

**STATE UNIVERSITY OF NEW YORK  
COLLEGE OF TECHNOLOGY  
CANTON, NEW YORK**

**COURSE OUTLINE**

**BIOL 117 Human Reproduction**

**Prepared By: Ron Tavernier**

**SCHOOL OF SCIENCE, HEALTH, & PROFESSIONAL STUDIES  
SCIENCE DEPARTMENT  
May 2015**

- A. **TITLE:** Human Reproduction
- B. **COURSE NUMBER:** BIOL 117
- C. **CREDIT HOURS:** 3
- D. **WRITING INTENSIVE COURSE:**
- E. **COURSE LENGTH:** 15 weeks
- F. **SEMESTER(S) OFFERED:** Spring
- G. **HOURS OF LECTURE, LABORATORY, RECITATION, TUTORIAL, ACTIVITY:**  
3 hours lecture per week
- H. **CATALOG DESCRIPTION:** This course will discuss human reproduction from a biological point of view. Topics will include anatomy, reproductive physiology, genetics, conception, embryology, pregnancy and parturition, and disease states. Consideration will be given to medical, psychological, sociological, and legal and ethical perspectives.
- I. **PRE-REQUISITES/CO-COURSES:** None
- J. **GOALS (STUDENT LEARNING OUTCOMES):**  
By the end of this course, the student will be able to:

<i>Course Objective</i>	<i>Institutional SLO</i>
1. Describe the cell cycle, and how sexual reproduction passes chromosomes from parents to offspring. Describe chromosomal abnormalities that can occur.	3. Professional competence
2. Explain the fundamental principles of Mendelian genetics and the transmission of genes from parents to offspring. Describe the structure and function of DNA, and the processes of DNA replication, transcription, and translation. Discuss the types of prenatal genetic tests and the advantages and dangers of each.	2. Critical thinking 3. Professional competence
3. Discuss the transmission, symptoms, consequences and treatment of common sexually transmitted diseases. Discuss common methods of birth control and infertility treatment.	3. Professional competence
4. Describe normal male and female reproductive anatomy. List the major reproductive hormones and their functions throughout the human life cycle. Explain the series of biological events that commence with conception and lead to parturition. List the four stages of sexual response, and describe the characteristics of each.	2. Critical thinking 3. Professional competence
5. Discuss issues relating to ethical issues related to	2. Critical thinking

human reproduction with consideration of legal, psychological, and sociological perspectives.	3. Professional competence
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- K. TEXTS:** Mader, Sylvia S., Human Reproductive Biology, 3<sup>rd</sup> edition. McGraw Hill Higher Education, 2004.
- L. REFERENCES:** None
- M. EQUIPMENT:**
- N. GRADING METHOD:** A - F
- O. MEASUREMENT CRITERIA/METHODS:**
- Quizzes
  - Exams
  - Assignments
  - Class participation
- P. DETAILED COURSE OUTLINE:**
- I. Chromosomes and Chromosomal Inheritance
  - II. Genes, Medical Genetics, and Genetic Counseling
  - III. DNA and Molecular Genetics
  - IV. Sexually Transmitted Diseases
  - V. Reproductive Hormones and Sexual maturation
  - VI. Human Reproductive Systems
  - VII. Birth Control and Infertility
  - VIII. Human Sexual Response
  - IX. Fertilization, Development, and Birth
- Q. LABORATORY OUTLINE:** None