

# SPRING 2011 BIO 310 Biology of Gender Syllabus

**INSTRUCTOR CONTACT:** Dr. Dana Vaughan's office is in Halsey 249. Her office phone number is 424-3076. Her email is [Vaughan@uwosh.edu](mailto:Vaughan@uwosh.edu). Email contact is probably the most efficient route of communication.

**EMAIL & D2L POLICY:** Campus email ([you@uwosh.edu](mailto:you@uwosh.edu)) and D2L postings are considered legal communications by the University and I use both of them, frequently. Therefore, you are advised to read your campus email and survey D2L for announcements on a daily basis. If you need help forwarding your campus email inbox to some other inbox (e.g. yahoo or hotmail), consult a technician at Academic Computing. BTW, I will not answer emails from other than uwosh.edu email accounts.

**D2L Discussion Boards:** Almost without exception, when one student has a question, a dozen others have the same question, too. Therefore, I encourage everyone in the class to post questions on D2L (anonymously if you wish) and let other students participate in the thought process.

**COURSE MEETINGS & OFFICE HOURS:** Lecture is 3:00-4:30 pm, Tue-Thu, Halsey 175. Office hours will be posted on the ANNOUNCEMENTS area of the D2L page for this course. Appointments are also available; please inquire.

**PREREQUISITES:** BIO 105 or BIO 108 and either BIO 211 (preferred) or BIO 230 or BIO 308, or instructor's permission. Many non-BIO-majors take this course. A lot of its content overlaps with BIO 212, 323, and 319.

**REQUIRED TEXTBOOK:** The first time this class was taught (Sp2010), we had no textbook which most students felt was a negative. Therefore, this year I am requiring a textbook. It is an excellent "essentials" book I used several years ago for Human Phys 212, covering both Anatomy & Physiology, and it's a paperback (around \$35 on amazon.com).

**Scanlon & Sanders, Essentials of Anatomy & Physiology, 6<sup>th</sup> Edition, Publ F.A. Davis, ISBN-10: 0803622562**

We'll use selected content from Ch. 2, 3, 4, 7, and 8; and we'll draw heavily from Ch. 1, 10, 20, and 21. There will also be readings posted on D2L Content. The Scanlon book is a useful reference on the basics of human biology, so basic that it will not go out of date, and you should consider keeping it for your permanent library.

**STUDENTS WITH DISABILITIES ARE WELCOME IN THIS COURSE.** Please contact your Instructor in the first week of class to arrange all possible accommodation ahead of time.

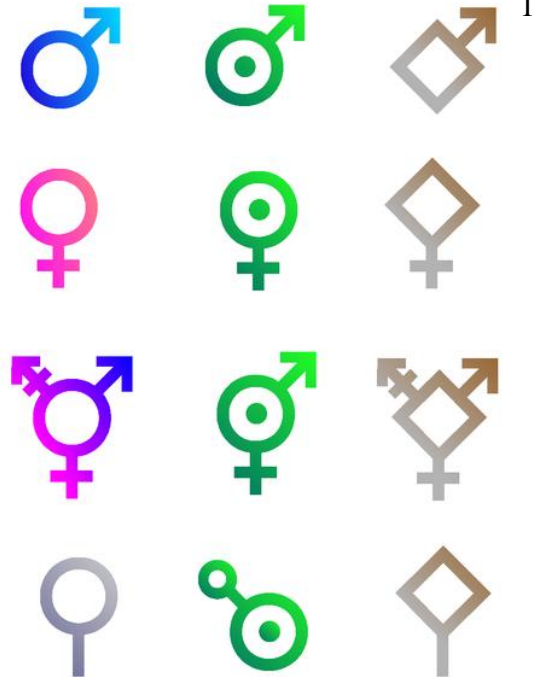
**ACADEMIC HONESTY** policies are clearly defined at this University and all students are expected to abide by them. Penalties for violations are severe. Cheating on an exam (including looking at someone else's paper) at a MINIMUM leads to zero on that exam, with no opportunity for a make-up or extra credit. A second offense is an F in the course and a report to Dean of Students.

**EXPLICIT IMAGES AND TERMINOLOGY** will be used for teaching some course content. Students will be required to learn from this material and to maintain an appropriately professional demeanor during class work.

**RESPONSIBLE USE OF THE INTERNET is required for this course.** Two concerns here:

1. The quality of internet sources varies widely. Instruction in locating reliable sources will be provided to all.
2. Internet searches using gender-specific keywords may unintentionally yield pornographic material, which can have serious legal consequences for the viewer. Any student who accidentally stumbles upon a pornographic resource in the context of this course should leave the site immediately; do not download any material and do not cite any of this material for this course.

**OBJECTIVES OF THE COURSE:** Students enrolled in this course are offered a foundation in the current theories and controversies surrounding the biological underpinnings of gender of humans and other animals. This will include principles of evolution, anatomy,



physiology, behavior, and development. Students will be encouraged to independently identify opposing views to the chosen texts and readings. Through active class participation, students will rehearse the application of these biological principles during scientific critical thinking about medical, sociopolitical, historical, religious, ethnic, and feminist theory issues surrounding gender biology.

### CLASSROOM POLICIES:

1. Please address me as Dr. Vaughan and feel free to raise your hand to ask questions in lecture.
2. Regular lecture attendance is required for success in the course. If you miss lecture, you don't have to tell me, but you do need to ask a classmate for notes.
3. Any device that goes off during class will be answered by me, therefore silence all cell phones and pagers when you enter the lecture room.
4. Most images shown in lecture will be from the required textbook. However, I reserve the right to introduce new images from other sources.
5. Human learning is improved by hand movements, so take notes throughout lecture. Develop a personal "shorthand" so that you can write faster (somewhat like the special language of text messaging). Examples: fxn (instead of function), rxn (instead of reaction), etc.
6. To tap into the natural human visual learning style, convert your notes from words and phrases to flow charts and sketches whenever possible.
7. To tap into the natural human auditory learning style, read your notes aloud to yourself or – best of all – work with a study partner or two, to give yourselves rehearsal verbalizing these concepts.
8. You may record my lectures if you like.

### HOW YOU WILL BE EVALUATED

*Please note that the grade of "C" is average. The grade of "A" is for Outstanding work. Evaluation instruments are written in order to "stretch" the class sufficiently to discern average from outstanding work.*

We will have four (4) exams. Exam coverage will be date-dependent. Question type will vary but you may expect multiple choice "all that apply" (meaning that one, some, none, or all answer choices may be correct).

- NO EARLY EXAMS, ever.
- LATE EXAMS on case-by-case basis with rigorous documentation expected.
- All exams are comprehensive because the material builds on itself, but the majority of exam questions come from material covered since the prior exam's cut-off date
- Questions can come from lecture and/or assigned reading that is specifically identified as "fair game for the exam".
- Question coverage is whatever topics we have completed by the date listed on the schedule.
- If the situation warrants (and that is *my* call), I reserve the right to curve any exam off the midpoint between the points possible and the high achieved on that exam.

Weighting for computation of final course grade (D2L gradebook will display grade-thus-far):

Exam 1	10%
Exam 2	20%
Exam 3	30%
<u>Final</u>	<u>40%</u>
TOTAL	100%

### HOW TO DO YOUR BEST IN THIS CLASS

Gender Biology is a subdiscipline of Physiology. Physiology cannot be learned by cramming or rote memorization. To do well in this class, you need to "**keep up -- don't catch up**". If you have a question, ask it ASAP not the night before an exam! Use the D2L Discussion board to ask questions anonymously if you prefer.

Because the material builds upon itself all semester, exams are essentially comprehensive. Many students find it valuable to reorganize their class notes from a strictly chronological order ("last week I learned X", "this week I learned Y") to a Concept Group order. I sometimes refer to these as "study posters". I will make suggestions for study posters as we go.

A recent study of students taking courses like this suggests that periodic self-examination (mock tests) is the best way to learn the material. Look at your notes, put them away, take a timed mock exam, check your answers, and repeat.

**SCHEDULE OF EVENTS** Class meets Tue-Thu 3:00-4:30 pm in Halsey 175.

<b>Tue Feb 1</b>	<b>First day of class</b>
<b>Tue Feb 22</b>	<b>Exam 1 worth 10% of course grade</b>
<b>Thu Mar 17</b>	<b>Exam 2 worth 20% of course grade</b>
<b>Mar 21-25</b>	<b>Spring break, no classes</b>
<b>Tue Apr 19</b>	<b>Exam 3 worth 30% of course grade</b>
<b>Tue May 3</b>	<b>Dr. Vaughan out of town; class activity TBA</b>
<b>Thu May 5</b>	<b>Dr. Vaughan <i>possibly</i> out of town; class activity TBA</b>
<b>Thu May 12</b>	<b>Exam 4 worth 40% of course grade and last day of class</b>
<b>Wed May 18</b>	<b>Grades posted on D2L and TitanWeb by 6 pm</b>

## TOPIC LIST

It is difficult to know exactly how fast or slow we may go through the material because this is such a heterogeneous class (some students require more review than do others) and because I would like there to be discussion amongst class members whenever possible. Good discussions cannot be held to a strict time limit!

On the Announcements page of D2L, I will keep a running estimate of what we'll be doing in class at least two (2) weeks ahead. It will be in the format shown below. Here is the order in which we will tackle our subject matter:

1. Welcome; why this course, Women's Studies presentation; course preview; the "construction" of gender; what is "normal"?; cultural bias and the study of biology of gender; introduction to biopolitics. Est. 1-2 class meetings
  - a. The article appearing online at <http://ilga.org/ilga/en/article/mAmLNII12H>
  - b. The organization website online at <http://www.msj.edu/APLS/research/history.html>
2. Foundation of physiology concepts for this course: gene expression, cell signaling, triangle of control, endocrinology, neurophysiology. Est. 3-4 class meetings.
  - a. Textbook: Selections from Ch. 1-2-3-4-7-8-10
3. Human gender determination; typical pathways. Est. 4-6 class meetings.
  - a. Textbook: Ch. 20-21
4. Human gender determination; atypical pathways i.e. "disorders". Est. 2-3 class meetings.
  - a. Reading TBA
5. Gender and the brain
  - a. Reading TBA
6. Diversity of sex determination and plasticity of gender in the animal kingdom
  - a. Reading TBA
7. Evolution of gender
  - a. Reading TBA
8. Endocrine disruption; "our stolen future"?
  - a. Reading TBA
9. Biopolitics Redux