Welcome to the Biology 10 Lab! Please read through the following information carefully. In this syllabus you will find descriptions of what you can expect from this course, from me as your instructor, and perhaps most important, what is expected of you.

Instructor: Nathan Norris
Office: SM 22A
Phone: (408) 741-2634
E-Mail: nathan_norris@westvalley.edu
Web: http://instruct.westvalley.edu/norris
Office Hours: Tue & Thu 7:00-7:30am & 4:15-4:45pm, Fri 8:00-9:00am or by arrangement.
If you cannot make the above times, feel free to drop by, or make an appointment.

As your instructor I am here to facilitate your education by (1) presenting you with the material that you need to learn, and (2) by assisting you in your learning of the material. I will try to make it fun and I will do everything I can to help you, however, I cannot learn it for you - that is your responsibility. If you have questions, please do not hesitate to ask. With effort you will learn and be successful - the effort, however, is up to you.

I. General Course Information

Welcome to the Biology 10 Laboratory. This lab is designed to allow you hands-on exposure to many of the topics discussed in the lecture. Each week the laboratory explores one or more key topics from your lectures through observations and experiments. The activities in lab are designed to reinforce what you have learned in lecture. You will be expected to answer the questions in your laboratory manual based on what you have learned from your reading and lectures, what you have observed in lab, and from your own experience. In the course of the semester you will find that biology is a science based on observation, a skill that you will develop during this lab. Our understanding of biology is continually growing and changing as new observations are made. Science may be thought of as a process and as such there is often no single right answer to a question! What is thought to be understood today may be shown to be incomplete tomorrow. As such biology requires you to keep an open mind, to think and ask questions, as you will see in many of the labs that follow.

Prerequisites: There are no prerequisites for this course. However, students are expected to read and write at the college level and know enough mathematics to use and understand graphs and charts.

Note: If you have a learning or physical need that will require special accommodations in this class you will need to notify me in writing of your accommodation needs. West Valley College makes reasonable accommodations for persons with documented disabilities. Students should notify the Disability and Educational Support Program (DESP) at 741-2010 or (TTY 741-2658) of any special needs.

II. Texts and Support Materials


Pre-Lab Webpage: http://instruct.westvalley.edu/schrey/b10prelabs/B10Prelabs.html
Lab Instructors Web Page: http://instruct.westvalley.edu/norris/10Lhome.html
Textbook: http://www.mhhe.com/arisHome/
You must purchase a current copy of the Biology 10 Laboratory Manual before the second lab meeting and bring it to lab every day. This manual is revised frequently so be sure you have the correct version. Be sure to read through the lab prior to coming to class.

In addition to the lab manual you will need a copy of the text (Mader). The text will be an important reference for the material covered in both the lecture and the lab. It is important that you read the assignments prior to coming to class and I suggest that you bring your textbook to lab each day.

Purchasing Course Books: Several options are available to you.

West Valley Campus Bookstore: You can purchase all of the books listed in the course syllabus directly from the bookstore located on West Valley campus. The bookstore also provides an online service in case you do not want to go there in person (http://www.bkstore.com/westvalley). Note: bookstore profits help fund the campus center – purchasing your books from the campus bookstore will help support the campus center.

Ordering Online (new or used): I am aware that new book prices are high and that this can place an undue burden on student budgets. One option to save money is to order books online from discount suppliers. The downside to this option is that, depending on the vendor, it can take several days to weeks for your books to arrive, and you will need the “required books” on the first day of class. Consequently, unless you have ordered your books several weeks in advance, this option may better serve you for the purchase of the “recommended and optional books” listed in your syllabus. Possible online sources are listed on the course website (http://instruct.westvalley.edu/norris/10Lhome.html).

III. Nature of the Lab

Thoughtful, disciplined hands-on work in the lab is often the most effective method for learning biology, in fact for most students this is where things start to make sense. How much you gain from this depends on your involvement and participation. In fact, most of our current understanding of biology comes primarily from laboratory and field investigation. While lectures will introduce you to the principles of biological study and understanding, lab activities are designed to allow you hands-on exposure to many of the same topics discussed in the lecture. Each laboratory will explore one or more key topics from your lectures using materials for you to observe and/or use in experiments.

It is expected that you read through the lab activities and any assigned reading prior to the lab. You will then need to complete a pre-lab assignment due at the start of each lab. Preparing ahead of time will enable you to get the most out of the lab (and possibly finish sooner). You can even start to answer some of the questions in the lab report before coming to lab.

At the beginning of each lab I will give a short introduction to the key concepts being demonstrated by the lab, the objectives of the lab, and the materials you will use in conducting the lab. Following the introduction you will spend the majority of the lab period making observations and answering questions based on what you observe. I strongly suggest that you read through the lab prior to coming to class. This will enable you to get the most out of the lab (you can even start to answer some of the questions). Working as a group with the other students at your table is encouraged, however, the lab report that you turn in is an individual effort. You will be expected to answer the questions in your laboratory manual based on what you learn from your reading and lectures, what you observe and record in lab, and from your own experience. The lab reports will be graded and you will be quizzed on that material at the start of lab the following week.

Note that the pre-labs and lab reports are intended to serve as your guide to understanding important principles and to support and reinforce what is presented in lecture. Thus it is to your advantage to make every effort to understand the material and thoroughly answer the questions. The weekly quiz provides a means to evaluate your level of understanding of this material.

A typical lab will progress according to the following schedule:
1) Turn in pre-lab assignments (at the start of lab, before the quiz)
2) Take a quiz on the previous weeks lab (plus a question on the current lab)
   - on completing the quiz you will need to turn in both the quiz and the previous weeks lab report
3) Introduction to the lab activities
4) Completion of lab activities
5) Lab Review (as time permits)
For more information about the laboratory see the Biology 10 Laboratory web page:
http://instruct.westvalley.edu/svensson/B10Main/index.html

Download pre-lab assignments form the pre-Lab webpage:
http://instruct.westvalley.edu/schrey/b10prelabs/B10Prelabs.html

Note: Eating, drinking, and smoking within the lab room is strictly prohibited. No visitors in the lab.

IV. Evaluation

Lecture: the points you earn in lecture will account for 75% of your grade

Laboratory: the points you earn in lab will account for 25% of your grade

Pre-lab Exercises (3 pts):
Several days prior to lab you should access the pre-lab webpage and download the pre-lab worksheet for the next lab (http://instruct.westvalley.edu/schrey/b10prelabs/B10Prelabs.html). You should review the upcoming lab and the appropriate sections of the textbook and complete the pre-lab. This will also help you complete the lab faster. The pre-lab exercises must be turned in to the instructor at the beginning of the lab.

Lab Reports (7 pts):
You are expected to turn in a completed lab report at the beginning of the next lab. The report will be spot checked for accuracy and completeness. These lab reports are intended to serve as your notes so it is to your advantage to be as thorough as possible and make the effort to understand the material. You can use the lab report to prepare for the next quiz. Note: you must attend the lab to earn report points. All lab reports must be turned in at the end of the lab period and all will count towards your grade, no lab reports will be thrown out.

Quizzes (15 pts):
Each lab will begin with a quiz. Quizzes will consist of true/false, multiple choice, fill-in and/or short essay questions based on the material covered during the previous week and/or the pre-lab exercise for the current week. You may use your lab report (but not your book) for the quiz so it is important to complete the lab activities and prepare ahead of time. The quizzes will be given at the beginning of lab - so arrive on time. All quizzes must be completed and turned in within 15 minutes. There will be no make-ups for the quizzes, but your lowest quiz will be thrown out.

Hot Topics Assignment (50 pts):
One of the requirements of the course is to complete a research paper on an environmental issue and prepare a presentation of your research. One lab period will be dedicated to student presentations of their research. Details To Be Announced. Special note: this is a requirement and will result in an incomplete grade for the entire course if it is not completed.

Extra Credit:
Education is not received. It is achieved. - Anonymous
Extra credit assignments are not offered. If you are not performing as well as you would like, increasing your workload with extra credit assignments will not help. If you are having trouble please come see me and we can discuss possible learning strategies that may help.

Note: Periodically I will post your lab grades. This gives you the opportunity to know exactly where you stand in the lab, if you are missing any work or if I have made any errors in recording your scores. Be sure to look it over. Note: you will need to provide a “secret identity” for posting of your grade.

V. Grading

If you can find a path with no obstacles, it probably doesn’t lead anywhere. - Frank A. Clark

You are not entitled to a passing grade, you must earn it. You will be graded based on how well you do, not on how hard you work. Effort is expected, not rewarded. Your lab grade will be based lab points earned (actual point values may vary).
Lab Point Breakdown (example):  

<table>
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<th>Points (note: actual point values may vary)</th>
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<tr>
<td>Quizzes (best 12 @ 15 points each)</td>
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<tr>
<td>Lab Reports (14 @ 7 pts each)</td>
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<tr>
<td>Prelab Assignments (13 @ 3 pts each)</td>
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<tr>
<td>Biology Hot Topics Assignment</td>
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<tr>
<td>Total Lab Points Possible</td>
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</table>

Remember that the points you earn in lab will account for 25% of your final Biology 10 course grade. The percentage of the total points possible that you earn in the lecture will be combined with your laboratory percentage to determine your course grade as follows:

\[(0.75 \times \text{lec percent}) + (0.25 \times \text{lab percent}) = \text{course percentage}\]

Example: assume you earn 72% of the possible points in lecture and 88% in lab.

\[(0.75 \times 72\%) + (0.25 \times 88\%) = 54\% + 22\% = 76\% \text{ (“C”)}\]

Note: because the lecture is weighted more heavily than the lab, your lecture score will more closely approximate the final grade that you will earn.

Your final course grade will be based on the following scale:

- **A** (90-100%), **B** (80-89%), **C** (65-79%), **D** (55-65%), **F** (below 55%)

**Warning:** failure of the lab will automatically result in failure of the course.

**VI. Academic Dishonesty**

The college policy on cheating is clearly spelled out in the college catalogue and will be strictly enforced. Use of any method other than your knowledge and memory (such as notes, looking on other students papers, communication between students etc...) to answer questions on an exam or quiz constitutes cheating and will result in failure of that exam or quiz and probable failure of the course. Such behavior is disrespectful of other students and more importantly, of yourself. No dictionaries of any kind may be used during the exams or quizzes.

**VII. Attendance**

It is your responsibility to attend ALL class meetings. Class will start on time and last the entire time. It is expected that you are present at the start of class and attend the entire period. Your success depends on your attending regularly, taking good notes and studying. Please do not schedule appointments during scheduled class time or plan on leaving early. Unexcused absences may result in a loss of points and/or failure of the course. Failure to attend the equivalent of 10% or more of class (more than 3 lectures or 3 labs) for ANY reason may result in disqualification from the course (i.e. failure).

It is critical that you come to class prepared, having read the assigned material ahead of time, and that you take good notes. Failure to attend lecture or lab will result in missing announcements and valuable information that may not be covered in the text. Reading the text alone will not substitute for attendance. Students who attend, take good notes and study, have a good chance of doing well in this course.

**VIII. Dropping the Course:**

If you decide to drop the course it is up to you to fill out the appropriate paperwork and inform the instructor. **Do not** assume that if you stop coming to class that you will automatically be dropped. Students who fail to attend but do not inform the instructor and officially drop the course will receive a failing grade.

**IX. Miscellaneous Notes**

**CELL PHONES:** Due to the disruptive nature of cell phones and pagers all cell phones and pagers must be turned off while in lab. If for some reason you must leave your cell phone or pager on please switch it to silent mode and leave the room before answering it.

Ringing cell phones and/or pagers during quizzes may result in failure of the quiz. If you must leave your phone on during a quiz please switch it to silent mode. If, for any reason, you answer a cell phone or pager during a quiz you must turn in your quiz and forfeit your remaining time.
NON-SMOKING POLICY: It is the policy of the District to provide a safe learning and working environment for students and employees. It is the intent of the District to provide a smoke-free environment to the greatest extent possible. Smoking is prohibited in all indoor locations within the District. Smoking is prohibited in all areas of the Mission and West Valley campuses except in parking lot areas that are at least twenty five (25) feet away from buildings and pathways.

X. Tips for Success in this Course

Everyone can succeed in this course. To do so you must make the effort. You must be willing to work hard. This includes attending regularly, coming to class prepared, asking questions when you don't understand, taking good notes... in general, developing good study habits. These skills can be developed. If you don't have these skills the instructor may be able to help.

Each student must find what works best for them, however, some hints may be helpful. These include reading the assignments prior to coming to lecture. During the lecture take notes on your own paper, not on the lecture outline supplied. After the lecture (not the night before the exam) sit down with your notes, the book (pay particular attention to the figures), and the lecture outline. Review the terminology (you will learn lots of new terms) and fill in the blanks on the lecture outline from both your notes and the text - if it is not on the lecture outline don't emphasize it (but don't ignore it either). Upon completion you will have created a comprehensive study outline to use when reviewing for the exam. Finally, once you feel comfortable with the material get together with a small study group and go over it. Answer the study questions on the lecture outlines and at the end of the chapters. If you can explain ideas, concepts and terms to another student, you will be well prepared for an exam.

Remember – if you prepare, attend each class, do the work, and study there is no reason why you cannot earn a good grade. Please do not hesitate to talk to me if you have any questions or comments. I am here to help. I want you to be successful in this course.

You have to have confidence in your ability, and then be tough enough to follow through.
- Rosalynn Carter

XI. Campus Resources

As a registered student you have a host of resources on campus that are available to you, many free of charge. The following is a partial list (for a complete list please refer to the college catalogue).

Admissions and Records
- Apply for Admissions (http://www.westvalley.edu/classes/)
- Register for Classes (408) 741-TREG or http://www.westvalley.edu/classes/

Health Services (408) 741-2027
- provides limited medical treatment, health assessment, counseling and referrals

Tutorial Services (408) 741-2038
- tutoring is available without charge to students in academic and/or vocational subjects

Financial Aid (408) 741-2024
- program to assist eligible students in meeting education costs while attending school

Counseling Center (408) 741-2009
- provides academic, career and personal counseling for students

Disability & Educational Support Program (DESP) (408) 741-2010
- program to integrate students with disabilities into classes and equalize educational opportunities

Educational Transition (ET) for Women and Men (408) 741-2022
- program for adults who are returning to continue or begin their education

Extended opportunity Programs & Services (EOPS) (408) 741-2023
- support services for students who have historically experienced language, social, financial barriers

Technology Center (408) 741-2666
- computers with internet access are available, requires a nominal fee for printing
# LABORATORY SCHEDULE

<table>
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<tr>
<th>WK</th>
<th>WEEK of</th>
<th>LAB</th>
<th>LABORATORY ACTIVITY</th>
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<tr>
<td>1</td>
<td>1-Feb-10</td>
<td>1</td>
<td>Concepts In Biology <em>(provided as Handout)</em></td>
<td>1, 31.3</td>
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<td>2</td>
<td>8-Feb-10</td>
<td>2</td>
<td>Scientific Inquiry &amp; Lab Safety <em>(No Lab Friday 2/12)</em></td>
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<td>3</td>
<td>15-Feb-10</td>
<td>3</td>
<td>Microscopes <em>(No Lab Monday 2/15)</em></td>
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<td>22-Feb-10</td>
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<td>Cell Environment</td>
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<td>5</td>
<td>1-Mar-10</td>
<td>5</td>
<td>Respiration &amp; Photosynthesis</td>
<td>6, 7, 8</td>
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<td>6</td>
<td>8-Mar-10</td>
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<td>Nutrition &amp; Physical Fitness</td>
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<td>15-Mar-10</td>
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<td>Cardiovascular &amp; Respiratory Fitness</td>
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<td>22-Mar-10</td>
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<td>Cell Division &amp; Gene Expression</td>
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<td>-</td>
<td>29-Mar-10</td>
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<td><strong>SPRING BREAK</strong></td>
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<td>9</td>
<td>5-Apr-10</td>
<td>12</td>
<td>Reproduction</td>
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<td>10</td>
<td>12-Apr-10</td>
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<td>Inheritance</td>
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<td>Biotechnology</td>
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<td>26-Apr-10</td>
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<td>Biology Hot Topics <em>(student presentations)</em></td>
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<td>3-May-10</td>
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<td>Evolution</td>
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<td>14</td>
<td>10-May-10</td>
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<td>Campus Nature Walk or Villa Montalvo Field Trip</td>
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<td>Ecology</td>
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<td><strong>FINALS WEEK - NO LABS</strong></td>
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## LABORATORY SECTIONS AND INSTRUCTORS

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<td>6:30 - Kalpin</td>
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**Important Dates**

- Last day to Add: Feb. 11
- Last day to Drop without a "W": Feb. 19
- Last day to Drop with a "W": Apr 30
- Final Exams: May 24-28

**Holidays:**

- Presidents Day: Feb. 12, 15
- Spring Break: Mar 29 - Apr 3
- Graduation: May 28

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### Spring 2010

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**Notes:**
- 1st day classes
- Holiday Presidents Day
- last day to add
- last drop w/o W
- petition to graduate
- 1st day Spring Vernal Equinox
- Spring Break
- Passover Begins
- Easter Sunday
- Tax Day
- Earth Day
- last drop w/ W
- Graduation

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*Bio 10 - Introduction to Biology*