
Course Prefix No.: MLT 112
Course Title: Introduction to Parasitology
Lecture hrs/wk: 2.0
Lab hrs/wk: 0.0
Credit hrs/sem: 2.0

[Distance Learning Attendance/VA Statement](#)
[Textbook Information](#)

COURSE DESCRIPTION

This course provides an introductory study of human parasites, including classification, life cycles, and differential morphology of the medically important parasites.

In addition, attention is given to those classified as Protozoa, Nematoda, Cestoda, and Digenea. Specimen collection and specimen handling are also included in this study.

COURSE COMPETENCIES

Upon completion of this course the student will be able to:

1. Describe the distinguishing characteristics of the trophozoite and cyst stages of the major medically important Protozoa, and review their life cycles.
2. Trace the development of the malarial parasite in man and the mosquito, and list the distinguishing characteristics of Plasmodium vivax, ovale, malariae, and falciparum.
3. List the diagnostic criteria for the major medically important intestinal and tissue Nematodes, and trace their life cycles.
4. Recite the life cycles of the major medically important Tapeworms, describing their scolices, proglottids, and ova.
5. Recite the life cycles of the major medically important Flukes, describing the morphology and ova of each.
6. Review the proper techniques for specimen collection, and describe the procedures for studying specimens in the laboratory.
7. Identify protozoa, ova, and malarial parasites on Kodachrome slides and on prepared microscope slides.
8. Demonstrate professionalism in dress, conduct, and attitude.

PERFORMANCE OBJECTIVES

1. Using diagrams and transparencies provided, the student will describe the life cycles of the major medically important protozoa.
2. Given charts and drawings, the student will trace the life cycle of the malarial parasite and will name the differential characteristics of each major species.

3. Given transparencies and drawings, the student will review the life cycles of the major medically important intestinal and tissue Nematodes, citing their morphological characteristics.
4. Using transparencies and drawings provided, the student will trace the life cycles of the major medically important Tapeworms, and compare their morphologies.
5. Given transparencies and diagrams, the student will describe the general life cycles of the flukes, and review the morphology of each species.
6. Utilizing information obtained from lecture and the textbook, the student will describe the appropriate techniques for specimen collection and examination in the laboratory.
7. Utilizing the Kodachrome slides and prepared microscope slides, the student will identify protozoa, ova, and malarial parasites in peripheral blood smears.
8. Utilizing information obtained in MLT 101 on professionalism, the student will display appropriate dress, conduct, and attitude at all times.

Note: For further objectives, refer to learning objectives at the beginning of each chapter of the text.

COURSE REQUIREMENTS

1. Attend lab/review sessions consistently. The maximum number of allowable absences is **10%**.
2. Students will adhere to the student code of conduct as described in the **York Technical College Catalog and Handbook**. Students will conduct themselves with dignity and maintain high standards of responsible citizenship. Any student caught cheating or involved in any other academic dishonesty will be given a grade of zero and will be subject to further disciplinary action.

EVALUATION STRATEGIES/ GRADING

1. Perform all laboratory exercises until 100% accuracy is obtained.
2. Take and pass four (4) written tests.
3. Perform all laboratory exercises at a satisfactory level according to guidelines set by the instructor.

Laboratory exercises will be graded as S or U (Satisfactory or Unsatisfactory). If a U is received on any lab exercise, it must be repeated until an S is obtained. When all lab exercises have been satisfactorily completed, a score of 95 will be assigned for the final lab grade.

The grade for the course is determined by an average of the four test scores and the score for the lab exercises. An average of 70 or better must be attained in order to pass the course.

Grading Scale:

90 - 100 = A
80 - 89 = B
70 - 79 = C
60-69 = D
<60 = F

- **A grade of C or better** must be obtained in this class for progression in the MLT program.

ENTRY-LEVEL SKILLS

Students should have a basic knowledge of the metric system, scientific notation, centrifuges, the microscope, pipetting, and the guidelines for laboratory safety.

PREREQUISITES: None

CO-REQUISITES: None

Note: MLT classes must be taken in accordance with the curriculum display as outlined in the college catalog and MLT program handbook.

Disabilities Statement: Any student who feels s/he may need an accommodation based on the impact of a disability should contact the Special Resources Offices (SR) at 803-327-8007 in the 300 area of Student Services. The SRO coordinates reasonable accommodations for students with documented disabilities.