

Note:

Course content may be changed, term to term, without notice. The information below is provided as a guide for course selection and is not binding in any form, and should not be used to purchase course materials.

COURSE SYLLABUS

BIOM 630

PRINCIPLES OF PATHOLOGY

COURSE DESCRIPTION

This course reviews basic pathology principles including: Inflammation, Infection, Repair, Thrombosis, Hemostasis, Hyperplasia, Hypertrophy, Neoplasia, and Apoptosis. In addition, the pathophysiology of disease applied to various organ systems is covered in depth. Correlations with appropriate laboratory results and physical findings will elucidate the basis for signs and symptoms of various common diseases. Both diagnostic features of diseases and critical thinking skills will be stressed.

RATIONALE

Principles of Pathology is intended primarily for graduate students with an interest in Biomedical research and various careers in medicine such as PA, MD, DO, DPM, and DDS. The course is designed to review all human pathology found in the human body. The link between structure (anatomy) and function (physiology) will be examined. Sufficient examples will be given that reflect God's creative acts while studying His magnificent handiwork, the human body. Exploring the human body as a creation of the Almighty God brings glory to our Creator.

I. PREREQUISITE

For information regarding prerequisites for this course, please refer to the [Academic Course Catalog](#).

II. REQUIRED RESOURCE PURCHASE

Click on the following link to view the required resource(s) for the term in which you are registered: <http://bookstore.mbsdirect.net/liberty.htm>

III. ADDITIONAL MATERIALS FOR LEARNING

- A. Computer with basic audio/video output equipment
- B. Internet access (broadband recommended)
- C. Microsoft Office
- D. iSpring or similar software program for audio/visual use

IV. MEASURABLE LEARNING OUTCOMES

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

- A. Describe the mechanisms of inflammation and repair in the human body.
- B. Explain cell injury, cell death, and adaptation.

- C. Explain the tissue repair process.
- D. Describe pathological consequences of neoplasia, and identify bone, joints, and soft tissue tumors.
- E. List the various pathologies of the heart and blood vessels.
- F. Explain the human body as a creation of the Almighty God that brings glory to the Creator as well as how pathology is a result of a fallen world.

V. COURSE REQUIREMENTS AND ASSIGNMENTS

A. Textbook readings and lecture presentations

B. Course Requirements Checklist

After reading the Course Syllabus and [Student Expectations](#), the student will complete the related checklist found in Module/Week 1.

C. Discussion Board Forums (2)

Discussion boards are collaborative learning experiences. Therefore, the student is required to provide a thread in response to the provided prompt for each forum. Each thread must be at least 500 words and demonstrate course-related knowledge. In addition to the thread, the student is required to reply to 2 other classmates' threads. Each reply must be at least 300 words.

D. Pathology Study

1. Pathology Study Bibliography

The student will write a 1-page bibliography in current APA format that includes at least 6 references in addition to the Bible. At least 1 of the references must be from the textbook. At least 3 references must be from current material fewer than 5 years old. The other references may be older than 3 years in regard to the history of the pathology.

2. Pathology Study Rough Draft

The student will create a PowerPoint presentation of at least 15 slides that focuses on an assigned pathology of the body. The student must include a description of the historical background, symptoms, course, diagnostic tests, and historic treatment. The rough draft must include at least 3 of the 6 references used in the bibliography.

3. Pathology Study Presentation

Using the revised rough draft, the student will create an audio/video presentation on the assigned pathology of the body. The presentation must be 15–30 minutes and contain at least 6 references other than the course textbook and the Bible.

E. Exams (4)

Each exam will cover the Reading & Study material for the assigned modules/weeks. Each exam will be open-book/open-notes, contain 50–75 multiple-choice, true/false, and short answer questions, and have a 2-hour time limit.

VI. COURSE GRADING AND POLICIES

A. Points

| | |
|--|-------------|
| Course Requirements Checklist | 10 |
| Discussion Board Forums (2 at 50 pts ea) | 100 |
| Pathology Study Bibliography | 25 |
| Pathology Study Rough Draft | 75 |
| Pathology Study Presentation | 200 |
| Exams (4 at 150 pts ea) | 600 |
| Total | 1010 |

B. Scale

A = 930–1010 A- = 900–929 B+ = 870–899 B = 830–869 B- = 800–829
 C+ = 770–799 C = 730–769 C- = 700–729 D = 600–699 F = 0–599

C. Disability Assistance

Students with a documented disability may contact Liberty University Online’s Office of Disability Academic Support (ODAS) at LUOODAS@liberty.edu to make arrangements for academic accommodations. Further information can be found at www.liberty.edu/disabilitysupport.

COURSE SCHEDULE

BIOM 630

Textbooks: Kumar et al., *Robbins Basic Pathology* (2013).

| MODULE/ WEEK | READING & STUDY | ASSIGNMENTS | POINTS |
|-------------------------|--|--|---------------|
| 1 | Kumar et al.: ch. 1 1 presentation | Course Requirements Checklist Class Introductions DB Forum 1 | 10 0 50 |
| 2 | Kumar et al.: ch. 1 1 presentation | Exam 1 | 150 |
| 3 | Kumar et al.: ch. 2 1 presentation | Pathology Study Bibliography | 25 |
| 4 | Kumar et al.: ch. 2 2 presentations | Exam 2 | 150 |
| 5 | Kumar et al.: ch. 5 1 presentation | Pathology Study Rough Draft | 75 |
| 6 | Kumar et al.: ch. 20 1 presentation | Exam 3 | 150 |
| 7 | Kumar et al.: ch. 10 1 presentation | Pathology Study Presentation | 200 |
| 8 | Kumar et al.: ch. 9 1 presentation | DB Forum 2 Exam 4 | 50 150 |
| TOTAL | | | 1010 |

DB = Discussion Board

NOTE: Each course module/week begins on Monday morning at 12:00 a.m. (ET) and ends on Sunday night at 11:59 p.m. (ET). The final module/week ends at 11:59 p.m. (ET) on **Friday**.