

BIO/WMS 127-001: GENES AND GENDER

Spring 2010: TWF at 8:30 AM – 9:20 AM

Room: Albertus Magnus 135

Credit Hours: 3.00



PROVIDENCE
COLLEGE

INSTRUCTOR:

Name: Fr. Nicanor Pier Giorgio Austriaco, O.P., Ph.D.

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I am generally in my office (Sowa 229B) or in my laboratory (Hickey Hall 181) from 9:00 AM - 5:00 PM daily and am easily available with a prior appointment. To make an appointment, you may call me on my telephone or email me. I'll keep Friday afternoon from 2:00 P.M. to 4:30 P.M. for drop-in appointments. I will either be in my office or in my laboratory. Please feel free to talk to me about any issue relating either to the course or to your life as a student here at Providence College.

A PRAYER BEFORE STUDY

St. Thomas Aquinas, O.P.

O God, Creator of all things, true source of light and wisdom, graciously let a ray of your light penetrate the darkness of my understanding. Give me a keen intellect, a retentive memory, and the ability to grasp things correctly and fundamentally. Give me the talent of being exact in my explanations and the ability to express myself with thoroughness and charm. Point out the beginning, direct the progress, and perfect my work. We ask you this through Jesus Christ Our Lord. Amen.

COURSE DESCRIPTION:

This course explores the role of biological claims in current social debates surrounding the specification of sex/gender in the human species. A foundation in both classical and molecular genetics will help us to better understand how sex/gender is determined by both genetic and environmental causes. This course is intended for non-science majors and for students enrolled in the Women Studies Program. It is open to science majors, as a free elective only, with permission of the instructor. *One semester, 3 credits.*

REQUIRED TEXTS:

- Desmond Morris, *The Naked Woman: A Study of the Female Body* (New York: St. Martin's Griffin, 2007).
- Desmond Morris, *The Naked Man: A Study of the Male Body* (New York: Thomas Dunne Books, 2009).
- Susan Pinker, *The Sexual Paradox* (New York: Scribner, 2008)
- Edward Stein, *The Mismeasure of Desire: The Science, Theory, and Ethics of Sexual Orientation* (Oxford: Oxford University Press, 2001).
- James D. Watson, *DNA: The Secret of Life* (New York: Knopf, 2003).
- Jacquelyn White, *Taking Sides: Clashing Views on Gender*, 4th edn. (New York: McGraw-Hill, 2009)

We will also be reading papers from other sources. These papers will be available on the ANGEL website.

ACADEMIC EXPECTATIONS:

Your performance in this course will be based on the following criteria:

Midterm Exam	25%
Final Exam	25%
Reading Quizzes	20%
Current Issues Writeups	20%
Class Participation	10%

EXAMS: The in-class midterm exam will be worth 100 points and will consist of multiple choice, short answer, and essay questions. Note that you will be asked, not only to recall pertinent information from the lectures, but also to synthesize the material and apply it to novel conceptual problems. The take-home final exam will be worth 100 points and will consist of three essays questions that will involve a synthesis of all the material covered in class.

READING QUIZZES: Reading quizzes will be administered during the first ten minutes of the indicated class meeting. A reading quiz will be based on the assigned book. For each book, please be ready to answer any of the following questions:

1. What is the main argument/most important claim of the book?
2. What is the main argument/most important claim of each chapter of the book?
3. Which is the most important chapter of the book? In other words, in your opinion, which chapter is most crucial for the main argument/most important claim of the book? Why?
4. In your opinion, how do the claim(s) of the book impact the current debates over the specification of sex/gender in human beings? Why?

CURRENT ISSUES DISCUSSION WRITEUPS: During the course of the semester, we will hold several in-class discussions on controversial current issues, using the texts in Jacquelyn White, *Taking Sides: Clashing Views in Gender*, 4th edn. (New York: McGraw-Hill, 2009) as foils for the debate. On the day of the in-class discussion, each student needs to submit a single-page, single spaced summary of the TWO assigned readings.

Each assignment has to include a 250-word summary for EACH of the two assigned readings. Each summary should answer the following questions:

1. What is the main argument/most important claim for the reading?
2. What is the author's supporting evidence for his or her main argument/most important claim? If applicable, how does the author use biological claims in his or her argument?
3. Do you think that the argument is supported by the evidence? Why or why not?

Discussion preparation write-ups that are submitted late will be penalized one full letter grade (10%) unless prior arrangements are made with the instructor. You may discuss your write-ups with your classmates. However, I expect the responses to be written independently. Furthermore, if you do discuss your responses with your classmates, please note this on your assignment and list the names of your collaborators.

PLAGIARISM POLICY: Academic dishonesty, cheating, and plagiarism (“the stealing and passing off of the ideas or words of another as one’s own without crediting the source”) are not tolerated in the professional world of science and will not be tolerated in this class. For the first offense, the student will receive a zero for the assignment. If a student aids another student during the assignment in an illicit manner, both parties will receive a zero. For the second offense, the student will receive an F for the course. Please consult the current Providence College Undergraduate Catalogue for its statement on “Academic Honesty.”

SCHEDULE OF READINGS

Week 1: Introduction [January 19, 2010]

January 22, 2010: ----- NO CLASS TODAY -----

Week 2: Nature of Heredity [January 26, 2010]

Week 3: Human Genetics and Pedigrees [February 2, 2010]

February 5, 2010: Reading Quiz for *DNA, The Secret of Life*

Week 4: The Nature of the Gene [February 9, 2010]

Week 5: The Nature of the Genome [February 16, 2010]

February 19, 2010: Reading Quiz for *The Naked Woman*

Week 6: Sex Determination in Humans [February 23, 2010]

February 26, 2010: In Class Discussion for Issue #1, *Taking Sides on Gender*

Week 7: Sexual Dimorphism [March 9, 2010]

March 9, 2010: Reading Quiz for *The Naked Man*

March 12, 2010: MIDTERM EXAM

Week 8: Human Sexual Dimorphism-Physiology [March 16, 2010]

March 17, 2010: In Class Discussion for Issue #4, *Taking Sides on Gender*

March 19, 2010: In Class Discussion for Issue #5, *Taking Sides on Gender*

Week 9: Human Sexual Dimorphism-Psychology [March 23, 2010]

March 24, 2010: Reading Quiz for *The Sexual Paradox*

March 26, 2010: In Class Discussion for Issue #8, *Taking Sides on Gender*

Week 10: Human Sexual Dimorphism-Psychology II [March 30, 2010]

March 31, 2010: In Class Discussion for Issue #3, *Taking Sides on Gender*

Week 11: Sexual and Gender Identity**[April 6, 2010]**

April 6, 2010: Extra Reading Available on ANGEL -

- Carl Elliott, “Amputees by Choice,” in Carl Elliott, *Better Than Well* (New York: Norton, 2003), pp. 208-236.
- M. Diamond and H.K. Sigmundson, “Sex Reassignment at Birth: Long-term review and clinical implications,” *Arch Pediatr Adolesc Med* 151 (1997): 298-304.
- Jan Morris, “My Conundrum” in *Sex & Gender: A Spectrum of Views*, eds. Philip E. Devine and Celia Wolf-Devine (New York: Wadsworth, 2003), pp. 22-29.

April 9, 2010: In Class Discussion for Issue #2, *Taking Sides on Gender*

Week 12: Mate Choice in Animals**[April 13, 2010]**

April 13, 2010: Reading Quiz for *The Mismeasure of Desire*

April 16, 2010: Extra Reading Available on ANGEL:

- American Psychological Association, Report of the American Psychological Association Task Force on Appropriate Therapeutic Responses to Sexual Orientation, 2009
- Nicanor Austriaco, O.P., “Understanding Sexual Orientation as a Habitus: Reasoning from the Natural Law, Appeals to Human Experience, and the Data of Science,” in *Leaving and Coming Home: New Wineskins for Catholic Sexual Ethics*, ed. David Cloutier (Eugene, OR: Cascade Books/Wipf & Stock, *in press*).

Week 13: Mate Choice in Humans**[April 20, 2010]**

April 20, 2010: In Class Discussion for Issue #10, *Taking Sides on Gender*

April 21, 2010: In Class Discussion for Issue #12, *Taking Sides on Gender*

April 23, 2010: Viewing of *GATTACA*

Week 14: Special Topics**[April 27, 2008]**

April 27-28, 2010: Viewing of *GATTACA*

April 30, 2010: Discussion of *GATTACA*: Social Policies and Ethics