UAB
Universitat Autònoma de Barcelona

Science and Gender

Code: 105802
ECTS Credits: 6

2024/2025

Degree	Type	Year
2500000 Sociocultural Gender Studies	OB	3

Contact

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Teachers

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Teaching groups languages

You can view this information at the end of this document.

Prerequisites

None.

Objectives and Contextualisation

This subject aims to provide analytic tools from the feminist critique of science, the history and philosophy of science and technology, and education with gender perspective, for the students to actively take part in the current debates, as well as to elaborate programs and take measures to face future challenges in the scientific-technological and environmental fields, with an intersectional gender perspective.

Competences

- Express correctly and in a non-sexist or homophobic manner both orally and in writing.
- Formulate, argue and discuss your own and others' ideas in a respectful, critical and reasoned way.
- Identify and question gender representations in the history of ideas, arts and culture, as well as in the construction of scientific knowledge.
- Interpreting and interrelating the conceptual bases of feminist theories.
- Interpret gender inequalities in relation to sexuality, class, ethnicity and territory based on the concepts and approaches of sociocultural analysis.

- Students can apply the knowledge to their own work or vocation in a professional manner and have the powers generally demonstrated by preparing and defending arguments and solving problems within their area of study.
- Students must be capable of collecting and interpreting relevant data (usually within their area of study) in order to make statements that reflect social, scientific or ethical relevant issues.
- Students must develop the necessary learning skills in order to undertake further training with a high degree of autonomy.

Learning Outcomes

1. Analyze the representations of the body in cultural and artistic productions throughout history.
2. Contrast the debates on feminism and masculinities.
3. Critically analyze informative speeches especially in relation to ideology and ethnocentric and sexist biases.
4. Describe the fundamental concepts of gender theory.
5. Explain the historical links between feminism and other movements against inequality (afrodescendencia, LGBTI, etc.).
6. Make an inclusive use of language.
7. Prepare an organized and correct speech, orally and in writing, in the corresponding language.
8. Prepare basic proposals to promote gender equality in scientific and technological studies.
9. Students can apply the knowledge to their own work or vocation in a professional manner and have the powers generally demonstrated by preparing and defending arguments and solving problems within their area of study.
10. Students must be capable of collecting and interpreting relevant data (usually within their area of study) in order to make statements that reflect social, scientific or ethical relevant issues.
11. Students must develop the necessary learning skills in order to undertake further training with a high degree of autonomy.
12. Use the specific technical vocabulary and own interpretation of the required disciplines.

Content

Block 1. Historical, scientific, and technological accounts of sex/gender.

- Lesson 1. Analysis of scientific and technological discourse with a critical perspective. Objectivity and reason as a premise, man as gender.
- Lesson 2. Critical perspectives from the history of science and technology to scientific and gender discourse.

Block 2: Scientific, medical, and technological constructions of the body, sexuality, and gender.

- Lesson 3. Biological construction of sex and sexual dimorphism.
- Lesson 4. Medicalization and naturalization processes
- Lesson 5. Science and the construction of masculinities.

Block 3: Feminist critique to science and feminist epistemologies.

- Lesson 6. The epistemological debate : knowledge and the subject of science.
- Lesson 7. Inquisition, coloniality and women and gender.

Block 4. Scientific education and STEM from a gender and equity perspective.

- Lesson 8. Challenges of science education with a gender and equity perspective.
- Lesson 9. Science education and STEM/STEAM with gender perspective. What do they do, what can be done, and what can we do?

Activities and Methodology

Title	Hours	ECTS	Learning Outcomes
Type: Directed			
Lectures	33.33	1.33	
Practical sessions	14.67	0.59	
Type: Supervised			
Field trip	4	0.16	
Programmed tutorials	6	0.24	
Type: Autonomous			
Comprehensive reading of texts	25	1	
Preparation for debates and discussions	15	0.6	
Preparation of the assessment activities	40	1.6	
Search of bibliography	10	0.4	

The methodology is eclectic and interdisciplinary, based on the students' prior knowledge. Through the sessions, the students have to use this concepts and terms in his argumentation, critiques and justifications.

The sessions will start by introducing the topic through a case study, reading or audiovisual material to promote the activation of one's own prior knowledge. After that, a lecture related to the proposed topic will add complexity to the analysis. Lastly, a creation, debate and / or argumentation phase will take place to integrate what has been learned during the session.

Annotation: Within the schedule set by the centre or degree programme, 15 minutes of one class will be reserved for students to evaluate their lecturers and their courses or modules through questionnaires.

Assessment

Continous Assessment Activities

Title	Weighting	Hours	ECTS	Learning Outcomes
Argumentative test	33,3%	1	0.04	1, 2, 3, 4, 5, 6, 7, 9, 10, 12
Individual portfolio	33,3%	0	0	3, 6, 8, 11
Oral presentation	33,3%	1	0.04	1, 6, 7, 8, 9, 10, 11, 12

Continuous assessment

The evaluation of the competences and learning outcomes is continuous, through the active participation of the students in relation to the activities proposed. The final grade will consist of the overage of the points obtained in each assessment. For the evaluation to be considered effective, students must have a 3,5 out of 10, in each of the assessments. The evaluation activities are a writing exam with notes, an oral exposition and a dossier.

Lecturers will report the grades of each assessment through Moodle once each block has been completed. Final grades will be published after the session of general conclusions of the course, also through Moodle.

Single assessment

In the event that the student adheres to the single assessment, the student will have to pass a written theoretical development exam without notes (33.3%), the resolution of a case study (33.3%) and an oral exposure (33.3%). The grade for the subject will be the average of these activities, provided that you obtain a minimum of 3.5 in each of them. The subject will be approved as long as an average value higher than 5 is obtained.

Recommendations

It is assumed that students are able to express themselves correctly both orally and in writing. For this reason, any spelling and expression errors that may be made will lead to a decrease in the grade of the assessment. Likewise, it is considered that the students know the general norms of presentation of an academic work. However, specific rules may be applied by indication of the lecturers if they consider it appropriate.

In the event of a student committing any irregularity that may lead to a significant variation in the grade awarded to an assessment activity, the student will be given a zero for this activity, regardless of any disciplinary process that may take place. In the event of several irregularities in assessment activities of the same subject, the student will be given a zero as the final grade for this subject.

Grade review procedure

At the time of each assessment test, lecturers will inform the students via Aula Moodle of the procedure and date of revision of the grades.

Recovery procedure

In case of need, a recovery test (exam) will be carried out for those students who do not pass the continuous assessment tests as a whole. To participate in the recovery, the students must have been previously evaluated in a set of activities whose weight equals a minimum of 2/3 of the total grade of the subject, and have obtained a minimum grade of 3,5 out of 10. In the case of the single assessment, the same recovery system will be applied as for the continuous assessment.

Conditions for "Not evaluable"

Students who do not complete at least 2/3 of the assignments will be considered as "Not evaluable", exhausting the enrolment rights of the subject.

Information regarding adaptation of evaluations to the hybrid teaching system in the event of an epidemic

In the event that tests or exams cannot be taken onsite, they will be adapted to an online format made available through the UAB's virtual tools (original weighting will be maintained). Homework, activities, and class participation will be carried out through forums, wikis and/or discussion on Teams, etc. Lecturers will ensure that students are able to access these virtual tools, or will offer them feasible alternatives.

Bibliography

The following list corresponds to the basic bibliography for each block. Throughout the course, lecturers will offer specific bibliography of interest.

Block 3:

Cowan, Ruth Schwartz (1989). *More Work for Mother: The Ironies of Household Technology from the Open Hearth to the Microwave*. London: Free Association Books

Haraway, Dona J. (2004). *Testigo_Modesto@Segundo_Milenio. HombreHembra _Conoce_Oncoratón: feminismo y tecnociencia*. Barcelona: UOC

Harding, Sandra G. (1998). *Is science multicultural?: postcolonialisms, feminisms, and epistemologies*. Bloomington: Indiana University Press

Keller, Evelyn Fox (1991). *Reflexiones sobre género y ciencia*. València: Alfons el Magnànim.

Merchant, Carolyn (1983). *The Death of nature: women, ecology, and the scientific revolution.* San Francisco: Harper & Row

Schiebinger, Londa L. (2004). *¿Tiene sexo la mente?: las mujeres en los orígenes de la ciencia moderna*. Madrid: Cátedra; València: Universitat de València. Instituto de la Mujer

Wajcman, Judy (2006). *El tecnofeminismo*. Madrid: Cátedra; València: Universitat de València Instituto de la Mujer

Block 2:

Adán, Carme (2003). *Feminismo e coñecemento: da experiencia das mulleres ao cíborg.* Coruña: Espiral Maior.

Haraway, Donna J. (1995). *Ciencia, cyborgs y mujeres*: la reinvención de la naturaleza. Madrid: Cátedra

Harding, Sandra G. (1996). *Ciencia y feminismo*. Madrid: Morata

Keller, Evelyn Fox & Longino, Helen E. (1996). *Feminism and science.* Oxford: Oxford University Press

Longino, Helen E. (1990). *Science as social knowledge: values and objectivity in scientific inquiry.* New Jersey: Princeton University Press

Merchant, Carolyn (1996). *Earthcare: women and the environment*. New York: Routledge

Plumwood, Val (1993). *Feminism and the mastery of nature.* London, New York: Routledge

Block 1:

Badinter, Elisabeth (1993). *XY La identidad masculina.* Madrid: Alianza

Braidotti, Rosi (2013). *The posthuman.* Cambridge: Polity Press.

Coll-Planas, Gerard & Missé, Miquel (2015). La identidad en disputa. Conflictos alrededor de la construcción de la transexualidad.*Papers*, 100 (1): 35-42. Available at: <<http://dx.doi.org/10.5565/rev/papers.637 >>

Fausto-Sterling, Anne (2006). *Cuerpos sexuados: la política de género y la construcción de la sexualidad.* Barcelona: Melusina

Laqueur, Thomas (1994). *La construcción del sexo: cuerpo y género desde los griegos hasta Freud*. Madrid: Cátedra

Milam, Erika L.; Nye, Robert A. (2015). An Introduction to Scientific Masculinities. *Osiris*, 30 (1):1. Avalaible at: https://doi-org.are.uab.cat/10.1086/682953

Preciado, Beatriz (2008). *Testo yonqui*. Madrid: Espasa Calpe

Block 4:

Archer, Louise; Dawson, Emily; DeWitt, Jennifer; Godec, Spela; King, Heather; Mau, Ada; Nomikou, Effrosyni; Seakins, Amy(2017). Killing curiosity? An analysis of celebrated identity performances among teachers and students in nine London Secondary Science Classrooms. *Science Education*, 101 (5): 741-764. Available at: https://doi-org.are.uab.cat/10.1002/sce.21291

Brotman, Jennie S. & Moore, Felicia M. (2008). Girls and Science: A review of four themes in Science Education. *Journal of Research in Science Teaching*, 45 (9): 971-1002

Cantero Riveros, Beatriz (2015). *Inclusión del Género en la Enseñanza de las Ciencias*. Thesis dissertation. UAB. Available at: <<https://ddd.uab.cat/record/166152>>

Hughes, Gwyneth (2001).Exploring the Availability of Student Scientist Identities within Curriculum Discourse: An anti-essentialist approach to gender-inclusive science. *Gender and Education*, 13 (3): 275-290.

Hussénius, Anita (2014). Science education for all, some or just a few? Feminist and gender perspectives on science education: a special issue. *Cultural Studies of Science Education* 9: 255-262. Available at: http://dx.doi.org.are.uab.cat/10.1007/s11422-013-9561-0

OECD (2016). PISA 2015 Results (Volume I): Excellence and Equity in Education, PISA, OECD Publishing, Paris. Available at: <<https://doi.org/10.1787/9789264266490-en>>

Solsona i Pairó, Núria (2010). Génesis y desarrollo de los saberes femeninos en la educación. *Aula de Innovación Educativa*, 191: 7-11. Available at: http://dialnet.unirioja.es/servlet/articulo?codigo=3227801

Software

None

Language list

Name	Group	Language	Semester	Turn
(PAUL) Classroom practices	1	Catalan/Spanish	second semester	morning-mixed
(TE) Theory	1	Catalan/Spanish	second semester	morning-mixed