

# BIOMEDICAL SCIENCE 136 – BIOLOGY OF HUMAN SEXUALITY - FALL 2023

PROFESSOR: BLAKE BARRON

BLAKE'S OFFICE: EBS 322



**BLAKE'S  
OFFICE HOURS:**

Mondays 10:00 AM - 11:00 AM, Tuesdays, 2:30 PM - 3:30 PM  
Wednesdays 10:00 AM - 11:00 AM, Thursdays, 2:30 AM - 3:30 PM  
or other in-office hours or by Zoom at a previously arranged  
appointment time

BLAKE'S E-MAIL ADDRESS: barron@sbcc.edu

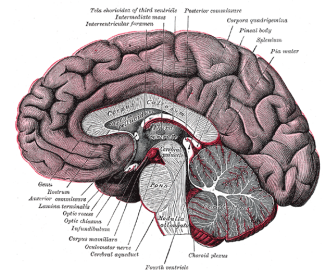
OFFICE TELEPHONE #: 805-730-4244

**INTRODUCTION:** Welcome to Biomedical Science 136 and the fascinating, appealing and fun study of the structure, function, lifelong changes in and diversity of human reproduction! The Biology of Human Sexuality is a course that primarily emphasizes the biological aspects of sexual reproduction in humans. This is a **3 unit lecture-only** course designed for primarily for non-majors, interested majors and allied health students **who may not have a formal background in biology**. This course satisfies the SBCC General Education Requirement in Natural Sciences and this course is also transferable to the UC and CSU as a life science course **without** a laboratory. Registered Nurses can receive CEUs by taking this course. **For this course, you must attend two 80-minute lectures each week.** With our smaller, face-to-face class size this semester, we are going to have fun and I will be able to directly assist you more individually to help you achieve the best possible grade you can in this class. There is no laboratory component to this course.



**TEXTS:** The required text is: *Biology of Human Sexuality* for Biomedical Sciences 136, digital/e-book custom edition for Santa Barbara City College edited from various texts published by other authors that I have combined.

**IMPORTANT: As this is a custom textbook, the textbook is ONLY available for order or purchase from the SBCC Bookstore NO ONLINE RETAILER WILL HAVE IT. PURCHASE YOUR TEXTBOOK as soon as you can (it is free on the SBCC Promise).**



**LECTURE NOTES:** A required series of lecture videos, illustrated webpages, web links, content videos, vocabulary lists, and review sheets are at the course website (<http://www.biosciweb.net/biosex>). See email for specifics about course website. Please contact me if you have problems with access to a computer or the Internet. Additional required lecture videos will be distributed on the course website.

**LECTURES:** Tuesday & Thursday, 9:35 am - 10:55 am in EBS 301 (#31000)

**YOU WILL BE TAKING ALL OF YOUR EXAMS FACE-TO-FACE ON PAPER IN THE LECTURE HALL (EBS 301) ON EXAM DAYS. YOU WILL TAKE SOME QUIZZES FACE-TO-FACE ON PAPER AND SOME QUIZZES ON CANVAS ON THE DATES INDICATED IN LECTURE AND ON THE COURSE WEBSITE (see welcome email for course website username and password).**

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**EXAMS, QUIZZES AND OTHER ASSIGNMENTS:** Each of the exams and quizzes will consist of a varied combination of multiple choice, true-false, fill-in-the-blank, sentence completion, matching, short answer, essay, and diagram/graph interpretation questions. **Requisite CANVAS discussion forums, homework assignments, the research paper and digital presentation assignment guidelines will be posted on the course website. You will need to use a TURNITIN.COM account or create one in order to submit the paper for the course.**

**THE FINAL COURSE GRADE IS DETERMINED BY STUDENT COMPLETION AND PERFORMANCE OF THE FOLLOWING ASSIGNMENTS:**

ASSIGNMENTS	DATE	POINTS	% of COURSE GRADE
Three Lecture	Thursday, September 21 <sup>st</sup> ; 9:35 am in EBS 301	100	~8%
Assessment Exams:	Thursday, October 19 <sup>th</sup> ; 9:35 am in EBS 301	100	~8%
	Thursday, November 16 <sup>th</sup> ; 9:35 am in EBS 301	100	~8%
	Thursday, December 14 <sup>th</sup> ; 8:00 am in EBS 301	150	~13%
One Final Exam:	Thursday, December 14 <sup>th</sup> ; 8:00 am in EBS 301	150	~13%
Literature Search Paper:	1 paper @ 100 points due Tuesday, October 10	100	~8%
Digital/Artistic Presentation:	1 presentation @ 100 points due TBA	75	~8%
Lecture Quizzes:	10 points per week	150	~13%
Collaborative Learning:	10 points per week	150	~13%
Homework/Group/Web-Based/Discussion Assignments:	(to be assigned)	275	~21%
<b>TOTAL:</b>		<b>1200</b>	<b>100%</b>

Specific requirements for the four exams, quizzes and other assignments will be provided on the course website and via email on a regular basis each week during the semester.

### SPECIFICS RELEVANT TO EXAMS AND QUIZZES:

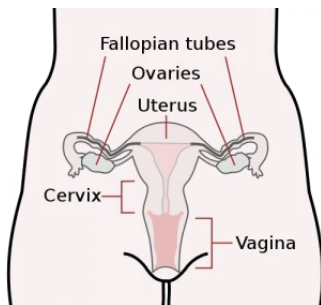
**EXAMS AND QUIZZES:** Each of the exams and quizzes will consist of a varied combination of multiple choice, true-false, fill-in-the-blank, sentence completion, matching, short answer, essay, and diagram/graph interpretation questions. You will NOT take a quiz or participate in collaborative learning on exam days. **All of the exams and some of the quizzes will be held in EBS 301. Some of the face-to-face quizzes will be collaborative (collaborative learning assessment) with your classmates in class. These are easy.**

1. THE THREE LECTURE ASSESSMENT EXAMS WILL NOT BE CUMULATIVE.
2. THE FINAL EXAMINATION WILL HAVE A 30 TO 50 POINT CUMULATIVE AND COMPREHENSIVE COMPONENT.
3. A MISSED EXAM WILL SIGNIFICANTLY LOWER YOUR COURSE GRADE, USUALLY BY ABOUT ONE LETTER GRADE BECAUSE OF THE 100 POINT VALUE. THE FINAL EXAM HAS A CUMULATIVE COMPONENT.
4. NONE OF THE EXAMS WILL BE DROPPED. ALL EXAMS SCORES WILL COUNT TOWARD THE FINAL GRADE.
5. THERE WILL BE A LECTURE QUIZ OR SOME SORT OF COLLABORATIVE LEARNING ASSESSMENTS IN EVERY LECTURE. ALL OF THESE POINTS WILL COUNT TOWARD YOUR FINAL GRADE.
6. DO NOT DISMISS THE QUIZZES/COLLABORATIVE LEARNING ASSESSMENTS AS THEY ACCOUNT FOR A TOTAL OF 260 POINTS AND ABOUT 22% OF THE FINAL GRADE, MORE THAN THE EQUIVALENT OF TWO EXAMS.

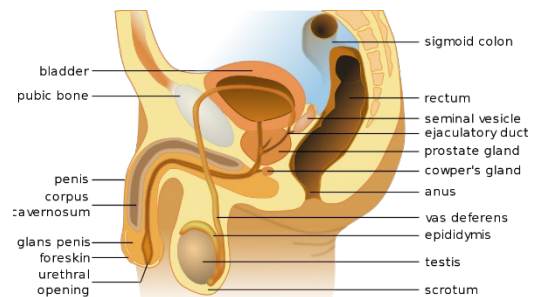


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7. IF YOU MISS MORE THAN TWO LECTURE MEETINGS YOU **MAY** BE DROPPED FROM THE COURSE UNLESS YOU DISCUSS WITH ME ANY INTENDED OR UNFORESEEN ABSENCES.
8. THE QUIZZES WILL GENERALLY BE 10 POINTS EACH AND THE COLLABORATIVE LEARNING ASSESSMENTS WILL VARY. I WILL EXPLAIN ABOUT COLLABORATIVE LEARNING AS WE GO ALONG AND I BELIEVE YOU WILL FIND IT FUN AND HELPFUL TO IMPROVE YOUR CLASS PERFORMANCE. THESE QUIZZES AND ASSESSMENTS ARE DESIGNED TO HELP YOU KEEP PACE WITH YOUR STUDIES AND REVIEW THE REQUIRED COURSE INFORMATION WE ARE DISCUSSING PREVIOUS TO EXAMS. THE QUIZZES WILL USUALLY COVER MATERIAL FROM THE PREVIOUS TWO CLASS MEETINGS.
9. **THERE WILL BE ABSOLUTELY NO QUIZ OR COLLABORATIVE LEARNING ASSESSMENT MAKEUPS OTHER THAN ONE MAKEUP QUIZ THAT WILL BE GIVEN WITH THE FINAL EXAM. THIS FINAL QUIZ WILL REPLACE ONE MISSED QUIZ OR YOUR LOWEST QUIZ SCORE IF YOU TAKE ALL THE QUIZZES.**



### **READING ASSIGNMENTS IN THE TEXT ARE LISTED BELOW**



### **LECTURE AND CONTENT SCHEDULE**

*THIS SCHEDULE MAY BE MODIFIED DURING THE COURSE AT MY DISCRETION*

WEEK	DATES	LECTURE & DISCUSSION TOPIC
1	AUG 28 - SEPT 3	COURSE INTRODUCTION, DEFINITIONS OF SEX & SEXUALITY & BRIEF HISTORY OF SEX & HUMAN SEXUALITY IN THE 20 <sup>TH</sup> CENTURY - <i>HISTORY OF SEX: THE 20<sup>TH</sup> CENTURY</i> (MOVIE) <b>READING ASSIGNMENT:</b> CHAPTERS 1 & 2
2	SEPT 4 - 10	HEIRARCHY OF LIFE, HUMAN BIOLOGY BASICS: HOMEOSTASIS, ORGAN SYSTEMS, BIOMOLECULES & HORMONES, FUNDAMENTAL ASPECTS OF CELL STRUCTURE & FUNCTION, THE HUMAN LIFE CYCLE AND CELL DIVISION <b>READING ASSIGNMENT:</b> CHAPTERS 2, 3, 4, 5 & 6
3	SEPT 11 - 17	MALE REPRODUCTIVE ANATOMY, STRUCTURE AND FUNCTION OF THE TESTES: SPERMATOGENESIS, (SPERM PRODUCTION), STEROIDOGENESIS, SEMINALYSIS, ENDOCRINE DISRUPTERS OF THE MALE REPRODUCTIVE SYSTEM AND THE USE AND ABUSE OF ANABOLIC STEROIDS <b>READING ASSIGNMENT:</b> CHAPTERS 5, 6, 7 & 8

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- 4            SEPT 18 - 24    FEMALE REPRODUCTIVE ANATOMY AND ANIMAL ESTROUS CYCLES  
**READING ASSIGNMENT:** CHAPTERS 5, 6, 7 & 9

**THURSDAY    SEPT 21            FIRST LECTURE EXAMINATION**

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- 5            SEPT 25 -  
OCT 1            THE MENSTRUAL CYCLE: HORMONAL CHANGES,  
STEROIDOGENESIS, OVULATION, MENSTRUATION,  
CHANGES IN THE FEMALE REPRODUCTIVE TRACT,  
MENSTRUAL CYCLE DISORDERS, PREGNANCY TESTING,  
PREMENSTRUAL SYNDROME (PMS) AND ARE LARGE NUMBERS OF  
MENSTRUAL CYCLES "NORMAL"?  
**READING ASSIGNMENT:** CHAPTERS 6, 7, 9 & 10
- 6            OCT 2 - 8            THE SEXUAL BRAIN: STRUCTURE & FUNCTION OF THE  
HYPOTHALAMO-PITUITARY AXIS, HOW THE BRAIN CONTROLS THE  
GONADS AND HUMAN LIFE STAGES: PUBERTY TO MENOPAUSE  
**READING ASSIGNMENT:** CHAPTERS 8, 9, 10, 11 & 12
- 7            OCT 9 - 15            HUMAN LIFE STAGES: PUBERTY TO MENOPAUSE AND  
HUMAN SEXUAL AROUSAL: RESPONSE & SEXUAL DYSFUNCTION  
**READING ASSIGNMENT:** CHAPTERS 8, 9, 10, 11 & 12  
**DRAFT COPY FOR PEER REVIEW OF LITERATURE SEARCH  
ASSIGNMENT IS DUE TUESDAY, OCTOBER 10**
- 8            OCT 16 - 22            *EVOLUTION: WHY SEX?* (MOVIE), MORE SEXUAL RESPONSE,  
EVOLUTION OF SEXUAL BEHAVIOR: HUMAN AND ANIMAL MODELS,  
BIOLOGICAL BASIS OF MATE SELECTION AND PAIR BONDING,  
DIVERSITY AND PATTERNS OF SEXUAL BEHAVIOR IN HUMANS,  
GENDER ROLE IDENTIFICATION & CURRENT RESEARCH ON THE  
BIOLOGY OF HOMOSEXUALITY AND BI-SEXUALITY  
**READING ASSIGNMENT:** CHAPTERS 10, 11 & 12

**THURSDAY    OCT 19            SECOND LECTURE EXAMINATION**

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- 9            OCT 23 - 29            CONTRACEPTION  
**READING ASSIGNMENT:** CHAPTER 13
- 10            OCT 30 -  
NOV 5            EMERGENCY CONTRACEPTION (PLAN B/THE MORNING AFTER  
PILL) & SPONTANEOUS, SURGICAL & CHEMICAL/MEDICAL  
ABORTION AND AN INTRODUCTION TO PREGNANCY: AN  
EVERDAY MIRACLE (MOVIE)  
**READING ASSIGNMENT:** CHAPTERS 13 & 14
- 11            NOV 6 - 12            SEXUALLY TRANSMITTED INFECTIONS (STIs or STDs),  
AIDS: ACQUIRED IMMUNE DEFICIENCY SYNDROME AND  
HIV: HUMAN IMMUNODEFICIENCY VIRUS  
**READING ASSIGNMENT:** CHAPTERS 15 & 16



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12 NOV 13 - 19 DNA AND BASIC MOLECULAR BIOLOGY OF THE GENE & GENETICS, HEREDITY & MORE ON SEX CHROMOSOMES,  
**READING ASSIGNMENT: CHAPTER 17**

**THURSDAY NOV 16 THIRD LECTURE EXAMINATION**

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13 NOV 20 - 26 MORE ON HEREDITY, SEX & BIOTECHNOLOGY,  
CLONING, "DESIGNER BABIES" AND GENETIC DISORDERS OF SEX  
**READING ASSIGNMENT: CHAPTER 17**

**NOV 23 & 24 THANKSGIVING DAY HOLIDAY - NO LECTURE ON NOV 23**

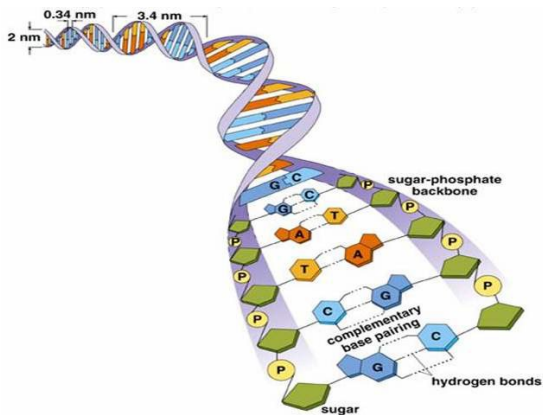
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14 NOV 27 - DEC 3 MORE GENETICS, THE BIOLOGY OF CANCER AND CANCERS OF THE MALE AND THE FEMALE REPRODUCTIVE SYSTEMS  
**READING ASSIGNMENT: CHAPTER 17**

15 DEC 4 - 10 BRIEF REVIEW OF DEVELOPMENT: GAMETE TRANSPORT TO BIRTH & LACTATION AND INFERTILITY: CAUSES, TECHNIQUES DESIGNED TO MAXIMIZE CONCEPTION, ISSUES SURROUNDING MULTIPLE CONCEPTIONS & CURRENT AND FUTURE TREATMENTS  
**READING ASSIGNMENT: CHAPTERS 14 & 17**

**FINAL EXAMINATION: THURSDAY, DECEMBER 14<sup>TH</sup>  
from 8:00 AM TO 10:00 AM IN EBS 301**

**I WELCOME AND HIGHLY ENCOURAGE YOU TO ASK ME LOTS OF QUESTIONS  
IN LECTURE, VIA EMAIL AND DURING OFFICE HOURS.**



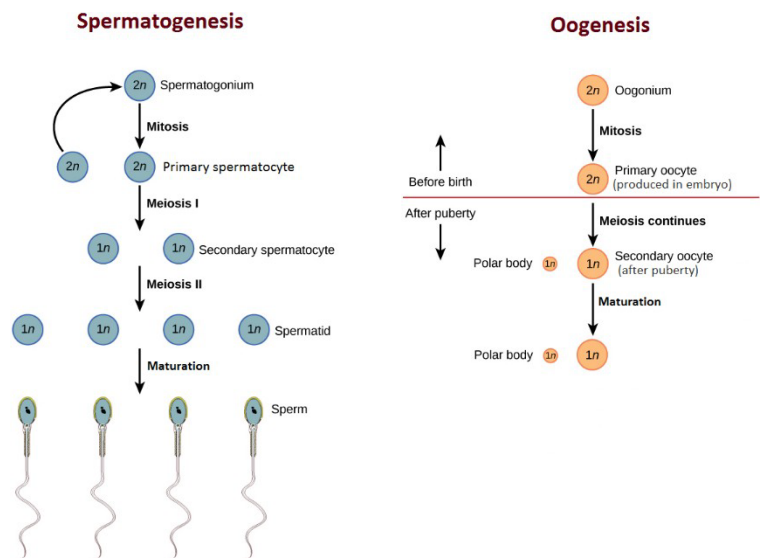


**Student Learning Outcomes  
Biomedical Sciences 136 –Biology of Human Sexuality**



**After successful completion of this course, a student will be able to:**

1. Summarize the fundamental cellular and physiological principles critical to an understanding of the biology of human sexuality including the cell theory, the basic structure and functional importance of biomolecules, sex hormones and cell organelles and characterize basic aspects of homeostasis and molecular genetics.
2. Articulate basic principles and solve elementary problems of human genetics and heredity.
3. Identify and locate the anatomy of the human male and female reproductive systems and explain the essential endocrine and physiological regulation of the gonads and secondary reproductive organs including gametogenesis and the menstrual cycle.
4. Describe the basic anatomical and physiological determinants of activity changes that occur throughout a human's reproductive life history including puberty, sexual arousal, fertilization, pregnancy, embryonic development, parturition, menopause, infertility and sexual dysfunction.
5. Cite and distinguish the type of causative organism, transmission, symptoms, diagnosis and treatments of the most common sexually transmitted infections including HIV/AIDS. List the behaviors that can increase and decrease an individual's risk of contracting a sexually transmitted infection. Characterize and differentiate the physiological mechanisms of action and the basic procedures involved in the use of the most common techniques of contraception and abortion. Outline the potential benefits and consequences of each technique.
6. Research and prepare a written report in a standardized format based on a search of the literature data on a topic of personal interest related to the biology of human sexuality.

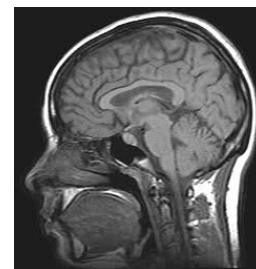


**POLICY ON GRADES - READ THESE PAGES VERY THOROUGHLY AND CAREFULLY!**

As we progress through the course and you complete each of the exams, quizzes and assignments, you will accrue points towards a final letter grade for the course. **Specific letter grades will not be given after each lecture exam or quiz, but you will receive a percentile score and I will give you a general idea of where you stand in the course after each lecture exam with reference to the rest of the class. All of your scores are always available in CANVAS once they are graded including your total overall percentage score at that point.** Generally, I have found that letter grades given for each exam can be misleading for some students. Often students will attempt to "figure out" their grade based simply on the letter grade they received for each exam or assignment (e.g. "I got an A on one test and a C on another test, so I probably have a B"). Since your course grade is based on your cumulative score for all your work, this can be an inaccurate method of determining your true course grade (although you may have a B, your cumulative percentile may be closer to an A or a C). Additionally, by giving letter grades for each exam, the focus tends to be on "getting the grade" instead of learning the subject matter. I will do everything in my power to prevent this learning from becoming an arduous and boring task for you, but it does require studious effort on your part. Thus, your percentile score on each exam is a more accurate depiction of how much of the course material you truly understand and have learned.

It is important that you realize that your grade is the result of your learned performance on the exams, quizzes, and assignments. Some students may understand the material very well, but perform poorly on any particular exam while other students may not have a complete grasp of the information and perform more adeptly on a particular exam. I can only evaluate you and assign grades based on your "performances" for each of the exams, quizzes, and other assignments. I make every attempt to grade fairly and impartially. **Each exam will include both objective (scantron) type questions and questions of the fill-in-the-blank or short answer or diagram drawing/labeling/interpretation type.**

A student who earns an **A grade** has performed excellent, exemplary work and completed all course assignments, while a student who earns a **C grade** has performed only adequate work in the course but still completed all course assignments. A student who earns a **B grade** has performed well in the course and completed all course assignments, while a student who earns a **D grade** has performed inadequate work, but has shown effort and completed most course assignments. An **F grade** is earned when a student performs at an unacceptably low level usually due to a poor attendance record, lack of diligent study effort and study time and/or incomplete course assignments.



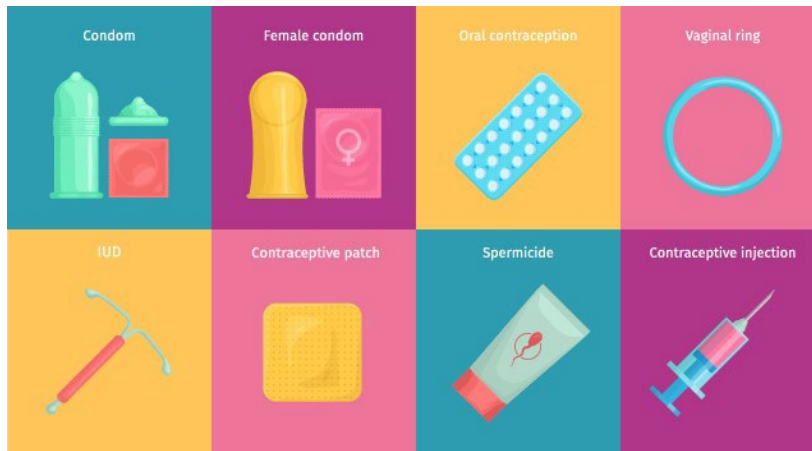
THE FOLLOWING SCALE WILL BE USED FOR DETERMINING FINAL COURSE GRADES:

Anyone who earns above 90% in this class is guaranteed an A- or higher grade. Anyone who earns above 80% in this course is guaranteed at least a B- grade or higher. Likewise, any student who earns at least 65% in this course is guaranteed at least a C grade. **Do not allow yourself to settle for merely passing this course, each of you deserves the best grade that you can achieve.** Come talk to me if you are finding yourself lost, confused, overwhelmed, bored or scared about your grade or any of the information presented **at the earliest possible sign that you are having difficulty.**

GRADE	TOTAL OVERALL PERCENTAGE	TOTAL POINTS ACCRUED
A+	98% - 100%	1165 - 1200
A	93% - 97%	1105 - 1164
A-	90% - 92%	1069 - 1104
B+	88% - 89%	1045 - 1068
B	83% - 87%	985 - 1044
B-	80% - 82%	949 - 984
C+	78% - 79%	925 - 948
C	65% - 77%	769 - 924
D	55% - 64%	649 - 768
F	0% - 54%	0 - 648

## **BIOMEDICAL SCIENCE 136 – BIOLOGY OF HUMAN SEXUALITY - FALL 2023**

**ATTENDANCE:** ATTENDANCE OF ALL LECTURES IS REQUIRED. Attendance of lecture is not optional and attendance as well as participation will be the first criteria considered when determining "borderline grades". **In my experience, those students who do not study DAILY are the students who do not fulfill their potential regardless of their level of understanding for any course.** Medical, legal and other scheduled appointments should NOT be scheduled on exam days and these will not be considered as excused absences. **Medical or personal emergencies will require a written notice of the specific problem signed by an appropriately qualified individual.** Regular study of the course website and asynchronous video content is not optional and participation in the course and discussion forum will be the first criteria considered when determining "borderline grades". Keep yourself on a regular schedule and I expect you to be fully prepared to be in both lecture each week.



**CHEATING:** Absolutely no form of academic dishonesty or plagiarism will be tolerated. It is unethical, unfair, and a violation of your own intelligence. Anyone caught cheating or plagiarizing will be subjected to the most severe academic penalties. More than ever, most academic institutions and professors are acutely aware that this is a serious and unfortunately all too common issue. No two students are allowed to submit exactly the same quiz, exam, paper, digital presentation or other assignments (with the exception of your collaborative assessments/quizzes).

### **MAKEUP EXAMS:**

There will be no makeup exams except in the case of death/illness of a family member or death/illness of you. **If you are sick for an exam or quiz, please let me know as soon as possible – we live in COVID times.** It is your responsibility to make sure that you have no conflicts with the exam schedule. In the case of some unforeseen personal crisis, a makeup will only be granted with my specific consent (this will generally require a verifiable reason).

### **EXTRA CREDIT ASSIGNMENTS:**

Put simply, do not rely on this! There will be some extra available points here and there on some assessments and additional assignments. **DO THE REAL WORK!** Stay focused and put an effort into your studies early on and you will not care about extra credit. If you are having trouble in the course, you certainly do not need more to study - which is what extra credit entails! We will be working closely together every week to maximize your potential. Ask for help!

### **WITHDRAWAL AND YOUR CONCERNS ABOUT YOUR GRADE:**

**September 9** is the last day to drop the course and receive a refund. The last day to withdraw from the course (without a refund and with a "W") is **October 27**. **December 8** is the last day to petition for Pass/No Pass status. **IF YOUR ARE CONCERNED ABOUT YOUR GRADE, PLEASE COME TALK TO ME AT THE EARLIEST POSSIBLE TIME SO THAT WE CAN DISCUSS YOUR OPTIONS.** It is to your great advantage to discuss with me (I don't bite!) any problems you are having early in the semester so that I can try and assist you as much as possible. If you do decide to withdraw, please tell me so that I will be aware of what happened to you and remember IT IS YOUR PERSONAL RESPONSIBILITY TO OFFICIALLY WITHDRAW SO THAT YOUR TRANSCRIPT RECORD WILL NOT BE ADVERSELY AFFECTED.



**DSPS STUDENTS:**

Disabled Student Programs and Services (DSPS) coordinates all academic accommodations for students with documented disabilities at Santa Barbara City College. If you have, or think you might have, a disability that impacts your educational experience in this class please contact DSPS to determine your eligibility for accommodations. DSPS is located in the Student Services (SS) Building, Room 162. Their phone number is 805-730-4164. If you are already registered with DSPS please submit your accommodation requests via the '**DSPS Online Services Student Portal**' as soon as possible. Once submitted and confirmed please visit with me about your specific accommodations. Please complete this process in a timely manner to allow adequate time to provide accommodation. Contact Blake by email to [barron@sbcc.edu](mailto:barron@sbcc.edu) if you have questions or concerns about your status.

**STUDY DISTRACTIONS:** Contrary to what many people believe, much solid scientific data clearly shows that **the human brain is NOT effective at multitasking. Instead, your brain task shifts.** If you have too many things going on around you (cell phone, Snapchat, Discord, web videos, messaging, etc.) while you are trying to study - particularly for an online course - then you will not be as successful as you would be if you were focused only on the study tasks at hand. **Stay focused and diligent on a DAILY basis.** See the Study Skills links and our study skills discussion in the first week for further details.

**FEEL FREE TO EMAIL ME ANYTIME WITH ANY QUESTIONS REGARDING THE MATERIAL OR COURSE.**

**One of Leonardo da Vinci's Embryological Drawings of the Fetus**

