

**University of Oregon**  
**HPHY 111 The Science of Sex**  
**Summer 2014 MTWR 11:00am-1:20pm**  
**Knight Library Proctor Room 41**  
Funded by the UO Science Literacy Program

**The Promise:**

This 100-level course has been designed for non-science majors fulfilling the science group-satisfying requirement. The course will use science journalist Mary Roach’s book “Bonk: the curious coupling of science and sex” as a scaffolding and beginning point for further exploration, as well as many other popular and scientific resources. This course will include frank, open and scientific discussions on topics that are often ignored due to culture stigma, but have a great impact on human health and wellness. You should come prepared for lively, light-hearted, brazen, direct, scientifically accurate and interesting preparatory assignments and discussions on the anatomy and physiology of human sexual function.

**The People:**

Sierra Dawson PhD Senior Lecturer sdawson@uoregon.edu	Tahisha Buck MS SLP Fellow tahisha@uoregon.edu	Kim Fox BA SLP Scholar kfox@uoregon.edu	Holly Aranda Teaching Assistant hsmith9@uoregon.edu
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**The Goals:**

The goals for this course fall into two categories:

- 1) Development of the knowledge, skills and abilities of science literacy.
- 2) Development of knowledge related to the anatomy and physiology of sex, and the ability to differentiate between fact and fiction.

The goals will be accomplished via the process of identifying a testable research hypothesis related to the course topics, research of the relevant background information, collection of data, and finally dissemination of the results for a mini-research project. In addition, the daily preparatory assignments and active learning in the classroom will support the development of science literacy, in addition to the goals related to the anatomy and physiology of sex.

**The Plan:**

In order to meet the goals of the course, we have developed 2 overarching objectives (A & B below) and 9 content objectives (1-9 below). You can find the list of objectives as a separate document in Blackboard. Below is the schedule that outlines when we will engage with each of these objectives during the 4-week term.

<i>Class meeting</i>	<i>Objectives we will work on:</i>
<b>Week 1</b> Monday 21/7	A. Be able to work effectively and respectfully in a community of learners.
Tuesday 22/7	1. Be able to compare and contrast the terms <b>sex and gender</b> , and use them both in the appropriate context.
Wednesday 23/7	2. Be able to draw and label the <b>male and female anatomy</b> related to sexual function, describe the <b>function</b> of each part of the anatomy, and how the <b>nervous system, circulatory system and</b>

	<b>genitalia work together during sexual activity.</b>
Thursday 24/7	<p>2. Be able to draw and label the <b>male and female anatomy</b> related to sexual function, describe the <b>function</b> of each part of the anatomy, and how <b>the nervous system, circulatory system and genitalia work together during sexual activity.</b></p> <p>B. Be able to describe the steps necessary to conduct a research experiment. Be able to conduct a mini research experiment, and communicate the results of the experiment in a creative and coherent way.</p> <p>Guest: Annie Zeidman-Karpinski Science Librarian</p>
<b>Week 2</b> Monday 28/7	<p>2. Be able to draw and label the <b>male and female anatomy</b> related to sexual function, describe the <b>function</b> of each part of the anatomy, and how <b>the nervous system, circulatory system and genitalia work together during sexual activity.</b></p> <p>Project Step 1: Testable research hypothesis related to the course topics due.</p>
Tuesday 29/7	<p>3. Be able describe the <b>physiology of attraction.</b> Describe the impact sex has on long term and short term partners.</p>
Wednesday 30/7	<p>4. Be able to describe the similarities and differences in the <b>hypothalamic/ pituitary/ hormonal axis</b> for both men and women.</p>
Thursday 31/7	<p>5. Be able to draw the <b>ovarian cycle</b> and include details regarding hormone changes, follicular (ovarian) changes and endometrial changes</p> <p>Project Step 2: Literature review outlining relevant background information due.</p>
<b>Week 3</b> Monday 4/8	<p>6. Be able to describe the anatomy and physiology underlying <b>pathologies</b> related to male and female sexual function (erectile dysfunction, painful intercourse etc.)? List the most common sexually transmitted infections (STIs) and describe how they are likely to be transmitted and their course throughout the body.</p> <p>Guest: Judy Abel PT – Pelvic Wellness Center</p> <p>Project Step 3: Description of methodology for collection of data including any survey tools due.</p>
Tuesday 5/8	<p>6. Be able to describe the anatomy and physiology underlying <b>pathologies</b> related to male and female sexual function (erectile dysfunction, painful intercourse etc.)? List the most common sexually transmitted infections (STIs) and describe how they are likely to be transmitted and their course throughout the body.</p> <p style="text-align: right;">Project Step 4: Engage in data collection (nothing due).</p>
Wednesday 6/8	<p>7. Be able to compare and contrast the effectiveness and mechanism of action of various methods of <b>birth control (barrier and hormonal)</b>, and be able to explain how hormonal birth control methods are related to the ovarian cycle.</p> <p>Guest: UO Nurse Practitioner Colleen Jones.</p> <p style="text-align: right;">Project Step 4: Engage in data collection (nothing due).</p>
Thursday 7/8	<p>8. Be able to explain the physiology and anatomy related to <b>conception and pregnancy.</b> Describe what changes happen in the female reproductive system after childbirth. Describe what factors can cause infertility in men and women.</p> <p style="text-align: right;">Project Step 4: Engage in data collection (nothing due).</p>

<p><b>Week 4</b> Monday 11/8</p>	<p>8. Be able to explain the physiology and anatomy related to <b>conception and pregnancy</b>. Describe what changes happen in the female reproductive system after childbirth. Describe what factors can cause infertility in men and women.</p> <p>Project Step 5: Graphical representation of data, and written description of interpretation due.</p>
<p>Tuesday 12/8</p>	<p>9. Be able to direct others to various local or Internet resources regarding <b>sexual health and wellness education, and positive sex messages</b>.</p> <p>Guests: Keith Van Norman from UO Health Center – creator of UO SexPositive app; Jody McCurry from Planned Parenthood.</p>
<p>Wednesday 13/8</p>	<p>Project Step 6: Dissemination of mini-research project findings &amp; reflection due.</p>

**The Expectations:**

Workload expectations include “preparation assignments” prior to each class meeting (and in the summer we meet four times each week for 4 weeks). This will include an average of 13 hours of reading and writing every week, outside of class time. The reading will include the book *Bonk: The Curious Coupling of Science and Sex* as well as popular articles, textbooks, scientific articles and websites. You will also design and carry out your own mini-research experiment, with a focus on graphical representation of the data, and dissemination of the findings. This individual project should involve approximately 25 hours of work outside of class throughout the 4-week term. **In total, you will spend 10 hours per week in class (total of 40), and 20 hours per week outside of class (total of 80),** for a grand total of 120 hours of engagement for this 4-credit course (as required by the UO Curriculum Committee).

**The Research Project:** To keep you on track for success, a portion of your research project will be due at the following time points in the term. A description of the expectations and grading rubric for each portion of the project will be available via Blackboard.

Week 2 (Monday July 28<sup>th</sup>): Testable research hypothesis related to the course topics.

Week 2 (Thursday July 31<sup>st</sup>): Literature review outlining relevant background information.

Week 3 (Monday August 4<sup>th</sup>): Description of methodology for collection of data including any survey tools.

Week 4 (Monday August 11<sup>th</sup>): Graphical representation of data, and written description of interpretation.

Week 4 (Wednesday August 13<sup>th</sup>): Dissemination of findings (students will select from many options including PowerPoint, Poster, Digital Story, Podcast or Manuscript).

**The Resources:**

Required:

Roach, M. (2009). *Bonk: The curious coupling of science and sex*. W. W. Norton & Company

iclicker – can be borrowed, purchased from UO bookstore, purchased from craigslist etc. (iclicker 1 or 2 will work fine).

3x5 Index cards – one package.

All other reading materials will be available electronically; additional resources may be added to the list below as the term progresses:

Dawson, Sierra (Feb 2013) The Anatomy and Physiology of Orgasm (in 9 parts)  
<http://www.youtube.com/playlist?list=PLHROYgtRnnKAdSQWyUzdDDdks81azAm2>

Gilroy, A. (2012) Atlas of Anatomy 2<sup>nd</sup> Ed. Thieme.

Hall, J. (2010) Guyton and Hall Textbook of Medical Physiology 12<sup>th</sup> Ed. Saunders.

Kelly, Diane TedTalk (Apr 2012): What we didn't know about penis anatomy.  
[http://www.ted.com/talks/diane\\_kelly\\_what\\_we\\_didn\\_t\\_know\\_about\\_penis\\_anatomy](http://www.ted.com/talks/diane_kelly_what_we_didn_t_know_about_penis_anatomy)

King, R. (2013) The Lady Vanishes: The Case of the Vanishing Clitoris. Hive Mind. Available online:  
<http://www.psychologytoday.com/blog/hive-mind/201307/the-lady-vanishes>

Mosbergen, D. (2013) Cliteracy 101: Artist Sophia Wallace Wants You To Know The Truth About The Clitoris. The Huffington Post. Available online:  
[http://www.huffingtonpost.com/2013/08/28/cliteracy\\_n\\_3823983.html?utm\\_hp\\_ref=women&ir=Women](http://www.huffingtonpost.com/2013/08/28/cliteracy_n_3823983.html?utm_hp_ref=women&ir=Women).

Roach, Mary (Feb 2009) 10 things you didn't know about orgasm  
[http://www.ted.com/talks/mary\\_roach\\_10\\_things\\_you\\_didn\\_t\\_know\\_about\\_orgasm](http://www.ted.com/talks/mary_roach_10_things_you_didn_t_know_about_orgasm)

Singham, M. The classroom discussion problem: Talkers and listeners. The National Teaching and Learning Forum No. 13 (2). Available online: <http://cgi.stanford.edu/~dept-ctl/tomprof/posting.php?ID=558>

Torgrimson & Minson (2005) Sex & Gender: what is the difference? J Appl Physiol 99: 785–787.

Weil, E. (2006) What if it's (sort of) a boy and (sort of) a girl? The New York Times Magazine, September 24. Available online:  
<http://www.nytimes.com/2006/09/24/magazine/24intersexkids.html?pagewanted=all&r=0>

**The Policies:**

If you have any questions regarding the expectation, policies or rationale for any portion of the course, be sure to ask; we would be happy to elaborate!

**Grading:**

Daily Preparatory Assignments	25%
In class Summative Assessments	15%
Research Project (Steps 1-5)	30%
Presentation of findings	30%

Attendance/participation For each class (beyond the first) that you are absent, or non-participatory, 2% will be deducted from your final course grade. We will let you know if your level of class participation is not consistent with our expectations.

**Accessibility:** Although this course has been designed using the principles of Universal Design, I invite you to talk with me if some aspect of the course is not accessible to you, and requires adaptation. I would be happy to consider changes that would make your learning experience more positive. You are also encouraged to contact the Accessible Education Center (AEC) in 164 Oregon Hall at 346-1155 or [uoac@uoregon.edu](mailto:uoac@uoregon.edu).

**Academic Integrity:** Plagiarism, as defined below, is obviously not permitted. If plagiarism or cheating is suspected, the HPHY Conduct Officer will be contacted and the UO's conduct policy will be strictly adhered to. The outcome for academic misconduct can include an F in the class. Please read and internalize the following quotation, from the Office of Student Life's Academic Dishonesty Policy to protect yourself from a charge of academic misconduct.

"Plagiarism is the inclusion of someone else's product, words, ideas, or data as one's own work. When a student submits work for credit that includes the product, words, ideas, or data of others, the source must be acknowledged by the use of complete, accurate, and specific references, such as footnotes. Expectations may vary slightly among disciplines. By placing one's name on work submitted for credit, the student certifies the originality of all work not otherwise identified by appropriate acknowledgements. On written assignments, if verbatim statements are included, the statements must be enclosed by quotation marks or set off from regular text as indented extracts.

Unauthorized collaboration with others on papers or projects can inadvertently lead to a charge of plagiarism. If in doubt, consult the instructor or seek assistance from the staff of Academic Learning Services (68 PLC, 346-3226). In addition, it is plagiarism to submit as your own any academic exercise (for example, written work, printing, computer program, art or design work, musical composition, and choreography) prepared totally or in part by another. Plagiarism also includes submitting work in which portions were substantially produced by someone acting as a tutor or editor."

As a reminder, when completing preparatory assignments or work on your research project, be aware that re-wording the ideas of others can lead to a charge of plagiarism. Please do not work with groups or collaborate when **writing** your assignments (although discussion of ideas is encouraged).