight or special creative
talents
Relies on teacher direction
Participates in class primarily as a listener
Usually comments only if questioned
Completes most assignments*

The "D" Student

*Minimum comprehension and performance on assessments
Often misses explicit relationships
Relies on teacher direction
Participates in class primarily as a listener
Comments only if questioned
Fair number of assignments are missing*

GRADE COMPOSITION 1st quarter = 42.5% 2nd quarter = 42.5% Final Exam = 15%

Unit Exams approx 25% Exams will be administered at the conclusion of each unit and will require advanced preparation and study. Completing homework, taking notes, and collaborating on lab experiments will help immensely for studying for an exam. Additionally students may benefit by working together in study groups to review exam material and attending a weekly tutoring session. Exams will assess students in a variety of formats (multiple choice, mathematical problem solving and essay) and will require students to employ recognition of vocabulary, application of concepts, and synthesis of ideas. . If you have a foreseeable absence on an exam day, you must inform me and plan an alternate exam time. You may not take an exam for credit after I have returned these to the class. If absent on the day of the exam, you will have the amount of days missed to make up the exam. Students must keep all exams for corrections at the end of the semester to earn enrichment points.

Laboratory approx 20% Lab experiments will occur most weeks with a pre-lab to be completed prior to lab in the student notebook. A pre-lab quiz may be given to judge student readiness and awareness of the experiment. A passing score on the pre-lab quiz will allow the student to participate in the exercise. Upon completion of a lab, a post lab and formal write-up may be assigned showing analysis using both qualitative and quantitative criteria. Experiments must be reproducible. They should fail the same way each time. Laboratory summaries will be turned in typed. Laboratory activities should not be missed for co-curricular activities. In the event that you miss a laboratory due to illness, the scheduled time for lab make-up will be announced.

Quizzes approx 20% Quizzes will review material from problem sets and laboratory. You will be allowed to drop one of your lowest quiz scores of each semester. In the event that you are unable to take the quiz on the scheduled day, I will use this as one score to drop. If you have a foreseeable absence on a quiz day, you must inform me and plan an alternate quiz time. You may not take a quiz for credit after I have returned these to the class. Quiz corrections must be complete the day after the quiz is handed back in order to earn back half the points lost. All questions and work must be written out.

Homework/Notebook approx 20% Students will have nightly problem sets that cover material for the quizzes and exams that should be written and solved in a portfolio. Students should be prepared with problems complete or at least tried upon coming to class. If a student does not understand problem, you must write out the problem and write out the Given, Find, Solve steps and ask questions the next class day. You should expect, on average, to spend 15-30 minutes with homework each night. Students must write the questions to accompany each problem and show all intermediate steps used in problem solving. In the event your homework is not complete, you will receive half credit. No unexcused late homework will be accepted. There will be no exceptions! I will drop four homework assignments at the end of the semester. Here in California, when a bridge falls down, we know it must be San Andreas' Fault! If absent, student are responsible for getting their make-up work from fellow students or the teacher. The portfolio notebook will be collected for check ups at various points in the semester.

Final Exam 15% A comprehensive final exam will be given to all students at the end of each semester. Biology is cumulative in nature and will apply previously learned skills throughout the course.

Enrichment: Enrichment opportunities will appear various times in the semester. These opportunities allow student to go beyond the regular course work and enrich their knowledge in the ever changing and developing science world. If a student finds a news article or television show that pertains to our class topic at the time, they may write up a one page summary explaining significance of their finding and may present to the class if time permits. A student can have no more than 3 missing assignments to have this opportunity. Students who have missed assignments must turn them in completed for zero credit to have this option. Attending tutoring sessions will give the student 2 enrichment points each time.

Service Learning Projects: Service learning will connect our curriculum to meet the greater needs of our community. These projects will allow students to connect their knowledge of earth science to aspects of Catholic Social Teaching. Service projects may be counted as part of homework grade or as an enrichment opportunity depending on the project.

Attendance: In the event of a foreseeable absence (ie. sports, appointments), **I expect the student to inform me prior to their absence from class. Since you will be on campus to participate in sports activities, school events (ie. liturgy, rally set-up), co-curricular activities, and fieldtrips, you must turn in the assignment due while still on campus prior to leaving.** For planned absences, the student should be prepared with missed work on his/her return to class. For unforeseen absences, all work, quizzes, and exams must be complete in the same number of days the student was absent. (ie. A student misses Monday and Tuesday, they have until class Friday to get the work in, non-class days count, must check in with teacher even if there is not class that day)

The Year at a Glance

Unit 1: Science of Life; Scientific Method; Using a Microscope

Unit 2: Chemistry

Unit 3: Structure and Function of the Cell, Homeostasis (Osmosis & Diffusion)

Unit 4: Photosynthesis/Respiration

Unit 5: Cell Reproduction

Unit 6: Fundamentals of Genetics

Unit 7: Nucleic Acids, Protein Synthesis, Gene Expression

Unit 8: Human Genetics, DNA Technology,

Unit 9: The Origin of Life, Evolution: Evidence and Theory, Human Evolution

Unit 10: Classification

Unit 11: Introduction to Animals

Unit 12: Importance of Plants

Students and Parents/Guardians:

In an effort to support Saint Patrick Saint Vincent High School and our global community's awareness of waste, Ms. Schroeder's Biology class syllabus is online and can be downloaded or printed and read at <http://www.geocities.com/emokat>

After completion of reading the syllabus document, please sign the following form and return to Ms. Schroeder by Friday, August 22, 2008.

Academic Honesty:

As stated in the 2008-2009 Parent-Student Handbook, any sort of infraction will be taken seriously with subsequent consequences.

SPSV Honor Code

Every member of the St. Patrick-St. Vincent High School community strives to live by the letter and the spirit of the SPSV Honor Code:

As a member of the St. Patrick-St. Vincent High School Community, I promise to aspire to the highest level of personal and academic integrity. I will work toward building an environment of trust and mutual respect in all that I do. Furthermore, I commit myself to truth (Veritas), avoiding dishonesty in both academic work and in personal encounters. I will always endeavor to create an atmosphere of peace and tolerance, with respect for others and their ideas.

For any further guidelines or policies not mentioned in Ms. Schroeder's syllabus, I follow those that are stated in the 2008 -2009 Parent-Student Handbook

By signing this document, I understand the policies and procedures to be a successful student of Biology

STUDENT SIGNATURE: _____.

By signing this document, I have read and support the teacher and my child in their efforts to have a successful year in Biology.

PARENT SIGNATURE: _____.

Parent questions or concerns: