Syllabus for WGS/STS 210 (601; 3 Credit Hours):
“Women and Gender in Science and Technology”
Fall 2014

Course website: https://moodle1415-courses.wolfware.ncsu.edu/course/view.php?id=403

Contact Information

Instructor: Dr. Deena M. Murphy
Instructor's e-mail: deena_murphy@ncsu.edu
Office hours: We can meet by appointment or set up meetings on Collaborate or Skype. NB. Please follow the instructions for configuring Collaborate prior to meeting.

Group Leaders: Group A: Jacob Clayton; Group B: Shaefny Grays; Group C: Patsy Sibley; Group D: Laura White
Group Leader e-mails: lwhite@ncsu.edu; patsy.sibley@gmail.com; sdgrays@ncsu.edu; jrclayt2@ncsu.edu
Office hours: Contact through Collaborate or G-mail chat at times listed on Moodle.

Please note, in this course, we implement a “3 Before Me” policy, meaning before contacting us for assistance of any kind (other than personal issues), we expect you to tell us what you did to find answers before coming to us (e.g., read FAQ list, asked a question on the discussion board, or looked through all “Getting Started” materials). You might be surprised by how many students either share your concerns and/or have the solution. There is a forum at the top of the Moodle page for “Questions Related to the Course” where you can post questions related to discussion boards, Collaborate, the syllabus, and other course business. We will all check these threads periodically to clarify any necessary information.

Overview of Course

This course is a fully online course and is an interdisciplinary introduction to the mutual influence of scientific and technological research on contemporary understandings of women and men. We will explore various topics including: the social construction of gender; social factors influencing science and engineering professionals; changing views on gender; career and other stereotypes related to societal expectations; the gendered climate in science; the medical treatment of men’s, women’s, and intersex bodies; the socio-historic context in which different gendered beliefs emerged; and how these gendered beliefs continue to impact scientific research and technological developments. This course will provide a variety of media and materials to challenge you to engage and discuss these topics with diverse peers from very different fields of study. This course further offers students unique insights into the ways that their experiences as men and women are relevant to their experiences with scientific and technological information. Most importantly, the emphasis of this course is focused on going beyond raising awareness toward identifying solutions to any issues raised, empowering students to overcome any perceived challenges to their success.
**Course Prerequisites and GEP Fulfillments**

There are no pre-requisites for this course. This course fulfills the requirements of two general education program requirements: Interdisciplinary Perspectives and U.S. Diversity.

**Overview of Learning Goals**

The main goals for this course are to explore how the social, economic, and institutional practices of scientific and technological research are shaped by the gendered beliefs. Students will interact with the instructor and each other to engage in dialogue around these issues and integrate an understanding of how their personal experiences as women and men are tied to the material in the course. Consequently, there are several learning goals for the course:

1. Students will be able to describe how the social, economic, and institutional practices of scientific and technological research are shaped by the presence and absence of women.
2. Students will be able to identify cultural myths about scientists and engineers and compare how those myths in turn foster other myths about men and women.
3. Students will critically analyze research about sex differences, examining social and technological knowledge in light of social debates about it.
4. Students will integrate and be able to assess how their experiences as men and women are relevant to experiences with scientific and technological information.
5. Students will be able to evaluate specific research about women to analyze and assess existing scientific knowledge and practices.
6. Students will participate in dialogue around the course content and demonstrate an ability to evaluate their experiences as women and men in relation to this content.

**Overview of Course Objectives**

In order to accomplish these learning goals, course participants will be guided toward achieving the following objectives:

1. To develop an awareness of the importance of gender to science and technology through exploration of readings, real-life examples, and a variety of media.
2. To recognize how one’s own values, culture, ideology, and worldview influence one’s views on gender, science, and technology and to learn how to view issues from diverse perspectives.
3. To integrate learning around the social, economic, and institutional practices of scientific and technological research in order to examine existing knowledge and to enhance one’s ability to challenge existing paradigms.
4. To develop some practical tools to facilitate success for women and people of color in the sciences, technology, engineering, and math fields.
OVERVIEW OF PEDAGOGICAL STRATEGIES

The learning approach of this class will be focused on active learning rather than passivity. While there will be some online lecturing by the instructor, this will be a participative class with an emphasis on small group, class discussion, and projects to engage you with the course content. The course will consist of interactive lectures, readings for discussion, group discussion facilitation, recorded “guest speakers,” and a variety of media to provide further material for discussion. Course participants will be expected to take responsibility for their own learning and for integrating course material into their understanding of women, science, and technology and how this applies to their lives. As an instructor, I see my main role as being a guide and facilitator in the learning process, responsible for fostering a classroom climate in which learning and integration are possible.

REQUIRED READINGS AND MATERIALS

All the links to copyrighted readings and other copyrighted materials for the course are provided within each unit for you to download for free as an NCSU student. There is no need to print materials.

Audio: If you don’t have one already you will need to order a headset. These are required in order to participate in the Collaborate office hours and the Collaborate discussions. A headset with a built in microphone may be your best bet as it eliminates feedback loops that occur with speakers and microphones. You can get headsets for about $10 - $15 at a computer or office supply store or you can try one of the online stores like www.amazon.com and www.cdw.com. (At the very least, you need a set of headphones that work with your computer and to ensure you are in a very quiet space when meeting on Collaborate).

Internet Access: This is an on-line course and you will be required to stream video and other media. A high-speed wireless network will meet all of your needs, but if your wireless network is slow, you should ensure you find a location to work with high-speed wireless or a wired network. Our NCSU campus has all of these.

COURSE SCHEDULE

Online courses can be intensive and each unit will be over one week (Wednesday through Tuesday). Each unit will require you to be on-line to post on Moodle discussion boards, join a Collaborate session, or complete a short quiz. The following chart outlines the tentative course schedule with the unit subject along with any projects and assignments due on that date. A more detailed outline can be found on the course web site as videos, supplemental readings, and other activities are added in to course content. Please note, the first two units are both Moodle discussion boards, but this then shifts to a rotation of Moodle discussion board, Collaborate discussion, and quiz.
<table>
<thead>
<tr>
<th>Unit</th>
<th>Subject and readings</th>
<th>Assignments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Section 1.</td>
<td>Educating women for scientific careers.</td>
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<tr>
<td>Unit 1</td>
<td><strong>Beginnings: Introductions and overview of the course.</strong> Overview of issues.</td>
<td>1. Review Moodle lecture</td>
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<tr>
<td>(Aug 20-26)</td>
<td>Readings: Peggy McIntosh article; Schacht: Men and Masculinities article</td>
<td>2. Complete “Getting Started” activities on main course page</td>
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<td></td>
<td>Videos (embedded in lecture): Two short clips; Changing Gender (45 mins)</td>
<td>3. Set up Moodle profile</td>
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<td></td>
<td></td>
<td>4. Moodle discussion forum posting</td>
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<tr>
<td></td>
<td></td>
<td>(Biography including privilege list and reflection on gender—written or</td>
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<tr>
<td></td>
<td></td>
<td>video posting)</td>
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<tr>
<td>Unit 2</td>
<td><strong>Introduction to Activism. Changing the world: Global issues, local initiatives.</strong></td>
<td>1. Review Moodle lecture</td>
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<td>Videos (embedded into lecture): <em>The Women’s Center; TED Talk: Jackson Katz; Science: It’s a Girl Thing and video blog response.</em></td>
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<td>Unit 3</td>
<td><strong>Personal Experiences</strong></td>
<td>1. Review Moodle lecture</td>
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<td>Videos: Interviews with female scientists: Sylvia Earle; Dr. Simone Peterson Hruda</td>
<td>3. Sign up for and participate in Collaborate session</td>
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<td>(from 14:15 onwards); others.</td>
<td>4. Sign up for all Collaborate sessions across semester by end of unit</td>
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<tr>
<td>Unit 4</td>
<td><strong>Educational choices.</strong></td>
<td>1. Review Moodle lecture</td>
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<tr>
<td></td>
<td>Audio: Play “Snow Brown and the Seven Detergents”</td>
<td>3. Mini-assignment 1 due September 16th at midnight</td>
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</tbody>
</table>
| Section 2. Social influences in science. | Unit 5  
(Sept 17-23) | *Stereotypes in science and engineering.*  
Readings: Barbercheck, Mary. “Science, Sex, and Stereotypical Images in Scientific Advertising.”  
Video: Killing Us Softly 4 | 1. Review Moodle lecture  
2. Moodle discussion board |
| --- | --- | --- | --- |
| Unit 6  
(Sept 24-30) | *Final Project*  
One unit is devoted to forming groups, creating web sites, writing project proposals, and providing feedback to other groups. | 1. Review Final Project instructions  
2. Form groups  
3. Final project proposal: Web site and group members for final project due by September 26th at midnight  
4. Responses to other students due by September 30th at midnight |
| Section 3. Technologies of Difference: How ideas about women and men shape science and technology. | Unit 7  
(Oct 1-7) | *Language and power.* The importance of the rhetoric of biological invasions and technostrategic discourse.  
Reading: Cohn, Carol. “Sex and Death in the Rational World of Defense Intellectuals.”  
2. Participate in Collaborate session |
| Unit 8 (Oct 8-14) | *Science as social practice.*  
Reading: Feng, Spence, and Pratt: “Playing an Action Video Games Reduces Gender Differences in Spatial Cognition.” | 1. Review Moodle lecture  
2. Quiz 2 due by end of unit |
| Unit 9  
(Oct 15-21) | *Culture and gender.*  
Reading: Kessler, Suzanne. “The Medical Construction of Gender: Case Management of Intersexed Infants.”  
Video: *Intersexion* documentary | 1. Review Moodle lecture  
2. Moodle discussion forum  
3. Mini-assignment 2 due before midnight on October 21st. |
## Section 4. New knowledge and social change.

| Unit 10 (Oct 22-28) | **The medical construction of sexuality.**
|----------------------|--------------------------------------------------
| Optional: Video: *Passion and Power* (75 minutes) | 1. Review Moodle lecture  
2. Discussion forum (Collaborate)  
3. Extra credit: Video: *Passion and Power* (75 minutes) due October 28th |

| Unit 11 (Oct 29-Nov 4) | **Including a feminist perspective.**
|------------------------|--------------------------------------------------
| | 1. Review Moodle lecture  
2. Quiz 3 due by end of unit |

| Unit 12 (Nov 5-11) | **Technology and the body.**
|-------------------|--------------------------------------------------
| **Readings:** Elizabeth Watkins “From Breakthrough to Bust: The Brief Life of Norplant, the Contraceptive Implant”
2. Moodle discussion board |

| Unit 13 (Nov 12-18) | **Changing the World: Global Issues, Local Initiatives**
|---------------------|--------------------------------------------------
| **Reading:** Trauger et al. "Our Market is Our Community": women farmers and civic agriculture in Pennsylvania, USA"  
**Video:** Vandana Shiva-The Future of Food and Seed; Fighting Hunger by Supporting Women | 1. Review Moodle lecture  
2. Participate in Collaborate session |

| Unit 14 (Nov 19-25) | **(Re)Imagining STEM?**
|---------------------|--------------------------------------------------
| **Excerpt from Riley et al. (2007); Bilmoria et al. (2007); Models of Community Engagement (2009)** | 1. Review Moodle lecture  
2. Quiz 4 due by end of unit |
COURSE DELIVERY

This section provides you with a brief overview of the assignments. Full course assignments and assessment of assignments are listed in detail in the “Getting Started’ section of Moodle.

COURSE REQUIREMENTS

I. Active participation and attendance 30%
II. Quizzes 20%
III. Mini-assignments 20%
IV. Final project 30%

I. Active participation on discussion boards and attendance (30%)

This is numero uno for you all. A seminar format only works when the class is actively engaged and has read the materials. To enable as much participation as possible, you will engage in a variety of on-line discussions and be encouraged to work in small groups on projects.

As we have close to 150 students in the class, there are four separate discussion groups (A, B, C, and D). Each student will be placed in one group at the start of the course and each group is assigned a TA as a Group Leader, who will facilitate discussion and grade discussion board postings on a unit-by-unit basis. After unit one, the rotation will be one unit on Moodle discussion boards, the next in Collaborate (followed by a quiz). To receive a basic passing grade (C) in the class, all students are expected to make a minimum of three postings on the unit forums on Moodle (initial posts are due prior to the end of the weekend) and to meet and discuss readings with a group of 2-3 people in the units using Collaborate. More postings (on Moodle only) are encouraged and will be expected to receive a B or higher, but the focus is always on quality rather than quantity. After initial postings prior to the end of the day Friday, follow up postings should be on a different day and include responding to a previous topic, responding to a classmate’s posting, and/or posting a specific response to a question raised. Postings should be well distributed throughout the unit (i.e. not all in one brief on-line session at one time or in response to one question). A recommendation for Moodle would be 2 strong posts that reference the readings and encourage further discussion prior to the end of the day Friday and 2-3 shorter posts that respond to another student (4-5 posts total). Please make good use of these forums throughout the unit to demonstrate your active engagement in materials and class discussions. Moodle and Collaborate are the only way we can monitor your individual understanding and ongoing participation in the course.
More details on Discussion Board Participation Guidelines are posted in the “Getting Started” section of the Moodle course site. Please note: **If you miss three discussion units with no excused absences, you will receive a failing grade for the course!** If you miss one or more units, you will also be downgraded one partial letter grade for each unexcused absence (i.e. an A- becomes a B+).

II. Quizzes (20%)

To give you all a break from posting on Moodle and Collaborate, we have included four short quizzes to replace discussion (units 4, 8, 11, 14). These will include multiple choice, yes/no, and true/false questions only. Each quiz will have 5-10 questions only and may be timed (between 10-15 minutes). You will need to read the assigned readings and listen to the lectures in order to take each quiz. Each quiz will only be based on the material in the unit in which it is assigned.

III. Mini-assignments (20%)

All of these assignments should be done in small groups of up to 5 people (you may work with anyone from groups A, B, C or D). You are required to complete two different mini-assignments. Details for these assignments are posted in the “Getting Started” section of the Moodle course site.

IV. Final project (30%)

We strongly recommend you complete the final project in groups of 2-5! Before unit 6, you will be expected to form groups on-line by connecting on the Moodle forum provided, then contacting each other via e-mail or through the forum to set times and dates to meet either in-person or virtually. You will then have to set up a web site related to your group project and provide a project proposal. The project is based on a feminist pedagogical strategy, which incorporates academic study with the practice of making your research a tool for social action and change. It involves you and a small group of your classmates deciding on a project, implementing it, and presenting it — by the last unit of class. A critical part of this project is the social action and change part; this is not simply a research paper! You will need to disseminate this to a group of people beyond our class.

More details on the Final Project can be found in the “Getting Started” section of the Moodle course site. Your group will be expected to create a web site (from the template provided) and post a project proposal by the end of unit 6 and then present the final project and submit a write-up by December 5th.
COURSE EVALUATION:

Grades will be based on four main items: I. Active participation and attendance on the Moodle site (30%); II. Quizzes (20%); III. Mini-assignments (20%); and IV. Final project (30%).

This will result in a total of 100% with letter grades as follows:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>A+</td>
<td>97-100</td>
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<tr>
<td>A</td>
<td>94-96</td>
</tr>
<tr>
<td>A-</td>
<td>90-93</td>
</tr>
<tr>
<td>B+</td>
<td>87-89</td>
</tr>
<tr>
<td>B</td>
<td>84-86</td>
</tr>
<tr>
<td>B-</td>
<td>80-83</td>
</tr>
<tr>
<td>C+</td>
<td>77-79</td>
</tr>
<tr>
<td>C</td>
<td>74-76</td>
</tr>
<tr>
<td>C-</td>
<td>70-73</td>
</tr>
<tr>
<td>D+</td>
<td>67-69</td>
</tr>
<tr>
<td>D</td>
<td>64-66</td>
</tr>
<tr>
<td>D-</td>
<td>60-63</td>
</tr>
<tr>
<td>F</td>
<td>below 60</td>
</tr>
</tbody>
</table>

Some key points about grading:

- All grades and assignments will be posted in Moodle (do not e-mail papers to your TAs or professor, please)
- Completing all assignments does not guarantee you an A or even a B. C is the default grade for completion of tasks and full participation in class and As and Bs denote higher performance in all class activities and assignments.

POLICIES AND PROCEDURES:

Our policies in regard to late assignments, attendance and class participation, academic integrity, and discrimination, are as follows.

Late assignments. Late assignments will be accepted at the instructor’s discretion and may be penalized by one letter grade for each day late. Late assignments will only be accepted under extreme circumstances such as illness or family or other emergencies. You are expected to manage your time and ensure all assignments are submitted on or before the due date.

Attendance and class participation. The equivalent for attendance in an on-line course is regular participation and timely completion of assignments. The university’s definition of excused absences will be applied in cases where work could not be submitted on time. Please note: If you miss three discussion units with no excused absences, you will receive a failing grade for the course! Note: Excuses for unanticipated absences must be reported to the instructor no more than one week after you return to class.

IMPORTANT! The Women and Gender Studies Department automatically drops students who have not attended the first two units. On-line this means participating and completing all assignments for the first two units. See the course schedule for more details.
Academic integrity. The learning activities in this course are designed to promote discussion among students as peer educators. Though you are free to use any legitimate academic materials at your disposal, you may not plagiarize available sources (such as existing book or movie reviews) or simply replicate answers of others enrolled in the course. I understand and expect all students to follow the university's honor pledge: “I have neither given nor received unauthorized aid on this test or assignment.” For the university's policy, see: http://policies.ncsu.edu/policy/pol-11-35-01

Students with disabilities. Reasonable accommodations will be made for students with verifiable disabilities. In order to take advantage of available accommodations, students must register with Disability Services for Students at 1900 Student Health Center, Campus Box 7509, 919-515-7653. For more information on NC State's policy on working with students with disabilities, please see the Academic Accommodations for Students with Disabilities Regulation (REG02.20.01)

Policy on teaching and learning practices. This course is designed to foster dialog about how a wide variety of exclusionary practices (including those based on gender, race, class, sexual preference, ethnic or religious background, and physical disabilities) promote social inequalities. Full participation in this course requires your willingness to (1) read the material, (2) share your reactions and experiences as well as (3) show respect for others' perspectives and experiences. Students may be required to disclose personally identifiable information to other students in the course, via electronic tools like email or web-postings, where relevant to the course. Examples include online discussions of class topics, and posting of student coursework. All students are expected to respect the privacy of each other by not sharing or using such information outside the course. It is my job to create a classroom environment in which you feel safe and fully included. Please alert me if you have concerns about the course content, classroom culture, or to report inappropriate behavior by another student as the semester progresses.

N.C. State Polices, Regulations, and Rules (PRR): Students are responsible for reviewing the NC State University PRR's located at http://oucc.ncsu.edu/course-rights-and-responsibilities, which pertains to their course rights and responsibilities.

On-line course evaluations. Online class evaluations will be available for students to complete during the last 2 weeks of the semester then become unavailable at 8am on the first day of finals. Students will receive an email message directing them to a website where they can login using their Unity ID and complete evaluations. All evaluations are confidential; instructors will not know how any one student responded to any question, and students will not know the ratings for any instructors.

Evaluation website: https://classeval.ncsu.edu/secure/prod/survey/index.cfm

Student help desk: classeval@ncsu.edu

More information about ClassEval: http://upa.ncsu.edu/eval/clev