Middle Sex: reflection of Jeffrey Eugenides Novel.  Paper details Read Jeffrey Eugenides Novel, Middle Sex Part 1: Biochemistry and Endocrinology behind the narrative: From the opening paragraph in the first chapter of the novel, it is clear that Cal has 5-alpha-reductase deficiency. He describes himself as being born twice, first as a baby girl in 1960 and then as a teenage boy in 1974. Explain the biochemistry and endocrinology behind this story, describing the consequences of the 5-alpha-reductase deficiency that would lead to the apparent birth of a baby girl and then to the changes that Cal experiences upon reaching puberty (what are described in the three assigned chapters). Consider Dr. Luce’s observations in the write-up that can be found near the end of the chapter, “Looking Myself up in Webster’s.” See how much of this you can explain in terms of biochemistry and endocrinology. Write your explanation at a level that would be appropriate when communicating to one of your classmates. Draw upon your knowledge from lectures you have had during the current year, knowledge you acquired from reading, other classes you had previously, etc. You may of course research the matter further, but one of the purposes of this exercise is for you to evaluate the extent of your knowledge. Are you confident of this information? Do you know the evidence behind it? Your answer to the latter two questions do not necessarily have to be included in your essay. Their main purpose is for considering what is asked in 3) below. Part 2: Interview to determine gender identity: A major purpose of Dr. Luce’s extensive interview of Cal is to determine his sense of gender identity. This is a critical part of Dr. Luce’s decision in determining the treatment for Cal’s condition. Evaluate from your perspective what Dr. Luce gets right and what he gets wrong in this process and explain why you think so. Keep in mind that the story takes place in 1974, and you are viewing this from the perspective of attitudes, experience, and body of knowledge that has accrued over 47 years since that time. In addition, you have the added advantage of knowing the Cal’s thoughts and descriptions from his narration of the story. Use these advantages you have to describe how you would have conducted this evaluation and explain why you think this would have been effective in evaluating Cal’s gender identity. You can of course use methods for interview that you may have learned about in other classes, but the important part of your answer is why you think this procedure would have been effective for Cal specifically, drawing on your understanding of him from his narrative. 3) Consider carefully what you wrote for 1) and 2) above, especially in terms of the confidence you have in the information you provided such as the evidence on which it is based and the appropriateness of the procedure you propose for the interview. Write two or more self-defined learning objectives of your own for this exercise—reflecting your interests, personal goals as a medical doctor, and/or learning style—that will help you further explore issues raised by items 1) and 2) above and helping you to fill gaps in your knowledge.