



# FORENSIC PATHOLOGY

"The truth sleeps in the morgue"

Advanced Study Science - 6990

Course Expectations 2010-2011

Ms. Ristow



*Hic locus est ubi mors gaudet succurrere vitae*

## **COURSE DESCRIPTION:**

This one-year, senior level course is offered to Medical Magnet students whose individual desire is to pursue the study of Forensic Pathology. This course is based on principles and procedures employed in criminal and civil investigations and introductory analyses performed by Medical Examiners and/or Coroners. It relates many areas of scientific endeavor to real-life situations. It builds on previous biology, chemistry, physics, anatomy, and medical skills. This course will focus on applying current medical methods and procedures to the collection, documentation, preservation, examination, and interpretation of evidence involved with a deceased human body.

Students enrolled in this course should have taken general biology and general chemistry as a prerequisite. This course will fulfill one credit of the four science credits required for Magnet graduation. **As this is a heavy hands-on class, students are expected to participate in, and document, many labs and various 'crime scene' scenarios.**

## **TEXTBOOK:**

Dolinak, David. Forensic Pathology: Principles and Practice. 1. San Diego: Academic Press, 2005

## **COURSE OBJECTIVES:**

Upon completion of this course, the student will be able to reason scientifically and think flexibly; communicate scientifically and medically; understand medical concepts and value ethical science; exhibit confidence in the ability to solve scientific and medical problems; and collect, manipulate, and present data using proper medical terminology and documenting techniques.

1. To utilize safe, efficient, and effective laboratory rules and procedures.
2. To apply scientific methods to analyze and solve crime simulations involving a deceased human body.
3. To utilize prior scientific knowledge to collect, interpret, and analyze evidence off of a deceased human body.
4. To appropriately use current medical laboratory technology, procedures, and equipment.
5. To analyze current events in relation to forensic pathology concepts.
6. To select and model the various procedures necessary for the proper identification, collection, preservation of evidence in relationship to a deceased human body.
7. To select and model the various procedures necessary for the determination of identification of person, time of death, cause of death, and manner of death, of a deceased human body.
8. To formulate and test hypotheses through the use of inductive and deductive reasoning.
9. To gain insight into branches of forensic pathology such as toxicology, odontology, entomology, anthropology, and histology.
10. To describe and discuss the relationship of science, technology, and society.
11. To explore the historical development of science, technology, and society.
12. To evaluate the moral and ethical issues in the use of Forensic Pathology practices.
13. To explore career opportunities within the field of Forensic Pathology.
14. To develop a written autopsy report that is technically and grammatically correct in format and layout.

## **TENTATIVE COURSE CONTENT AND TOPIC SEQUENCE:**

- I. **First Quarter – What a Medical Examiner/ Coroner Does**
  - a. Anatomy/Physiology Review
  - b. Introduction to Forensic Pathology
  - c. Duties of a M.E. in a Crime Scene Investigation
    - i. Photography & Written Documentation
    - ii. Autopsy & the Paperwork Involved
    - iii. Death Certification & the Paperwork Involved
  - d. Identifying the body before autopsy
    - i. Fingerprints
    - ii. DNA
    - iii. Dental
- II. **Second Quarter – Cause and Manner of Death**
  - a. Natural Death
    - i. Histology
  - b. Unnatural Death
    - i. BFT & Sharps
    - ii. Firearms
    - iii. Asphyxia/Drowning
    - iv. Cars/Aviation
    - v. Forensic Toxicology
- III. **Third Quarter – Examining and Investigating Remains**
  - a. When you can't autopsy
    - i. Postmortem Changes
    - ii. Time of Death
  - b. Identifying John Doe
    - i. Using Forensic Anthropology
    - ii. Using Forensic Odontology
- IV. **Fourth Quarter – Applied Forensic Pathology**
  - a. Coroner's Report Review
  - b. Pathologist as a Witness
  - c. Autopsy of "John Doe"
    - i. Written Autopsy Report
    - ii. Expert Witness Testimony



## **LABORATORY SAFETY:**

Due to the nature of this course, we will be performing many hands-on laboratory experiments. Students will be thoroughly instructed in the techniques for handling such equipment and materials. It is important that the student wear appropriate safety clothing (eye ware, gloves, apron), follow lab safety rules, adhere to experiment directions, and remain tightly focused at all times in the laboratory.

**Failure to do so can result in harm to the student and those around him/her. Accordingly, penalties for failure to adhere to these tenants will be immediate and severe.**

## **MATERIALS:**

**Please bring these materials with you to class each day:**

- writing utensils: pens, pencils, highlighters, colored pencils
- an academic planner (there is a planner check every Monday)
- 2 spiral bound 5-subject notebooks – 180+ pages (*1 for each semester*)
- hardcover composition book (*graph paper preferred*)
- calculator (*scientific preferred*)
- metric ruler and glue/scotch tape
- your brain

**ADDITIONALLY, the following purchases will need to be made:**

- Medical Scrubs
- Lab Fees



**WEBSITE:**

A brief summary of each day’s classroom activities and a listing of assignments, upcoming quizzes and tests, and other information of interest (**LIKE YOUR GRADES**) will be available at:

<https://educatorpages.com/site/Ristow/pages/forensic-pathology>

**REMINDE:**

Please sign up by texting “ @8fg7c9 ” to 81010

**GRADING:**

Grades will be determined by taking the number of points earned divided by the number of total possible points. Points can be earned by participating in the following activities: tests, quizzes, laboratory exercises, homework, and classroom participation (includes note taking and wearing scrubs). Participation grades will be judged solely by the teacher and will be determined upon the following factors: behavior, attitude, attendance, note taking, completing assignments on time, and volunteering to answer questions. The opinion of the teacher on participation points is FINAL.



**NOTE: There are NO extra credit assignments**



Your total points from the term will comprise 90% of your overall grade. The final exam will count 10%.

**ON AVERAGE:**  
**Homework & Participation comprises 20%, Labs and Projects are worth 35%,  
Test and Quizzes are worth 35%, and the Cumulative Final is 10%**

- a. **Homework:** will be given daily, and is usually due the following class period.
- b. **Late and Make-up Work:** Students will be expected to turn in all work on time, unless absent on the day an assignment is due.
  - (1) Work turned in at the beginning of class on the due date will be eligible for full credit.
  - (2) **LATE WORK IS NOT ACCEPTED!**
  - (3) You may use your “GOODDF” card once per quarter to turn in an assignment up to 3 days after the due date.
  - (4) Students with an approved absence will be expected to make up missed quizzes, exams, worksheets, labs, and homework within the same number of class days that they were absent. **REMEMBER**, if an absence is **UNEXCUSED**, I do not need to provide you with, or accept, absent work. In cases where a student with an approved absence misses a full week of class, more appropriate arrangements will be made. **IT IS THE STUDENT’S RESPONSIBILITY TO FIND OUT WHAT THEY MISSED, and to MAKE UP THAT WORK!** (Students should check the “Make-Up

*Bucket” to see what they missed, and to obtain those assignments. Extra assignment worksheets will be kept for two weeks after the assignment is given; after that time, those worksheets will be thrown away.)*

- (5) Due to the nature of labs (some are time sensitive, some are not), if a student misses part/all of a lab, **it will be up to the teacher to determine how the student will make up what they missed.** This MAY include, but is NOT limited to:
- obtaining results from their team
  - coming in on their own time to make up the lab
  - doing an alternative lab assignment
- (6) Quizzes and exams may be made up each school day before or after school, or during lunch. **PLEASE SCHEDULE A TIME WITH THE TEACHER FIRST.**
- c. **Exams:** Chapter, quarter, and semester exams will be based on assigned readings; classroom demonstrations, presentations, lectures, discussion, and laboratory work. Exams will look very much alike in terms of format. They will typically include questions of the following types: multiple choice, fill in the blank, true/false, matching, math problems, graphing, and essay. Each type of exam question will be weighted relative to its importance and difficulty.
- d. **Quarterly and Semester Exams:** A comprehensive exam may be administered at the end of the first and third quarters. These exams would include all the material studied during those quarters, respectively. A comprehensive semester final exam **will be** administered at the end of the second and fourth quarters. This semester exam will cover all the material studied during both of the associated quarters.
- e. **Scrubs:** Medical students **will purchase and wear** medical scrubs as uniforms on **first day of the week.** Uniform guidelines are posted in the classroom and a copy will be sent home. **Fifteen “Professional Dress” points will be given each week.** Failure to wear complete uniform, removing uniform in whole or part after class, improper accessories, hair, or unapproved dress will result in loss of **total points** for that day. If a student is **absent**, they have the opportunity to earn their points if they wear their uniform on the **next day back upon returning to the class** from their absence. **It is the student’s responsibility** to check-in with the instructor to note the wearing of the uniform for the purpose of making up professional dress points if their absence was on the 1<sup>st</sup> medical class day of that week. Extra uniforms may be purchased through the Magnet office each fall or from local uniform stores if a uniform is lost, damaged, or torn. Uniforms are a mandatory part of the professional dress of the academy.
- f. **Citizenship Grades:** Citizenship grades will be determined on classroom participation, behavior, and referrals for discipline. Any student receiving a referral to the Dean’s Office from this class for behavior or academic cheating will be issued and automatic “U” in citizenship for that quarter and referred to the Magnet Office.
- g. **NOTEBOOK CHECKS:** To see how well you keep and organize papers, and other materials given out in class, EVERYTHING done for the class need to be kept in the notebook until the end of the semester. Notebook checks will be done the day before and/or the day of the exam. If you do not have your notebook on the day of the notebook check, you will receive a zero.
- h. **ACADEMIC INTEGRITY: PLAGARISM** in a school environment is academic dishonesty ... aka: **CHEATING.** It will not be tolerated and, if discovered, will be dealt with severely. The consequences may include receiving a grade of zero on that assignment, failing the course, and/or being RPC’d or expelled from Rancho High School.

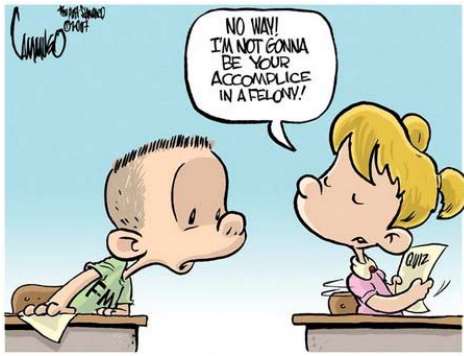
In *Webster’s Dictionary* , **plagiarism** is defined as:

1. To steal and pass off (the ideas of another) as one’s own.
2. To use (a created production) without crediting the source.
3. To commit literary theft.
4. To present as new and original an idea or product derived from an existing source.

**Directly copying someone else’s work and then taking full credit for it is the most flagrant kind of plagiarism. However, there are other, more subtle forms of plagiarism.**

**For example, in a science course:**

1. Copying someone else’s ideas and answers on a test or quiz is cheating.
2. Giving or receiving information on exams outside the classroom is cheating.



- 3. Accepting or giving help during a test or quiz., or using a calculator or notes without expressed permission of the teacher. (This includes using notes stored on a calculator.)
- 4. Directly copying someone’s homework is plagiarism. Working together on assignments is acceptable if ideas are shared, but the actual transcription onto paper must be an individual effort.
- 5. Directly copying answers from a text is plagiarism. It is usually not necessary to credit one’s own text when giving answers, but ideas from any other book must be footnoted.
- 6. Science research papers are governed by the same rules that apply to all research papers. Facts and commonly accepted ideas need not be acknowledged, but all opinions, interpretations of facts, original ideas, charts, and direct quotes must be footnoted.
- 7. Using someone else’s data without giving credit or, **worse**, making up data to fit the expected answer are forms of plagiarism. It is acceptable to present your own obviously erroneous data, to state the reasons that you feel the results should be disregarded, and then to present another student’s data – making sure that the source is acknowledged.
- 8. Classes may be videotaped at any time to document good and bad behaviors.

The educational process is based on the principle that the less educated learn from the ideas of the more educated.  
**Students should, therefore, use ideas and opinions of others. This is not plagiarism.**  
**Plagiarism occurs when this use is NOT acknowledged.**

## COMPUTATION AND WEIGHTING OF STUDENT GRADES:

Letter Grade	Percent Range
A	90-100%
B	80-89%
C	70-79%
D	60-69%
F	Less than 59%

Semester grades will be computed using the same rubric but weighting the quarter and final exam grades as follows:

$$1^{st} \text{ Semester Grade} = 40\% (\text{Q1 Grade}) + 40\% (\text{Q2 Grade}) + 20\% (\text{final exam})$$

$$2^{nd} \text{ Semester Grade} = 40\% (\text{Q3 Grade}) + 40\% (\text{Q4 Grade}) + 20\% (\text{final exam})$$

## How and when students will be advised of their grades:

Academic grades will be posted by student number on the last day of the week; **GRADES ARE ALSO POSTED ON THE WEBSITE EVERY FRIDAY.** If you sign up for “News Flash”, an email will be sent to you to alert you when grades are posted. Students should review this posting to identify missing assignments. Never discard any assignment, quiz, or test until you see your grade posted on the printout. I, and the student aides, do make mistakes. If I fail to post a grade for you, you will be easily able to produce the graded assignment to correct our error.

# ATTENDANCE:

In reference to CCSD Regulation 5113, Rancho High School follows the “11<sup>th</sup> Unexcused Absence/ No Credit Policy”. See the following website for more information on Regulation 5113:

[http://www.ccsd.net/pol-reg/pdf/5113\\_R.pdf](http://www.ccsd.net/pol-reg/pdf/5113_R.pdf)

## CLASSROOM RULES: *(Or the top 10 ways to make Ms. Ristow happy and give you all your participation points!)*

1. Bring materials to class. You should bring your text daily, along with your calculator, and materials to take notes. **Do NOT bring food or drink, as part of this room is a working laboratory**, and eating in the class is dangerous to your health!! *(However, this IS Vegas, so water bottles are allowed)*



2. In regards to “Cell Phone Manners and Courtesy”:



**CELL PHONES ARE NOT TO BE USED, IN ANY WAY SHAPE OR FORM, DURING CLASS. ... this INCLUDES TEXTING!**

**Texting during class is VERY rude, and is NOT acceptable in a college environment. It is also a QUICK WAY to get on my “bad side”.**

**IF I SEE YOU USE YOUR CELL PHONE IN ANY WAY SHAPE OR FORM (this includes texting), I WILL CONFISCATE AND LOCK UP THE PHONE UNTIL YOUR PARENT COMES AND PICKS IT UP FROM ME FOR YOU.**

3. If you are going to be/have been absent, it is **YOUR** responsibility to see me about the make-up assignment(s). Do this before or after class, **NOT DURING!** *(It is considered RUDE to expect a teacher to STOP class to take care of YOUR problems).* Assignments are also posted online everyday, this is available on the web site:

<https://educatorpages.com/site/Ristow/pages/forensic-pathology>

For homework and tests, you have as many **school days** (NOT CLASS DAYS) to turn the assignment as you were absent. For labs, you need to talk with the teacher.

4. **Do your homework** - the only way to succeed is to practice! Class time is for working, not playing. Forensic Pathology assignments come first. Should you complete your classroom assignment, then you may work on something else. Wasting time (playing cards, etc.) will not be tolerated.



5. **Do not talk** while someone else (especially Ms. Ristow) is talking.

**Please raise your hand** if you have a question and I will call on you as soon as I am at a stopping point. Remember, this is a MAGNET course, and I expect the students to behave accordingly.



6. While attendance is taken at the beginning of class, get your materials ready for what is being done that day. Be ready to start as soon as I am finished. Please be on time. **You are considered tardy if you enter the doorway after the bell sounds. Tardy #1 is “free”, each tardy after that loses you 15 points.**

7. Follow all instructions, especially in the laboratory. We are often dealing with potentially dangerous materials, so dress appropriately for the lab.



8. All school rules will be enforced, and **YOU ARE RESPONSIBLE FOR YOUR ACTIONS!!**

9. Please do not leave the room unless it is absolutely necessary. You MUST have a hall pass. Leaving the room without permission, unless in an emergency situation, will result in a referral.



10. All jokes made by the teacher, no matter how stupid they are, must be tolerated.



### **EXTRA INSTRUCTION:**

*I am here for only one reason - to help each of you be successful. Since you don't come to school intending to do poorly, we share a common goal. I have found in life that if you are diligent in doing what is expected of you, you will almost certainly come away from the experience feeling good about your effort and with good marks to show for that effort. I will be available to assist you outside of normal class time on a daily basis – before or after school. But, as “life happens”, please schedule an appointment to make sure that I am here for you.*

### **DISCIPLINE:**

Failure of students to adhere to class or school rules, procedures, and policies will result in a full range of appropriate consequences at the classroom and, if necessary, school administration or legal authority levels. Classroom level consequences might include counseling, written warnings, loss of privileges, point deductions, calls to parents, notes home, detention, in-school suspension from the classroom, and lowering of the citizenship grade. If appropriate, more severe consequences might include required parental conferences (RPC), loss of course credit, suspension, expulsion, or arrest. While I want every student to succeed, I will not hesitate to use all the tools at my disposal to insure that no single student interferes with the success of his/her classmates through inappropriate or improper behavior.

## **Classroom Behavior Expectations:**

Students are expected to conduct themselves in a polite and respectful manner to all other students, guests, faculty and staff. These traits are to be carried over into the medical profession.

Penalties for inappropriate behavior, improper cell phone etiquette, unpreparedness to learn, talking inappropriately in class, being out of one's chair inappropriately, disruption of class, inappropriate language, and failure to follow school rules, will include:

**1<sup>st</sup> offense:** verbal warning with documentation.

**2<sup>nd</sup> offense:** written warning with documentation and 30 minutes of detention in classroom after school performing tasks to help the teacher. Parent notification.

**3<sup>rd</sup> offense:** written warning with documentation and 1 hr detention after school in classroom after school performing tasks to help the teacher. Parent notification.

**4<sup>th</sup> offense:** Student will receive a written warning with documentation and be referred to the dean for any inappropriate behavior that meets the guidelines by Rancho HS, CCSD and the classroom behavior plan. Notice will be mailed home to parents.

**5<sup>th</sup> offense:** Student will receive a written warning with documentation and be referred to the dean again for inappropriate behavior that meets the guidelines by Rancho HS, CCSD and the classroom behavior plan. Parents will be notified by Dean's office.

**6<sup>th</sup> offense:** Student will receive written warning with documentation and be referred to the dean again for any inappropriate behavior that meets the guidelines by Rancho HS, CCSD and the classroom behavior plan. At this point, protocol for CCSD will be followed by Dean's office.

**Students with excessive inappropriate behaviors/offenses and or a referral to the Dean's office will receive a “U” or unsatisfactory as a citizenship grade.** Continued inappropriate behaviors will be referred to the Dean for appropriate consequences and is cumulative for each semester.

Any fighting, cheating, destruction of materials or property (school or fellow student), stealing of other students material or stealing of school district material will earn a student a “U” in citizenship for that quarter and an immediate referral to the Dean’s office. All dean’s referrals, in-house suspensions, RPC’s and discipline referrals will be reported to the Magnet Office.

## ☆☆ A NOTE TO PARENTS ☆☆

Successful students have at least two groups of adults monitoring and encouraging them to do well – teachers and parents/guardians. Most students need both. You can help me help your student be successful in the following ways:

1. **Emphasize the importance** of homework and of completing all assigned work **on time**. Check the class website as well as with your student frequently to see what work has been assigned.
2. **Ensure** your student has a **quiet place/ time** in which to study at home **each night**.
3. **Help** your student with **time management**. Assist him/her in balancing his/her time appropriately between school work, chores, a job, and relaxation time.
4. **Be PROACTIVE on knowing how your student is doing in ALL their classes!**  
If you are concerned about your student’s grade, request a weekly grade print-out for **ALL** their classes.

