COURSE SYLLABUS

INTRODUCTION TO THE BIOLOGY OF HUMAN REPRODUCTION BIOLOGY 136

TAKOMA PARK/SILVER SPRING CAMPUS OF MONTGOMERY COLLEGE Biology Department

Professor Email= Mailbox in Biology Office

Course Section: Office Hours: Hours to be determined

General Course Information and Specific Outcomes

Course Description: This course introduces anatomical, hormonal and neurological aspects of human reproductive biology. Topics include basic male/female anatomy, reproductive endocrinology, sexual differentiation, fertilization and early fetal development, pregnancy, labor and birth and factors influencing fertility.

Course Objectives: All living organisms are capable of reproducing. This course will take a comprehensive look at this interesting and relevant process by examining the components of reproductive system and its processes in detail. While a variety of species will be used as examples, this course will concentrate on human sexual reproduction. Specifically, the course will examine the hormones necessary for reproduction to occur, the concepts of developmental and genetic sex, sexual differentiation, the process of puberty, and the processes resulting in the production, development and nurturing of offspring. While there are no specific prerequisites to take this course, reproduction either directly or indirectly involves all systems and functions of the body and therefore you should have a basic knowledge of biology. **This course requires extensive writing.**

Course Outcomes: Upon completion of the course, the student will be able to:

Demonstrate group work skills.

Describe how the endocrine system functions.

Describe the process of birth.

Explain the hormonal and nervous systems roles in the functioning of the female reproductive system.

Explain the hormonal and nervous systems roles in the functioning of the male reproductive system

Explain the process, hormonal regulation of, and changes associated with puberty in males and females.

Explain the processes of gamete transportation, fertilization, implantation, and the early processes of cleavage and blastocyst formation.

Identify anatomical differences between human male and female reproductive systems.

REQUIRED BOOKS

Human Reproductive Biology, Fourth Edition, By Jones and Lopez, 2013, Academic Press: New York

We will be using <u>HUMAN REPRODUCTIVE BIOLOGY</u> 4th Edition, Jones and Lopez, 2013 or 2014, Academic Press: New York. This textbook provides a comprehensive overview of human reproductive biology. The textbook is the foundation of the course and, to succeed in this course, you will need to carefully read the pages indicated in each module.

Note: Do not let the level of detail in the book concern you. You are expected to develop a strong basic working knowledge of reproduction, but not to memorize each detail from the book.

Attendance: This is a fully online class and therefore there will be no on-campus participation. All work will be done online, including discussions and exams. Since you will not be in a traditional classroom, this does not mean that you will be able to allow assignments to linger. There is a lot of work to be done, and there will be a lot of interaction among students and instructor.

Auditing Class: The instructor of the class section will provide students auditing the course specific course responsibilities.

Support Services: The Science Learning Center, located in SNI01, and the Student Technology Center, located at 8561 Fenton Street, suite 210 in Silver Spring, have reinforcement materials to support this course including videos and computer programs. All computer activities assigned in class can also be found in these Centers. The phone number for the Science Learning Center is 301-650-1427 and for the Student Technology Center is 301-650-1657.

Student Disability: Any student who may need an accommodation due to a disability, please make an

appointment to see me during my office hour. A letter from Disability Support Services (R-CB122; G-SA175; or TP-ST120) authorizing your accommodations will be needed. Any student who may need assistance in the event of an emergency evacuation must identify to the Disability Support Services Office; guidelines for emergency evacuations for individuals with disabilities are found at www.montgomerycollege.edu/dss/evacprocedures.htm

Class Behavior: Each and every student is expected to behave in ways that promote a teaching and learning atmosphere. Students have the right to learn; however, they do not have the right to interfere with the freedom of the faculty to teach or the rights of other students to learn. Students will be treated respectfully in return for respectful behavior. All discussions should be carried out in a way that keeps the learning environment respectful of the rights of others. Students are also expected to conduct themselves in ways that create a safe learning and teaching environment

that is free from such things as violence, intimidation, and harassment, including sexual harassment. Please make sure that you obtain and read a copy of the current Montgomery College <u>Student Handbook</u>, which contains the Student Code of Conduct, described above. Students are expected to abide by the Code of Conduct.

Communication:

You may contact me either at the Blackboard course site email or on my college email account (alex.micich@montgomerycollege.edu). Over the course of the semester, I will regularly send general emails to the class or post items under announcements. Please check regularly for these communications. Likewise, I will be checking regularly for communications from you.

STUDENT SERVICES:

Computer Access: Information on all campus locations where students can use computers can be found at http://cms.montgomervcollege.edu/leamingcenters/computersTPSS/

General Support Services: A summary of campus services offered to students to support your success can be found at http://cms.montgomerycoIIege.edu/leamingcenters/servicesTPSS/.

Instructional Support Services: The Science Learning Center, located in Science North Room IOI (240-567-1594), has reinforcement materials to support this course including all assigned course software, videos, and some anatomical models. All assigned course software is also available at the Student Technology Center located in Student Services Center Room 304 (240-567-1657) and the Medical Learning Center located in Health Sciences Center Room 221 (240-567-5591). Information on Learning Centers at all campuses of the College can be found at http://cms.montgomervcollege.edu/leamingcenters/.

Student Disability: A student needing special accommodations due to a disability should let the instructor know as soon as possible. A letter from Disability Support Services (Germantown-SAi75, Rockville-CB122, or Takoma Park/Silver Spring-ST120) authorizing your accommodations is required. Any students who may need assistance in the event of an emergency evacuation should identify themselves to the Disability Support Services Office.

Veteran's Services: If you are a veteran or on active or reserve status and you are interested in information regarding opportunities, programs, and/or services, please visit the Combat2College Website at http://www.montgom-erycollege.edu/combat2college and/or contact Joanna Starling at 240-567-7103 or Joanna.starling@montgom-erycollege.edu.

MC Syllabus - Important information: <u>littp://cms.mo11tgomerycollege.ed11/mcsyllab11s/</u>

In addition to course requirements and objectives that are in this syllabus, Montgomery College has information on its web site (see link above) to assist you in having a successful experience both inside and outside of the classroom. It is important that you read and understand this information. The link below provides information and other resources to areas that pertain to the following: student behavior (student code of conduct), student e-mail, the tobacco free policy, withdraw and refund dates, disability support services, veteran services, how to access information on delayed openings and closings, how to register for the Montgomery College alert System, and finally, how closings and delays can impact your classes. If you have any questions please bring them to your professor. As rules and regulations change they will be updated and you will be able to access them through the link. If any student would like a written copy of these policies and procedures, the professor would be happy to provide them. By registering for this class and staying in this class, you are indicating that you acknowledge and accept these policies.

References:

Please take a look at the following links which outline college guidelines.

Montgomery College Policies and Procedures

http://www.montgomerycollege.edu/verified/pnp

IT Acceptable Use Policy

http://www.montgomerycollege.edu/verified/pnp/6600I.doc

Student Resource and Code of Conduct

http://cms.montgomerycollege.edu/edu/secondary5.aspx?urlid=55

Family Education and Rights Privacy Act

http://www.montgomerycollege.edu/verified/pnp/41003.doc

Academic Honesty: According to the policies and Procedures of the college, "cheating" or "plagiarism" in connection with an academic program is prohibited and the student may be disciplined. In the rare instance that a student in this course cheats or plagiarizes material, that student will receive a grade of F and dismissal from the course.

Exam Coverage, Format and Scheduling:

There will be one Midterm exam and one Final Exam. There will also be two short term papers assigned. In addition to this, students will be responsible for answering assigned questions given throughout the semester that are pertinent to the subject matter. These assignments will help you prepare for exams, and written answers may even be incorporated into your term papers if you so choose. Exam questions could be in any form, although Professor Micich does have a fondness forshort essay type questions.

Exam Make-ups: You are expected to take each exam at the scheduled time. You will be provided with a window of opportunity to complete the exams on Blackboard. When you miss an exam due to a serious and unavoidable circumstance, you may, at Professor Micich discretion, be permitted to take another exam. However, I do not foresee that this will be a problem as you can access your course from anywhere there is a reliable internet connection. If missing an exam unavoidable, make-up exams will be ENTIRELY ESSAY covering assigned topics within the missed exam's unit of study. The make-up exam will be of equivalent point value to the missed exam. If you provide Professor Micich with sufficient advance notice that you will unavoidably miss an exam, arrangements can possibly be made to give you the same exam as your classmates took. If you have not made prior arrangements, you must contact Professor Micich immediately upon your return following the missed exam to discuss the possibility of a make-up exam. You will NOT be permitted to make-up more than one exam.

Research Review Papers: Two research review papers will be required of students. There will be a great flexibility for students to choose a topic of interest. Papers should be academic in nature, using appropriate sources (more information and instructions are forthcoming). Please understand that plagiarism will not be tolerated, and will result in severe penalties. Please refer to the Montgomery College policy on plagiarism. The college libraries have plenty of resources to aid in these matters.

Discussion: In an online learning environment, we cannot have spontaneous face to face discussions as we would in a traditional classroom. However, the system does allow us to use a discussion board in which we can post comments, questions, or anything else that might interest us. I

encourage you to participate in this, as it is a forum in which our understanding of a particular topic could be broadened through interaction with classmates. Here we will be able to share personal experiences that are pertinent to the topic at hand, or just to ask and answer questions that might come up. This is also the place to discuss topics that are beyond the scope of the course, as progress in the understanding of various problems and concerns occur every day. Please share news articles, latest research, etc. Anything you feel may contribute to the overall learning of the class. I understand that not everyone is comfortable in the sphere, but please make every effort to join in.

Homework: Homework will be assigned periodically. As stated previously, these assignments will contribute to your mastery of the subject material and help to prepare you for exams and the writing of research papers.

Course Grade: Your course letter grade will be computed based on the following:

20% -- Midterm Exam

20%--Final exam

20%--Research paper #1

20%--Research paper #2

20%-- Homework assignments

A = 90% to 100% of all possible points

B = 80% to 89% of all possible points

C = 70% to 79% of all possible points

D = 60% to 69% of all possible points

F = 59% or less of all possible points

TOPICS AND SCHEDULES

We will follow the sequence of topics found in the textbook, up to chapter 12. You can plan on spending 1-2 weeks on each chapter depending upon the length of the reading and complexity of the material. I feel that it is best for students to learn at their own pace, and so I will not impose upon you a formal schedule (except for exam dates and research paper due dates-please keep an eye on them). You will be able to gauge at what speed you should be moving based upon the timing of the discussion threads and homework assignments. However, keep in mind that it is not advisable for you to fall behind. Hopefully, our discussions and homework assignments will keep you engaged and encourage you to continue moving forward.

Finally, at certain points throughout the semester, I will communicate with you regarding details for research projects and exams.

UNIT 1 INTRODUCTION TO HORMONES (chapter 1)

UNIT 2 REPRODUCTIVE SYSTEMS (chapters 2-4)

UNIT 3 SEXUAL DIFFERENTIATION AND DEVELOPMENT (Chapters 5-7)

UNIT 4 PROCREATION (chapters 8-12)

WHAT IS PLAGIARISM?

Plagiarism is a serious ethical violation that occurs when you copy exact words from your references without paraphrasing or re-writing the idea in your own words. Allied health professionals and research scientists affect patients' lives, requiring that honesty and reliability are paramount. All students are expected to achieve their academic goals honestly. Montgomery College and your instructor are committed to imposing appropriate sanctions for breaches of academic honesty. Plagiarism is not tolerated and your submissions will be checked for plagiarism. Copying and pasting from an internet source on any assignment without citing the source is plagiarism, and will result in a score of O for that assignment.

All written materials submitted in this class MUST be written in your own words. This is called paraphrasing. Lack of paraphrasing is plagiarism. What is paraphrasing and how do you do it? Paraphrasing is using information from a source but re-writing it into your own words. As a hypothetical example, let's suppose you read the following sentence in your reference and you want to use this information in your own writing: Caesarean sections are chosen over vaginal delivery twice as frequently by multiparous women who delivered by c-section in their first birth (Smith, 2003). An example of acceptable paraphrasing means that you re-write this information using your own words, such as Women who give birth via caesarean section are twice as likely to choose a c-section than vaginal delivery for subsequent births (Smith, 2003).

You MAY NOT copy and paste text from Internet sources, *even* if you properly quote the material and identify the source. If you properly paraphrase your sources, you will not need to use quotation marks. Quotation marks and bulleted lists are not acceptable. End notes or footnotes, which you may have learned to use in your English class, are not acceptable in your submissions. Your submissions must include citations located WITHIN THE TEXT. What is a citation? This means that if you use an idea from another source, you must "cite" that source's name and year of its publication in parentheses following the sentence. Therefore, a citation is when you give credit to your source for the idea(s) in your sentence or paragraph.

Reminder: You MAY NOT copy and paste text from Internet sources, even if you properly quote the material and identify the source. All information included in any assignment must be paraphrased. You are responsible for understanding what paraphrasing is. If you are unclear, further information on paraphrasing can be found at Montgomery College's website: http://www.montgomerycollege.edu/library/paraphrasing.htm.

Plagiarism is not tolerated and your assignments will be checked for plagiarism. "Students who engage in any act adjudged by the instructor to constitute academic dishonesty or misconduct are subject to any and all sanctions deemed appropriate by the instructor. Grade sanctions may range from an "F" on the assignment in which the dishonesty occurred to the maximum sanction of an "F" in the course. The instructor also has the prerogative of referring a case to the campus

Dean of Student Development with the specific request that the Dean consider imposing additional sanctions."

To better understand these topics, the Montgomery College libraries have developed an online tutorial on avoiding plagiarism available at: http://www.montgomerycollege.edu/library/plagia-rismintro.htm.