Columbia University
New York Post-Graduate Medical School

Office Copy

Bacteriology
Pathology
and Serology

March 1932

Second Avenue, 20th and 21st Streets
New York City
The courses in Pathology and Bacteriology are, in general, arranged in units of one month, daily sessions of three hours each. Each unit course begins on the first day of the respective month and no students are received into a class after the first day, except by special permission. In each laboratory division a graded sequence of unit courses is presented. Thus in Bacteriology the student unfamiliar with the subject should begin with Unit Course 111 and continue with 112, 113 and 114 in order.

After the series of scheduled courses has been completed, full facilities are afforded to permit the student to continue along his chosen line of work either in the application of laboratory examinations to clinical medicine or in laboratory research.

The department welcomes at any time properly qualified persons who may desire to pursue researches, either independently or under guidance. Only those who are able to devote considerable time each day to a specific problem for a period of not less than three months will be considered in this category.
Courses in Bacteriology

111—Elementary Bacteriology. Professor MacNeal and Assistant Professor Sheplar. One month. Daily, 9 to 12. A course for physicians desiring to review the fundamentals of bacteriology. It includes a consideration of the mechanics and optics of the microscope; the principles and practice of microscopic visibility; preparation of culture media; principles and practice in recognition of microscopic species; microbial morphology and physiology; sterilization and antisepsis; the parasitic relation of microbes. Offered in March, July and November. Fee, $50.

112—Pathogenic Micro-organisms and Infectious Diseases. Professor MacNeal and Assistant Professor Sheplar. One month. Daily, 9 to 12. A continuation of Course 111, open to those who have taken Course 111 or its equivalent. It includes the study of representative disease-producing microbes and the changes associated with their presence in the body. Anthrax, tetanus, tuberculosis, leprosy, diphtheria, plague, typhoid, dysentery, cholera, pneumonia, influenza, gonorrhea, meningitis, infections of the pyogenic cocci and spirochaetal diseases are considered in turn. Offered in April, August and December. Fee, $50.

113—Serological Diagnosis. Assistant Professor Sheplar and Dr. Trouveller. One month. Daily, 9 to 12 or 1:30 to 4:30. An advanced course for students who have completed Courses 111 and 112 or have had equivalent training. Immunity, toxin and antitoxin, agglutinins, precipitins, cytolsins, complement fixation, the Wassermann reaction, Kahn precipitation test, Vernes flocculation tests, phagocytes, compatibility of blood for transfusion, colloidal gold test. Offered in January, May and September. Fee, $50.

114—Bacteriological Diagnostic Methods. Professor MacNeal and Assistant Professor Sheplar. One month. Daily, 9 to 12. An advanced course for students who have completed Courses 111 and 112 or have had equivalent training. Regional bacteriology in health and disease: eye, nose, pharynx, mouth and teeth; trachea and bronchi; feces, urine and genitourinary exudates; middle ear and mastoid; cutaneous lesions; abscesses, purulent collections; blood and spinal fluid. The special bacteriological methods applicable in each instance, including preparation of bacterial vaccines. Offered in February, June and October. Fee, $50.

115—Vernes Flocculation Test for Syphilis. Assistant Professor Sheplar and Miss Baylis. One month. Daily, 9 to 12. October to June. Demonstration of equipment and practical laboratory exercises in serological diagnosis of syphilis and tuberculosis by the Vernes technic. This course is open only to those who have completed Course 113 or have had equivalent training in serology. Fee, $50.
116—Preparation of Extracts for Allergic Tests.
Assistant Professor Sheplar and Miss Hopkins. One month. Daily except Saturday, 9:30 to 12:30. Preparation of fluid extracts for diagnosis of hay fever, asthma and allied conditions by the intracutaneous method and for the treatment of these conditions. Determination of nitrogen content of the extracts. Assigned reading, demonstrations and practical laboratory exercises. This laboratory course is given in conjunction with the clinical course on hypersensitive conditions offered in the afternoon by Assistant Professor Will Cook Spain. It may be taken separately, by special permission. Offered to a class of three or more. Fee, $50.

117—Bacteriophage Races and Their Use.
Professor MacNeal, Assistant Professor Sheplar and Associates. One month. Daily, hours to be arranged. Conferences, assigned reading and practical laboratory study of the bacteriophage phenomenon, bacterial dissociation and filterable viruses; technic of culture, filtration, enhancement of lytic power of bacteriophage and its practical application in treatment of dysenteries; cholera; staphylococcus infections in abscesses and wounds; colon bacillus infections of the urinary tract. This course is open only to qualified bacteriologists. Fee, $50.

Courses in Pathology

121—Haematology and Clinical Microscopy.

122—Histologic Technic.

123—Gross and Microscopic Pathology.
Professor MacNeal and Dr. Grewal. One month. Daily, 1:30 to 5. A review of the normal histology of various organs and tissues. Degenerative changes in cells and tissues. Inflammation and re-
pair, infectious granulomata and hyperplasia. Neoplasms, types and diagnosis. Regional pathology. Opportunity is offered the student to observe the gross and microscopic examination of a large number of surgical specimens sent to the laboratory and to attend and to assist in autopsies, and to make a histological study of the tissues thus obtained. This course is offered in April, August and December. Fee, $50.

Laboratory Courses Related to Special Fields of Medicine and Surgery

131—Bacteriology of the Genito-Urinary Tract. Professor MacNeal and Assistant Professor Sheplar. Two months. Monday, Wednesday and Friday, 11 to 12:30. Lectures and practical laboratory exercises. Collection of urine for bacteriological examination; microscopic examination for colon bacilli, tubercle bacilli, and other bacteria; culture of B. coli and preparation of autogenous vaccine; preparation of bacteriophage and the laboratory control of its use in pyelitis; recognition of the gonococcus, of bacillus of Duscey and of spirochetes; serological diagnosis of syphilis by complement fixation, flocculation and precipitation tests; human blood groups; tests of compatibility for transfusion; examination of seminal fluid for sterility and for chronic infections; laboratory evidence of eradication of genito-urinary infections; non-specific protein therapy. Begins in March and September. Fee, $50. Offered only to a class of three or more.

132—Pathology of Genito-Urinary Diseases. Professor MacNeal and Dr. Grewal. Two months. Monday, Wednesday and Friday, 11 to 12:30. Demonstration of the gross and microscopic structure of the normal genito-urinary organs of the male and of the inflammatory and neoplastic lesions of kidney, ureter, bladder, testis, seminal vesicles, prostate and penis. Fee, $50.

133—Embryology, Histology, Pathology and Bacteriology of the Eye. Assistant Professor Meeker. Four months. Tuesday, Thursday and Saturday, 8:30 to 10. Course includes didactic lectures, illustrated by gross material, lantern slides and projection of microscopic preparations, and practical laboratory work by the student himself. The course is designed for specialists attending the Seminar in Ophthalmology, but may be taken separately. It begins October 1st and February 1st. Fee, $100.

134—Embryology, Histology, Pathology and Bacteriology of the Ear, Nose and Throat. Professor MacNeal and Assistant Professor Meeker. Four months. Daily, except Saturday, 10 to 12. Course includes didactic lectures illustrated by projection of microscopic preparation and practical laboratory work by the student. It is designed for specialists attending the
Seminar in Oto-Laryngology, but may be taken separately. Course begins February 1st, June 1st and October 1st. Fee, $150. Offered only to a class of five or more.

135—Embryology, Histology and Pathology of the Bones, Joints and Skeletal Muscles. Professor MacNeal and Dr. Grewal. Two months. Tuesday and Wednesday, 2 to 3. The course includes didactic lectures, illustrated by gross specimens, lantern slides and projection of microscopic preparations, together with laboratory work by the student himself. Current surgical specimens are demonstrated and correlated with the clinical findings. The course is designed for specialists attending the Seminar in Orthopedic and Traumatic Surgery, but may be taken separately by special arrangement. Fee, $50.

136—Gynecological Pathology and Bacteriology. Professor MacNeal, Dr. Moench and Dr. Du Bois. This laboratory course is designed for specialists attending the first month of the Seminar in Gynecology. Other students may be admitted by special permission. Offered to a class of five or more. Hours to be arranged.

Explanations Concerning Courses

The courses in Pathology and Bacteriology are open to graduates in Medicine, to individuals who hold the Bachelor’s Degree in Arts or Sciences and to Graduate nurses. Other specially qualified students may be admitted by special permission of the Dean.

The student must satisfy the Instructor in each instance that he is qualified to undertake the work of a particular course.

The Laboratory courses begin on the first day of the month and are given as a rule from 9 to 12 A.M., though occasionally courses are given in the afternoon and sometimes at other hours.

The fee for the first month’s instruction in one course is $50, and for each succeeding course taken without interruption, $45.

A course in Pathology and Bacteriology extending over six consecutive months entails a fee of $250, and for one year, $500.

Autopsies by the Pathologist are open to all Matriculates.

The Weekly Clinical-Pathological Conference is open to all Matriculates.

Further information may be obtained by consulting the Director of the Department.

March 1, 1932.