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# University of the State of New York Bulletin

Entered as second-class matter August 2, 1913, at the Post Office at Albany, N. Y., under the act of August 24, 1912. Acceptance for mailing at special rate of postage provided for in section 1103, act of October 3, 1917, authorized July 19, 1918

Published fortnightly

No. 832

ALBANY, N. Y.

July 15, 1925

N.Y. (State) University

## COURSE OF STUDY AND SYLLABUS FOR THE GUIDANCE OF NURSE TRAINING SCHOOLS

IN THE PREPARATION OF STUDENTS FOR THE EXAMINA-  
TIONS OF THE STATE BOARD

REVISION OF UNIVERSITY OF THE STATE OF NEW YORK BULLETIN 749

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ALBANY

THE UNIVERSITY OF THE STATE OF NEW YORK

1925

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| 1936 | ADELBERT MOOT LL.D., <i>Vice Chancellor</i>          | - -       | Buffalo    |
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## COURSE OF STUDY AND SYLLABUS FOR THE GUIDANCE OF NURSE TRAINING SCHOOLS

IN THE PREPARATION OF STUDENTS FOR THE EXAMINATIONS OF  
THE STATE BOARD

### Board of Nurse Examiners

With years when terms expire

- 1926 GRACE CAMERON R.N. (Materia medica) Fort Covington  
1928 MARY G. MCPHERSON R.N. (Dietetics, hygiene and sanitation,  
and bacteriology) Ellis Hospital, Schenectady  
1929 MRS GENEVIEVE Y. CLARK (Medical nursing and nursing of  
mental and nervous diseases) 323 Second av., Albany  
1930 SISTER IMMACULATA R.N. (Pediatric nursing) Convent of  
Mercy, Rensselaer  
1930 BEATRICE BAMBER R.N. (Anatomy and physiology, Genito-  
urinary nursing and surgical nursing) Valhalla  
1930 LYDIA ANDERSON R.N., President, (Obstetrical nursing) 167  
Prospect pl., Brooklyn  
*Secretary*, ALICE SHEPARD GILMAN R.N., Education Bldg.,  
Albany

### Nurse Advisory Council

- 1926 MRS AMY HILLIARD COLVIN R. N., 39 First st., Troy  
1926 REV. FATHER METZGER, 138 Montrose av., Brooklyn  
1926 LUZERNE COVILLE M.D., 101 Dryden rd., Ithaca.  
1927 ARTHUR W. BOOTH M.D., 222 W. Church st., Elmira  
1927 HELEN YOUNG R.N., Presbyterian Hospital, New York City  
1927 WALTER G. RYON M.D., Hudson River State Hospital, Pough-  
keepsie  
1928 ALBERT T. LYTLE M.D., 200 Lexington av., Buffalo  
1928 ROBERT WILSON M.D., 111 E. 10th st., New York City

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*Public health law, Laws of 1909, ch. 49, being ch. 45 of the Consolidated Laws, as amended by Laws of 1920, ch. 742, in effect May 12, 1920. As amended to the close of Legislation, 1922.*

§ 250 **Who may practise as registered nurses.** Any person being over the age of 20 years and of good moral character, holding a diploma from a training school for nurses connected with a hospital or sanitarium giving a course of at least two years, and registered by the Regents of The University of the State of New York as maintaining in this and other respects proper standards, all of which shall be determined by the said Regents, and who shall have received from the said Regents a certificate of his or her qualifications to practise as a trained, certified, graduate or registered nurse, shall be styled and known and entitled to practise as a registered nurse, and no other person shall assume such title, or use the abbreviation R.N. or any other words, letters or figures to indicate that the person using the same is a trained, certified, graduate or registered nurse. Before beginning to practise nursing every such registered nurse shall cause such certificate to be recorded in the county clerk's office of the county of his or her residence with an affidavit of his or her identity as the person to whom the same was so issued and of his or her place of residence within such county. In every year, during the month of January, every registered nurse shall again cause his or her certificate to be recorded in the office of the Regents of The University of the State of New York, with an affidavit of his or her identity as the person to whom the same was issued, and of his or her place of residence at the time of such reregistration. The registrant shall pay to the Regents a fee of one dollar for each such reregistration. Nothing contained in this article shall be considered as conferring any authority to practise medicine or to undertake the treatment or cure of disease in violation of article 8 of this chapter.

§ 250-a **Who may practise as trained attendants.** Any person being over the age of 19 years and of good moral character, holding a certificate from a school for training attendants connected with any institution giving a course of at least nine months including six months' practical experience, and registered by the Regents of The University of the State of New York as maintaining in this and other respects proper standards, all of which shall be determined by the said Regents, and who, after a practical examination, shall have received from said Regents a certificate of his or her qualifications to care for the sick as a trained attendant, shall be styled and known

as a trained attendant, and no other person shall assume such title, or use the abbreviation T. A. or any other words, letters or figures to indicate that the person using the same is a trained attendant. Before beginning to practise, every such trained attendant shall cause such certificate to be recorded in the county clerk's office of the county of his or her residence, with an affidavit of his or her identity as the person to whom the same was so issued and of his or her place of residence. In every year during the month of January every trained attendant shall again cause his or her certificate to be recorded in the office of the Regents of The University of the State of New York, with an affidavit of his or her identity as the person to whom the same was issued and of his or her place of residence at the time of such reregistration. The registrants shall pay to the Regents a fee of fifty cents for each such reregistration. Nothing contained in this section shall be considered as conferring any authority to practise nursing as a registered nurse, or to practise medicine or to undertake the treatment or cure of disease in violation of article 8 of this chapter.

§ 251 **Board of examiners; rules; fees.** The board of examiners of nurses appointed pursuant to Laws of 1903, chapter 293 is continued and hereby increased by the addition of two members. The New York State Nurses Association at each annual meeting shall nominate for examiners two of their members, each of whom shall be a registered nurse and have had not less than five years' experience in their profession. Upon the expiration of the term of office of any examiner now in office the Regents of The University of the State of New York may from the candidates so nominated or from the registered nurses in the State fill the vacancy for a term of five years and until his or her successor is chosen. An unexpired term of an examiner caused by death, resignation or otherwise, shall be filled by the Regents in the same manner as an original appointment is made. Any examiner may be removed by the Regents for misconduct, incapacity or neglect of duty. The Regents may appoint and at pleasure remove a registered nurse as secretary to the said board of examiners who shall not be a member of such board, and such registered nurse inspectors as are necessary for the purposes of this article to be paid from the funds received by the Regents under the provisions of this article at such salaries as they may determine. The said Regents shall make rules for the examination and licensing of registered nurses and trained attendants applying for certification under this article, and shall charge for examination and for certification and license a fee of \$10 for nurses and \$5 for trained attendants

to meet the actual expenses and shall report annually their receipts and expenditures under the provisions of this article, to the State Comptroller, and pay the balance of receipts over expenditures to the State Treasurer. The said Regents may revoke any such certificate for sufficient cause after written notice to the holder thereof and hearing thereon.

No person shall thereafter practise as a trained, certified, graduate or registered nurse or a trained attendant under any such revoked certificate.

§ 251-a **Examinations; licenses; registration.** 1 The Regents shall admit to examination for registration, and shall license to practise nursing as a registered nurse, any candidate who shall pay the fee of \$10 and submit satisfactory evidence, verified by oath if required, that he or she:

*a* Is more than 20 years of age and of good moral character;

*b* Has a preliminary education of not less than one year of high school or its equivalent; such educational requirement not to be increased before the year 1930;

*c* Holds a diploma showing graduation from a course of at least two years given by a training school for nurses connected with a hospital or sanitarium approved and registered by the Regents of The University of the State of New York.

2 The Regents shall license to practise nursing all registered nurses practising as such within the State of New York on or before the 1st day of June, 1920, who make application therefor prior to the 1st day of January, 1923, and who submit herewith satisfactory evidence that he or she is at the time of the application therefor registered and legally authorized, under section 250 of this article to assume the title of registered nurse.

3 The Regents shall admit to examination for registration and shall license to care for the sick as a trained attendant, any candidate who shall pay the fee of \$5 and submit satisfactory evidence, verified by oath if required, that he or she:

*a* Is more than 19 years of age and of good moral character;

*b* Has a preliminary education of at least the completion of the eighth grade in a grammar school or its equivalent;

*c* Holds a certificate showing graduation from a course of at least nine months' training given by a school, association, hospital or sanitarium approved and registered by the Regents of the University of the State of New York;

*d* Passes the examination for trained attendants.

4 A candidate may be licensed by the Regents as a trained attendant, provided application is made before the 1st day of January, 1921, who

a Pays a fee of \$5;

b Submits satisfactory evidence that he or she is more than 19 years of age and of good moral character;

c Submits satisfactory evidence that he or she has had two years' experience in the care of the sick;

d Whose qualifications to practise as a trained attendant are certified to by three licensed physicians who have personal knowledge of the applicant's qualifications;

e Passes the examination for trained attendants.

5 On receiving from the board of examiners an official report that an applicant has successfully passed the examination, and is recommended for license, the Regents shall issue to him or her a license to practise according to the qualifications of the applicant as hereinbefore provided.

Every license shall be issued by the Regents under seal and shall be signed by the Commissioner of Education of the State of New York and by the secretary to the board of examiners.

Before any license is issued it shall be numbered and properly recorded and its number shall be noted in the license. The Regents may revoke any license for sufficient cause after written notice to the holder thereof and hearing thereon.

Applicants examined and registered by examining boards of other states registered by the Regents as maintaining standards not lower than those provided by this article may without further examination on payment of \$10 to the Regents and on submitting such evidence as the Board of Regents may require receive from them an indorsement of their certificates or licenses conferring all rights and privileges of a Regents certificate and license after examination.

6 Every licensee to practise as a registered nurse or a trained attendant shall before the licensee begins to practise thereunder, register in the office of the clerk of the county where such practice is to be carried on, in a book kept by the clerk for such purpose, his or her name, residence, place and date of birth, date and number of his or her license and date of such registration, which registration he or she shall be entitled to make only upon exhibiting to the county clerk his or her license, or a duly authenticated copy thereof, and, making affidavit stating the above facts and also that he or she is the identical person named in the license and had before receiving the

same complied with all the requirements of this article and the rules of the Regents preliminary to the conferment of such license; and that no money other than the fees prescribed by this article was paid directly or indirectly for such license; and that no fraud, misrepresentation or mistake in a material regard was employed or occurred in order that such license should be conferred. The county clerk shall preserve such affidavit in a bound volume and shall issue to every licentiate duly registered and making such affidavit a certificate of registration in his county, which shall include a transcript of the registration. Such transcript and the license may be offered as presumptive evidence in all courts of the facts stated therein. The county clerk's total fee for such registration, affidavit and certificate shall be \$1.

7 A county clerk having properly issued a certificate of registration to a licensed registered nurse or trained attendant, shall forward a duly attested copy of the same and a copy of the affidavit and evidence upon which said certificate was issued, to the secretary of the board of examiners within 30 days of such initial registration. On or before the 1st day of May of each year the secretary of the board shall mail to every registered nurse and trained attendant registered in the State of New York a blank application for reregistration, addressing the same in accordance with the post-office address given at the last previous registration. Upon receipt of such application blank which shall contain space for the insertion of his or her name, office and post-office address, date and number of his or her license, and such other information as the Regents deem necessary, he or she shall sign and swear to the accuracy of the same before a notary public, after which he or she shall forward such sworn statement and application for renewal of his or her registration certificate to the secretary of the board, together with the fee of \$1 for registered nurses and fifty cents for trained attendants. Upon receipt of such application and fee and having verified the accuracy of the same by comparison with the applicant's initial registration statements the secretary of the board shall issue a certificate of registration which shall render the holder thereof a legally qualified registered nurse or trained attendant as the case may be for the ensuing year. These certificates of registration shall all bear date of September 1st of the year of issue and shall expire on the 31st day of August in the year following. On the 1st day of January of each year or within 10 days thereafter, the secretary of the board shall publish and mail to every registered nurse and trained attendant in

the State of New York, a printed list of the legally registered nurses and trained attendants within the State. Should any registered nurse or trained attendant continue to practise nursing and care of the sick beyond the 1st day of January despite the fact that his or her name does not appear in the register, he or she shall be counted as an illegal practitioner and his or her license may be suspended or revoked by the Regents in accordance with the provisions therefor of this article. All nurses already registered in this State at the time of the passage of this act shall make application to the secretary of the board for the reregistration blank, upon receipt of which he or she shall in like manner already described make application for reregistration, forwarding to the secretary of the board the reregistration blank properly filled in and accompanied by the fee of \$1. Said application and fee must reach the secretary on or before the 1st day of December following the adoption of this statute; failing which the delinquent shall be dealt with as outlined in section 253 and in this section in relation to the suspension or revocation of said license.

**§ 252 Waiver of examination for nurses.** The Regents of The University of the State of New York may upon the recommendation of said board of examiners, or upon evidence satisfactory to said Regents, waive the examination of any persons possessing the qualifications mentioned in section 250, who shall have been graduated before, or who were in training on the 24th day of April, 1920, and shall thereafter be graduated, and of such persons now engaged in the practice of nursing and who have had three years' experience in the practice of nursing, two of which have been spent in practice in a hospital prior to 1920, or an equivalent for such hospital experience, such equivalent to be determined by the State Department of Education and the State Commissioner of Health, who make application in writing for such certificate prior to January 1, 1923.

**§ 252-a Waiver of examination for attendants.** The Regents of the University of the State of New York may upon evidence satisfactory to said Regents waive the examination of any persons possessing the qualifications mentioned in section 250-a of this article who shall have been graduated before or who were in training on the 24th day of April, 1920, and shall thereafter be graduated, and of such persons now engaged in caring for the sick and who have had at least two years' experience in caring for the sick prior to 1920 and of such persons having less than two years' experience prior to 1920 who shall submit to a practical examination given by

the board of examiners to demonstrate his or her fitness to care for the sick as a trained attendant, and who make application in writing for certificate to practise as a trained attendant prior to September 1, 1922. Every such application shall be accompanied by a written certification by three licensed physicians and one registered nurse acquainted with the applicant, of the facts in respect to applicant's experience and qualifications to practise as a trained attendant.

§ 252-b **Saving clause:** Nothing contained herein shall prevent any person from engaging in nursing, provided, however, that he or she shall not assume the title of trained, certified, graduate or registered nurse or trained attendant, without complying with the provisions of this article.

§ 252-c **Nurses in state institutions.** The Regents of The University of the State of New York shall license as trained nurses graduates of training schools for nursing in state institutions, or institutions under the visitation of the state hospital commission registered with the Regents and maintaining a three years' course for such training under such rules as the Regents have prescribed.

§ 252-d **Schools for trained attendants.** Any general hospital maintaining a nurse training school registered by the Regents of The University of the State of New York also may, with the approval of the Regents, conduct a school maintaining proper standards for the training of trained attendants, and on application and satisfactory evidence that such proper standards are being maintained, may receive a certificate of registration of such training school for trained attendants.

§ 253 **Violations of this article.** A person who violates any provisions of this article shall forfeit to the State \$25 for a first offense, and \$50 for each subsequent offense. All fines imposed or forfeiture incurred hereunder may be sued for and collected by the Attorney General and the amounts thereof recovered, or received in any way by anyone, shall be paid by the Regents of the University for use and disposition as provided for in section 251 of this article for the fees received from examinations.

§ 254 **Advisory council.** An advisory council shall be appointed by the Regents of The University of the State of New York. Such advisory council shall consist of three nurses, three physicians and three representatives of incorporated hospitals, and members of each of these three groups shall be appointed for terms of one, two and three years, respectively. Nominations to membership upon this council in twice the number of the vacancies to be filled shall annu-

ally be made to the Regents of The University of the State of New York by the New York State Nurses Association and the New York State League of Nursing Education, in agreement between these associations upon the nominees; by the Medical Society of the State of New York, and by the Hospital Conference of New York City or the State Hospital Association, or both. It shall be the duty of the advisory council to organize by the election of a president, vice president and secretary, and to advise the Regents as to courses to be pursued and standards to be maintained in training schools for nurses and for trained attendants, and also as to the rules for the examination of nurses and trained attendants applying for certification, and from time to time to make such recommendations to the Regents as it shall deem proper for the right enforcement of this article. The said council shall meet upon the call of the President of the University or at the request of any five members.

## INTRODUCTION

In this revision of the Syllabus for the Guidance of Nurse Training Schools there is no increase in the total number of hours of instruction but the outlines of the various subjects have been made more comprehensive in order that this material might be of greater value to directors and instructors in schools of nursing.

The State Department of Education is greatly indebted to the physicians and nurse educators who have given such valuable assistance in revising the outlines.

This work has been done with the approval of the Nurse Advisory Council.

Included under "Special Rules Relating to the Registration of Nurses" is the substance of the Regents Rules for the conduct of nurse schools, together with suggestions for carrying out these provisions, and the approved course of study which represents the minimum required of all schools in the preparation of their students for the licensing examinations.

Attention has been given to various questions of importance in the conduct of a nurse school. Emphasis has been placed on what is considered an adequate experience in the various services. The need of bedside teaching and of careful supervision of the practical work of the student is especially stressed.

As we carefully review the existing conditions we are forced to admit that only a small proportion of the total number of schools connected with the various hospitals throughout the State are wholly deserving of the name "school." This is a serious matter and may very properly account in some measure for the lack of increase in the numbers entering the schools for nurses during the past few years in proportion to the increase of young women entering the colleges during the same years.

It is a well-known fact that a student group properly taught and supervised provides the most satisfactory nursing service which a hospital can have.

The hospital wards are indispensable as a training field for nurses. All hospitals, however, do not offer suitable facilities for complete, or in fact even partial, training.

The hospital for chronic disease, the hospital for convalescents, certain special hospitals, the very small general hospital unable to

offer experience suitable or adequate for the training of nurses, may be valuable fields for the preparation of the trained attendant; while certain special hospitals, such as obstetrical, communicable disease, mental and surgical, may offer valuable experience in their specialty, and may be approved for their particular experience rather than registered for the complete training. Generally speaking, the hospital which is unable to offer at least three of the required services should be approved for affiliation in these services and should not attempt to conduct a registered school.

In the registration of schools of nursing the State Department of Education assumes an obligation to the young women of the country who are desirous of preparing themselves for a profession which is of growing importance in its relation to all health and social problems, and an obligation to the public when it licenses them as registered nurses.

The fact that a school is registered should be an assurance to any young woman that the proper basic preparation for nursing under approved conditions will be obtained at that school.

This Department recognizes the need of the hospital to provide an adequate nursing service for its patients but the time has passed when a hospital can expect to have its entire nursing, and part of its maid service as well, performed by student nurses. The time has also passed when the hospital for economic or other reasons may retain students in certain departments long past the time when service there ceases to be of educational value to the student, and thus deprive her of needed experience in other departments.

**The training school committee.** Although the school of nursing is in almost all instances an integral part of the hospital, it is in reality an educational organization situated within the walls of and controlled by an institution whose primary function is the care of the sick. The administration of a school under such conditions presents peculiar difficulties, in as much as the students of the school perform a large share of the work of caring for the sick, and the exigencies of hospital work tend to overshadow and push aside the educational needs of the students.

In order, therefore, that this educational function which the hospital assumes in the conduct of a nurse school may be safeguarded and may prosper, the school's interests must be guarded and promoted by a special group of persons known as the training school committee. This committee should study the needs of a school as an educational institution, provide means for meeting its financial needs,

cooperate with the director of the school in formulating and carrying out its policies, and interest itself in all other questions which relate to the right conduct of a school of nursing such as housing conditions, qualifications of staff, equipment of classrooms, facilities for study, provisions for recreation, etc.

There should be represented on this committee the board of trustees of the hospital, the medical board and the woman's board. There should be at least one member on this committee whose prime interest is education. In a small town this person may be the superintendent of schools, or possibly the principal of the local high school. In larger cities there is a broader choice among educators. The alumnae of the school should be represented by an able graduate. The superintendent of the hospital and the principal of the training school should, if not members of the committee, be present at all meetings. The principal of the school may act as secretary to the committee.

**Preliminary course.** The four-month preliminary course is required. To meet this requirement we urge training school committees to consider the possibility of union of instruction with other nurse schools. The advantages of the plan are many, the most important being:

1 It actually makes the preliminary course for certain schools possible. Instruction for small groups of three or four students can not be well given, while if four or five such groups unite and a class of sixteen or twenty is formed, good instruction is possible.

2 One instructor can serve a number of schools. This is more economical from a financial standpoint. It is desirable also because of the comparatively few nurses available who are well prepared for teaching.

3 A qualified nurse instructor can be obtained. This instructor might not be available for one small school.

4 It is possible to provide adequate teaching facilities and equipment and to avoid the duplication of this equipment in individual schools.

Schools of nursing in Westchester county and Utica have already adopted this plan. Such courses established either through the union of training schools, or in connection with technical schools and colleges, should be promoted and developed throughout the State.

**Time of admission to classes.** To carry out the preliminary course properly, students must be admitted to the school in groups. One of the defects found in many schools has been the practice of

admitting students at almost any date and without regard to the entrance of other students. It is a practice not followed by any other type of school. It is not only uneconomical, requiring as it does constant repetition of instruction, but it is demoralizing and harmful.

Students must be admitted in groups for the preliminary course. If such admission is possible twice a year, it should be in the fall and in the spring. A third class may be admitted, but the difficulty of repeating the preliminary classes 3 times a year makes it inadvisable. It necessitates carrying on a program of heavy class work during the summer, and from many standpoints proves a poor policy.

Students should not be considered a part of the regular nursing staff of the hospital during the four-month preliminary course. They may be assigned to the medical and surgical wards for supervised practice of the procedures which they have been taught in the classroom. The number of hours of ward practice during this period should not exceed 4 or 5 hours a day.

**Hours of duty and vacations.** These matters are touched upon in the syllabus. It is therefore enough to point out here that government departments, offices, many trades and industries acknowledge that the worker who gives over 8 hours of labor a day is not so efficient as one who is on duty a shorter period. The young women in our nurse schools are more than workers; they are students preparing for work later as graduate nurses and the hours of duty, including class and practical work, must compare favorably with the hours required in preparing for other professional work.

Many graduate nurses looking back on training school days see long days and nights of hard work with no opportunity for normal interest or activities. They remember tired minds and bodies which made proper study impossible; they remember classes held after 10 hours of hard physical work in the wards with the many responsibilities and constant demands on their sympathies. These graduates are not encouraging younger sisters or friends to enter nursing schools.

Hours of practical work and class work should not exceed 8, day or night for 6 days in the week. There should be a month's vacation each year.

**Need of women of higher education in the nursing profession.** While in accordance with the law registered schools may admit as students those who have not advanced in general education beyond

the completion of one year of high school or its equivalent, there is great need in the nursing profession for large numbers of educated women. Young women should be encouraged to complete high school before entering upon this specialized education.

Schools must offer sufficient inducement through the bettering of opportunities to attract women of higher education and attainments. Such women are urgently needed for all types of public health nursing and to act as directors, instructors and supervisors in our schools of nursing. Unless such women enter the schools, we must look in vain for graduate nurses qualified for these positions, and the effect upon the future may be readily visualized.

In a recent report made by a committee for the study of nursing education, of which Dr C. E. A. Winslow, professor of public health, Yale University, was chairman, the statement is made "that the career open to young women of high capacity in public health nursing or in hospital supervision and nursing education, is one of the most attractive fields now open, in its promise of professional success and of rewarding public service, and that every effort should be made to attract such women into this field."

**Use of ward helpers.** The constant repetition of a great deal of routine work, such as dusting and cleaning, folding and putting away linen, making surgical supplies, cleaning instruments, etc. is in no sense educative and should not be required of the student nurse. It is suggested that ward helpers be employed for many of the routine duties which have usually been assigned to student nurses. This will conserve the time of the student for the purely nursing duties and thus insure better care of the patients.

For an interesting study of this question, see the Cleveland Survey, Nursing Section, part 9, published by Cleveland Hospital Council, Cleveland, Ohio.

**Correlation of theory and practice.** It is essential that the theory given shall serve to interpret the practical work and that both shall be closely correlated. In planning the entire schedule this principle should be borne in mind. For instance, (1) the student who is preparing milk formulas for infant feeding should at the same time be given the opportunity to observe and to care to some extent for the children for whom the formulas are used; (2) class work in obstetrics should be given to groups of students at the time they are actually having their obstetrical experience. As far as possible this scheme should be carried out in connection with each service.

It has been found most helpful to plan the theoretical instruction as outlined giving the fundamental courses in the early part of the training. This means that the total number of hours of class work required each week is highest when the service of the pupil is least valuable from the standpoint of the hospital and grows progressively less as the pupil advances in training. For this reason the preliminary course of not less than 4 months is required. During this time the requirement should be 2 hours or more of theory daily, and from 4 to 6 hours daily for demonstration and instruction in hospital economics and nursing technic. When students are assigned to duty in the hospital, such assignment should be to medical and surgical wards, and the experience given should cover only the procedures which have been demonstrated in the classrooms, and should be given under close supervision.

**Ratio of nurses to patients.** The ratio of nurses to ward patients should be not less than one nurse to six patients on day duty, and one nurse at least to twenty patients on night duty. The ratio for private patients should be one nurse to three patients on day duty, and one nurse to ten patients on night duty. This ratio will be modified according to the type of cases cared for and will also be affected by plan of the building.

## **SPECIAL RULES RELATING TO REGISTRATION OF NURSE SCHOOLS**

**Incorporation.** The training school for nurses or the institution of which it is a department must be incorporated. The school will be inspected by a representative of the Department of Education upon formal application.

For registration a school of nursing must be connected with a hospital (or sanatorium) having not less than fifty beds and a daily average of thirty patients. Each bed must meet the requirements of the State Board of Charities as to air space.

**Schools situated outside New York State.** The Board of Regents registers schools of nursing situated in any part of the United States or Canada providing such schools meet the minimum requirements. Formal application for registration must be made on blanks which will be furnished upon request. All schools are inspected by a representative of this Department.

**Reciprocity agreement.** Any applicant of good character who is a graduate of a school of nursing registered by the Regents of The University of the State of New York as meeting the minimum requirements outlined in section 250-a of article 12, Public Health Laws of 1909, who shall pay a fee of \$10 and submit to the Board of Nurse Examiners written evidence that he or she has successfully passed the examination for registered nurse in the state in which she was graduated, may receive from The University of the State of New York an indorsement of this certificate or license without further examination.

**Registration of hospitals of less than fifty beds.** Under the following special regulation schools of nursing in New York State connected with a hospital of under fifty beds to a minimum of twenty-five beds with a daily average of twenty patients may be registered:

Such schools shall provide the complete four-month preliminary course, following which they shall give not less than 2 years and 6 months of instruction in the theory and practice of nursing, 1 year of which shall be spent in approved affiliations.

These affiliations shall come after a minimum of 12 months of service in the home hospital and the student shall spend a minimum of 4 months in the home hospital directly prior to graduation.

It is suggested that an arrangement for the preliminary course might be made with some technical institute or college. It may be quite possible for the students from several nurse training schools,

conveniently situated for the purpose, to come together at one point to receive their preliminary instruction under a well-qualified teacher.

This arrangement is planned to the end that applicants may find the small hospital a satisfactory field for training, and that the small hospital may have the benefit of the service of the students a sufficient length of time to make it possible to offer such training.

**Admission to nurse training schools in state hospitals and other institutions under the visitation of the State Hospital Commission, which course leads to a license as trained nurse.** For admission to nurse training schools in such institutions, the applicant must have passed an entrance examination prescribed by the committee on nursing of the quarterly conference of the State Hospital Commission, provided that such examination be approved by the State Board of Regents.

**Hospital facilities.** It is also required that wards and service rooms be properly located and equipped for the nursing care of patients. These rooms should be large enough to provide adequate working space and facilities for uniform placement of equipment. Lists of such equipment will be furnished to those desiring them.

**Clinical facilities.** Before graduation all student nurses must have had adequate experience in the following departments of nursing: medical, surgical (male and female), obstetrical, pediatric and nutrition. Schools of nursing connected with hospitals not providing adequate opportunities for experience in all the above departments must become affiliated with institutions approved as giving such experience.

**Experience which will be considered adequate in the various required services.** From every standpoint it is important that patients be classified and grouped according to their diagnosis. This means the segregation of medical, surgical, pediatric and obstetrical patients.

**Medical service.** If service is segregated, four cases a day to each student on duty in this department will be considered adequate. If the service is not segregated, case records must be kept by the student and must show this same experience.

**Surgical service.** If service is segregated, five cases (including gynecology) a day to each student in the department will be considered adequate. If not segregated, case records must be kept by the students and must show this same experience.

**Infants and children.** For adequate experience in the care of infants and children 3 months' service in a children's ward where the daily average of babies and children under 12 years, is ten, provided

at least five of these are medical cases, will be accepted. (The course should include 2 weeks' experience in the preparation of milk formulas.)

A combined adult and children's service will not be accepted.

**Obstetrical service.** The obstetrical service must be segregated. Experience shall include the observation of at least twelve cases during labor and delivery, each student actively assisting at not less than ten cases.

If a distinct delivery room experience is given, 10 days will be considered the minimum. This service must include 4 weeks of post-partum care of mothers, and a minimum of 2 weeks in a nursery with an average of eight babies. Attendance at prenatal clinics should be provided if possible. This experience must be adequately supervised.

When properly conducted, home service is valuable in supplementing the required obstetrical experience.

**Operating room service.** An average of six major cases weekly will be accepted for operating room experience in a 50-bed hospital. Assistance at twenty-five operations will be considered adequate for the individual student.

**Diet kitchen service.** The required experience of 1 month must include the actual preparation of proper diets for special cases, such as diabetic, nephritic etc., as well as experience in the selection and computation of diets. Tray service and general cookery can not be accepted. In every case students must be given opportunity to observe cases and study charts of patients for whom they are preparing diets.

**Dispensary and emergency service.** An active dispensary is valuable in extending the experience in any given service. The attendance of the students should not therefore be limited to the surgical clinics, but should be extended to the medical, venereal, pediatric and obstetrical clinics. They should be assigned to these various services as far as possible during the period in which they are obtaining their experience in these respective wards.

**Services recommended.** Experience in the following branches of nursing is strongly advised:

Nursing in mental and nervous diseases

Nursing in communicable diseases including tuberculosis and venereal diseases

Public health nursing

**Schools for male nurses.** Schools for male nurses shall provide instruction and experience in genito-urinary instead of gynecological and obstetrical nursing, and nursing in mental and nervous diseases instead of pediatrics.

#### Division of service for two-year course

|                             | MONTHS |                             | MONTHS |
|-----------------------------|--------|-----------------------------|--------|
| Preliminary .....           | 4      | Operating room .....        | 2      |
| Medical .....               | 5      | or                          |        |
| Surgical .....              | 4      | Operating room .....        | 1      |
| Infants and children.....   | 3      | and                         |        |
| (to include infant feeding) |        | Dispensary .....            | 1      |
| Diet kitchen .....          | 1      | (to be divided as outlined) |        |
| Maternity .....             | 3      | Vacation .....              | 2      |
|                             |        | <hr/>                       |        |
|                             |        | Total .....                 | 24     |

#### Division of service for the two-year and four months and two-year and six month courses

|                             | MONTHS |                              | MONTHS   |
|-----------------------------|--------|------------------------------|----------|
| Preliminary .....           | 4      | Operating room .....         | 2        |
| Medical .....               | 5-6    | Dispensary .....             | 1        |
| Surgical .....              | 4-5    | (to be divided as outlined)  |          |
| Infants and children.....   | 3      | Diet kitchen .....           | 1        |
| (to include infant feeding) |        | *Either mental or nervous or |          |
| Maternity .....             | 3      | communicable .....           | 3        |
|                             |        | Vacation .....               | 2        |
|                             |        | <hr/>                        |          |
|                             |        | Total .....                  | 28 to 30 |

Private patient service is to be included in the above and is not to exceed 2 months. Night duty is to be included in the above, not to exceed 4 months.

The three-year course as outlined is designed for those hospitals whose demand of higher educational qualification for admission attracts students likely to enter the advanced branches of nursing, such as executive and teaching positions in schools of nursing, or the field of public health, and therefore require a more comprehensive foundation.

#### Division of service for three-year course

|                              | MONTHS |                             | MONTHS |
|------------------------------|--------|-----------------------------|--------|
| Preliminary course .....     | 4      | Obstetrics .....            | 3      |
| Medical .....                | 5      | Operating room.....         | 2      |
| Surgical .....               | 4      | Dispensary .....            | 1      |
| Infants and children.....    | 3      | (to be divided as outlined) |        |
| (including infant feeding)   |        | Diet kitchen .....          | 1      |
| *Tuberculosis .....          | 1      | *Public health.....         | 4      |
| *Contagious .....            | 2      | Vacation .....              | 3      |
| *Mental and nervous diseases | 3      | <hr/>                       |        |
|                              |        | Total .....                 | 36     |

\* Experience in these services not required but strongly recommended.

Private patient service is to be included in the above, and is not to exceed 2 months. Night duty is to be included in the above, not to exceed 6 months.

**The four-month preliminary course is required in all schools.**

**Admission of students.** Students may not be admitted to a registered school of nursing except on the regular admission dates, and students transferring from one registered school to another will not be admitted except at these periods.

**Credit which may be allowed students for work done in other schools.** 1 A school giving a three-year course or a 2 years and 9 months' course, may allow 9 months' credit to a student holding a degree from an approved college.

2 No time credit may be allowed a student coming from a non-registered school of nursing, unless approved by the Department of Education. In event of credit being allowed, the student must spend a minimum of 2 years in the registered school.

3 Schools desirous of giving credit in time to students from other schools must present a record of the students' work to the secretary of the Board of Nurse Examiners. This record should be made on the summary sheet provided by the Department. The school will then be advised of the amount of credit allowed.

4 Students transferring from one registered school to another must have completed the work of any given semester before they may receive credit. Students withdrawing during a semester will not be given credit for the incomplete work of that semester.

**Affiliations.** All affiliations must be approved by the Department of Education. Students are to be admitted to affiliating schools in groups at stated periods in order that class work may be satisfactorily carried on.

The theoretical instruction is to be given at the affiliating school. This is essential for proper correlation of class work and practical experience.

Schools of nursing connected with children's hospitals shall provide for the following affiliations:

3 months' obstetrical experience

3 months' adult surgical (including gynecology) experience

3 months' adult medical experience

1 month's adult operating room experience

1 month's experience in nutrition

**Time lost by students in affiliating schools.** Students affiliating for 3 months' service may not be absent for more than 2 weeks

and receive credit for the course. Students affiliating for 6 months' service or more may not be absent for more than 1 month and may not lose more than 2 weeks in any service. Students absent for longer periods will be required to return to the affiliating school in order to complete the course.

**Hospitals maintaining both a nurse training school and a school for training attendants.** A general hospital desiring approval for conducting both a registered nurse training school and a school for training attendants must furnish evidence of ability to provide:

- 1 Adequate clinical material for the student nurses in all required services.

- 2 A daily average of 200 patients exclusive of dispensary cases.

- 3 An assistant to the principal of the training school for nurses, such assistant to be a registered nurse competent to and charged with supervising and carrying on the course of instruction for attendants.

- 4 Separate living quarters for the attendants in training.

- 5 A number of registered nurses, sufficient to direct and supervise the attendants in training to the end that attendants in training may not be left under the supervision of a student nurse in training and thus interfere with the proper care of the patients in the ward.

- 6 The uniform distinguishing attendants in training from all nurses in training to the end that there may be no confusion of the services to be performed by the different classes of pupils.

**Faculty of school.** The faculty must include a director or superintendent and *three* or more assistants, one of whom shall be qualified as a teacher and one of whom shall be in charge at night. There should be a staff of paid lecturers and instructors.

The director of the school must be a registered nurse qualified by general and professional education and through executive experience or post graduate instruction in training school methods and management.

The assistants and all nurses holding permanent positions in the school must be registered nurses, graduates of recognized schools.

In order to provide adequate supervision of nursing work a ratio of at least one graduate supervisor for every twenty-five beds is recommended in institutions of over fifty beds. This is exclusive of the principal of the school, the assistant, instructor and night supervisor.

It is strongly urged that when selecting supervisors their qualifications as teachers be given careful consideration.

**Preliminary educational requirement.** The institution must comply with the statutory requirement for preliminary education of students, which consists of 1 year of high school or its equivalent, 18 counts in Regents examinations, at standings of 75 per cent or above. This rating must be obtained prior to the beginning of the professional course and evidence of such training in the case of each pupil must be filed with the Department of Education as a basis for the recognition of such pupil as a member of the school of nursing.

**Living conditions.** A separate residence with single rooms is recommended, and adequate lavatory, toilet and bathing facilities are required. Adequate fire protection must be provided. Newly erected buildings must be of fireproof construction.

Provision must be made for recreation and reception rooms.

Nurses' residences should be arranged to accommodate the increased group for 8 months of the year, that the school may always be maintained at full numbers.

**Hours of duty and vacation.** The number of hours of duty shall not exceed 9 hours during the day and 10 hours during the night, and when possible should not be more than 48 a week. It is intended that hours of class work shall be included in the hours of duty.

In order that the student may fully profit by the course of training which the school provides, it is essential that the hours off duty should be such as to allow necessary time for study, rest and recreation.

Night duty shall be limited to 2 months each year, the first period not to be given until the student has been in training 6 months.

A vacation of 1 month should be given each year.

**Records.** Any nurse having spent 2 or 3 years in a registered school of nursing credited with giving a thorough course of training in the practice of nursing, should be enabled to procure at any time from the records of the training school an explicit statement of the details of this training. Moreover, the continued registration of the school is dependent upon securing definite information from accurate, up-to-date records which are open for inspection at all times. It is therefore *required* that such records be kept. They should begin with the application of the student and serve as a continuous history of her training.

(Forms recommended by this Department may be secured from the Physicians' Record Company, 509 South Dearborn st., Chicago, Ill.)

**Teaching facilities.** Successful teaching in any nurse training school depends largely on the character of the facilities provided for instruction.

This Department requires that properly lighted and ventilated classrooms be provided, including lecture room, demonstration room and diet laboratory. Adequate teaching equipment must also be provided. (Lists of equipment for different classrooms will be furnished by the Department on request.)

While chemical laboratories for use in teaching anatomy and physiology, bacteriology, chemistry etc. are not required it is strongly recommended that such teaching facilities be available for the use of students in the nurse training school. Schools connected with medical colleges may of course utilize these laboratories and if facilities for individual laboratory work are not available in the school it is strongly urged that laboratories in high schools or technical schools be utilized wherever it is possible.

The need of proper facilities for group practice in the demonstration room can not be too strongly emphasized. No school should have less than three beds and one crib in the demonstration room. Increase in a ratio of one bed for every ten students until the school enrolment reaches sixty. With this size school it will be necessary to teach the practical nursing classes in sections.

**Theoretical instruction.** Registered schools must provide instruction in the following subjects:

- Anatomy and physiology
- Applied bacteriology and pathology
- Nutrition and cookery
- Personal hygiene
- Drugs and solutions
- Principles and practice of nursing—elementary and advanced  
—including hospital housekeeping and bandaging
- History and social aspects of nursing
- Professional ethics
- Materia medica
- Dietotherapy
- Elementary principles of massage
- Nursing in general medical diseases including diseases of skin
- Surgical and gynecological nursing
- Pediatric nursing including infant feeding and orthopedics
- Nursing in communicable diseases including tuberculosis and venereal diseases

- Obstetrical nursing
- Operating room technic
- Nursing in diseases of the ear, nose and throat
- Nursing in diseases of the eye
- Nervous and mental nursing
- Nursing in occupational diseases
- Public sanitation

Instruction in the following subjects is strongly recommended :

- Psychology
- Chemistry
- Hydrotherapy
- Occupational therapy
- Professional problems
- Introduction to private duty nursing
- Modern social conditions
- Public health and public health nursing
- Introduction to institutional work

Schools for male nurses may substitute instruction in genito-urinary nursing for obstetrical nursing, and mental and nervous nursing for nursing of children.

**Examinations.** Examinations for registered nurses will be held 3 times a year in January, May and September. Application for admission to the examinations must be made to the Chief of the Professional Examinations Bureau, Department of Education, Albany, N. Y. Applications must be on file at least 10 days prior to the date of the examinations.

Students who have completed the required class work and practical experience and who are within 1 month of finishing the course of training may apply for admission. Other students must apply for admission to the first examination held after they complete the course.

Examinations will be given in the following subjects :

- Anatomy and physiology
- Hygiene, sanitation and applied bacteriology
- Materia medica
- Dietetics
- Medical nursing, mental and nervous nursing
- Surgical and gynecological nursing, syphilis and gonorrhea
- Obstetrical nursing
- Pediatric nursing

A practical examination will be given in nursing procedures.

State Board examinations for the trained nurse license to which will be admitted state hospital graduates who do not meet the requirements for the examination for license for registered nurse will be held in the following subjects:

Anatomy and physiology

Surgical nursing and applied bacteriology (elementary only)

Dietetics

Hygiene and sanitation

Medical nursing and materia medica (elementary only)

Mental and nervous nursing

A practical examination will be given in nursing procedures.

Examinations for the trained nurse license are held in January and September only.

Examinations for trained attendants are practical only and are held in May and November of each year. Application for admission to these examinations should be made to the Secretary of the Board of Nurse Examiners.

**General scheme of theoretical instruction for 2 years, and 2 years and 4 months, and 2 years and 6 months, and 3 years courses**

| <i>First year</i>                                                     |                                   |
|-----------------------------------------------------------------------|-----------------------------------|
| 1st semester                                                          |                                   |
| Preliminary course 4 months                                           |                                   |
|                                                                       | HOURS                             |
| Anatomy and physiology.....                                           | 48                                |
| Applied bacteriology and pathology ..                                 | 32                                |
| Personal hygiene .....                                                | 8                                 |
| Nutrition and cookery.....                                            | 24                                |
| Drugs and solutions.....                                              | 16                                |
| Elementary nursing (including bandaging and hospital housekeeping) .. | 80                                |
| History and social aspects of nursing.                                | 8                                 |
| Total .....                                                           | 216 hours — about 12 hours weekly |

*Recommended*

Chemistry .....

16 hours

This work to be covered during first 4 months of student's course.

| 2d semester                          |       |
|--------------------------------------|-------|
|                                      | HOURS |
| Advanced nursing .....               | 24    |
| Dietotherapy .....                   | 8     |
| Materia medica and therapeutics..... | 16    |
| Elementary principles of massage.... | 16    |
| Ethics .....                         | 8     |

Total .....

72 hours — about 5 hours weekly

*Recommended*

Elements of psychology ..... 8 hours. See Standard Curriculum for outline.

*Second year**1st semester*

## HOURS

Nursing in general medical diseases  
(including diseases of the skin).. 18  
Surgical and gynecological nursing.. 16  
Pediatric nursing (including infant  
feeding and orthopedics)..... 18

Total ..... 52 hours — about 3½ hours weekly

*2d semester*

## HOURS

Nursing in communicable diseases  
(including venereal diseases and  
tuberculosis) ..... 12  
Operating room technic..... 8  
Obstetrical nursing ..... 16  
Public sanitation ..... 8  
Nursing of diseases of the eye..... 2

Total ..... 46 hours — about 3 hours weekly

*Recommended*

Hydrotherapy ..... 6 hours

*Third year**1st semester*

## HOURS

Nervous and mental nursing..... 16  
Nursing in diseases of the ear, nose  
and throat ..... 6

Total ..... 22 hours — about 2 hours weekly

*Recommended*

Occupation therapy..... 6 hours

*2d semester*

## HOURS

Professional problems ..... 8

*Recommended*

Public health and public health  
nursing ..... 8-16  
Introduction to private duty nursing. 8  
Introduction to institutional work... 8 See Standard Curriculum for  
outline.  
Modern social conditions..... 8 See Standard Curriculum for  
outline.

(Schools wishing to increase the numbers of hours of instruction in any of these subjects are referred to the outlines in the standard curriculum. This curriculum may be secured from the National Nursing Headquarters, 370 Seventh av., New York City.

NOTE. All schools are required to give the courses in nervous and mental nursing and in nursing in diseases of the ear, nose and throat. The course in professional problems is required for 3 year courses only.

## SYLLABUS

*Note.* For arrangement of subject for the 2-years' and the 2-years and 4 months' courses consult "General Scheme of Theoretical Instruction."

### First Year — 1st Semester

#### ANATOMY AND PHYSIOLOGY

Time: 48-60 hours. Lectures and laboratory work by physician or nurse instructor.

##### *Objects of the course*

1 To give the student practical knowledge of the structure and functions of the normal human body, which will serve as a sound basis for further study in hygiene, dietetics, materia medica, pathology, surgical and medical nursing.

2 To stimulate interest in health or the normal functioning of the body, and to give an intelligent basis for preventive work, as well as for the general nursing care of patients.

##### *Outline of classes*

- 1 Biology — relation of biology to other sciences. Human anatomy and physiology as part of the science of biology

General outline of the human body

Divisions — surface parts

Cavities and organs contained (regions of the abdominal cavity)

Demonstration — manikin and skeleton

- 2 Systems of the body: Organs and functions of each system
- 3 The cell: composition, structure, and life activities; division of the cell; origin of tissues
- 4 Epithelial tissue: characteristics, classifications, location, and functions
- 5 Muscular tissue: structure and physiology of muscle
  - a Classifications (skeletal, voluntary visceral, involuntary cardiac)
  - b Difference in physiology of the three classes
  - c Tenacity: value of common causes of loss of (apply to care of patients)
- 6 Nerve tissue
  - a The neurone — structure, classifications, physiology
  - b General structure of nerves and ganglia

**7 Connective tissues**

- a* Characteristics and classifications (areolar, white fibrous, yellow elastic, neuroglia, reticular, adipose, cartilage, osseous, blood)
- b* General structure, location and functions of each variety
- c* Skeletal system
- d* General functions
- e* Classifications of bones

**8 Bones of the skull and face**

- a* Name, location, articulations, special features, functions
- b* Special attention to bones that are frequently diseased, as the temporal, maxilla, mastoid, and to the sinuses of the frontal bone

**9 Sternum, ribs, and vertebral column**

- a* The ribs, action of during respiration
- b* Vertebral column: anatomy of the vertebra, curves of the spine, classifications of the vertebrae, functions of the vertebrae
- c* Practical applications in the care of children in posture, etc.

**10 Bones of the upper extremity, including the shoulder girdle (follow outline in lesson 8)****11 Bones of the lower extremity; special attention to bones of the pelvis, and to the bones that form the arch of the foot****12 Articulations, varieties, classifications, and functions; movements allowed by the different types of articulations; sprains and dislocations****13 The muscular system (review structure and physiology of muscular tissue); muscles of the head, face, neck and tongue (location, origin, insertion and action)****14 Muscles of the thorax, abdomen and back, considering the location, action, proper use of, and means by which muscles may be relaxed to relieve pain****15 Chief muscles of the upper extremity (application made to muscle interference in breast operation, etc.)****16 Muscles of the lower extremity; means by which muscle tone may be maintained while patients are confined to bed (refer to lessons in massage, passive movements, etc.)****17 Membranes of the body, their structure, location and functions (serious, synovial, mucous, and cutaneous)****18 The nervous system (review physiology of the neurone); the physiological and anatomical nerve unit; reflex action, auto-**

- matic action, thought action; divisions of the nervous system (brain, spinal cord, plexus, and ganglia)
- 19 The spinal cord — position, structure; the meninges, and cerebro-spinal fluid; functions of the spinal cord
  - 20 The automatic system: location of chief ganglia and plexus; functions, and connections with the central system
  - 21 The brain: location and functions of the divisions of the brain
  - 22 The cranial nerves: names, numbers, location and functions
  - 23 Sensations, internal, external: comparative prominence of internal and external sensations; value of each
  - 24 Anatomy and physiology of the ear: relation of the middle ear to the throat, to the mastoid cells
  - 25 The eye — structure, physiology; common abnormalities of the eye; hygiene of the eye
  - 26 Glands; structure, varieties, and physiology of secretions, external and internal
  - 27 Ductless glands and internal secretions: effects of the various internal secretions upon the physiology of the body
  - 28 The vascular system — functions of; composition of blood
    - a Plasma, chemical composition of
    - b Corpuscles — varieties, structure and functions
  - 29 The heart: position of the heart, its relation to other organs
    - a The pericardium
    - b Structure of the heart, movements of the heart
    - c Nerve supply, blood supply
  - 30 Blood vessels — structure and functions
    - a Arterial distribution
    - b Venous return
  - 31 The lymph system — its relation to the blood system
  - 32 General circulation: causes, primary and secondary; systemic, pulmonary, and portal circulation; blood pressure
  - 33 The respiratory system, organs, structure and physiology of
    - a Normal respiration, internal and external
    - b Changes in the blood due to respiration
  - 34 Effect of posture and clothing upon respiratory movements
  - 35 The digestive system (review regions of the abdomen and organs contained): the alimentary canal, divisions, and general structure
  - 36 Anatomy of the stomach, glands, secretions and movements
  - 37 The small intestine, divisions, structure, glands and secretions; movements of the small intestine (segmentation, peristalsis)

- 38 The large intestine, divisions, structure and movements
  - a The accessory glands
  - b The salivary glands, structure and functions
- 39 The pancreas, structure and functions; the liver, structure and functions (blood supply and secretions)
- 40 Digestion
  - a Classification of foods
  - b Digestion in the mouth, mechanical and chemical
  - c Digestion in the stomach, mechanical and chemical
- 41 Digestion in the small intestine, mechanical and chemical; digestion in the large intestine, mechanical and chemical
- 42 Metabolism: conditions favoring normal activity of the cell; psychic influence upon digestion and metabolism
- 43 Elimination: wastes resulting from metabolism, and foreign substances which have been absorbed
  - a Necessity of removal of wastes
  - b Organs of elimination
- 44 The kidneys: structure and function; secretion of urine
- 45 The skin: structure and functions; heat production and control
- 46 The reproductive system: anatomy of the female reproductive organs
- 47 Physiology of reproduction
  - a Maturing of the ovum
  - b Fertilization and development

### Laboratory

- 1 Dissection of the frog
  - Location of organs
  - Study of the tissues
  - Study of the nervous system *4 to 6 hours*
- 2 Connective tissues
  - Bone, tendon, ligaments, cartilage etc., studied from joints of beef or similar animal
  - Examine prepared bone slides for Haversian system
  - Make blood slides *2 hours*
- 3 Heart and lungs
  - Dissection of heart and lungs with membranes and blood vessels
  - (The specimen may also include the diaphragm, liver and gall-bladder) *2 to 4 hours*

**4 The kidneys**

Dissection of pig's kidneys (or normal human kidneys)

Examination of prepared slides 2 to 4 hours

**5 The brain**

Examination of specimen of normal human brain 2 hours

Laboratory work may either accompany or supplement the regular recitations, depending upon the time available, and may be greatly increased with advantage to the class. Constant reference should be made to good charts, mounted skeleton, separate bones, and manikins which may be dissected.

**Teaching equipment**

List of equipment furnished on request.

**Textbooks**

**Kimber & Gray.** Anatomy and Physiology

**Williams.** Anatomy and Physiology

**Reference books**

**Bundy.** Textbook of Anatomy and Physiology.

**Howell.** Textbook of Physiology

**Starling.** Principles of Human Physiology

**Hough & Sedgwick.** Human Mechanism

**Martin.** Human Body

**Bigelow & Bigelow.** Applied Biology

**Halliburton.** Handbook of Physiology

**Brubaker.** Anatomy and Physiology

**Cannon.** Mechanical Factors in Digestion

**Cannon.** Bodily Changes in Pain, Hunger, Fear and Rage

**Parker & Parker.** Elementary Course of Practical Zoology

**Gray.** Anatomy

**Piersol.** Normal Histology

**Hill.** Manual of Normal Histology and Organography

**Stiles.** Nutritional Physiology

**Sherman.** Chemistry of Food and Nutrition

**Burton-Opitz.** Elementary Manual of Physiology

**APPLIED BACTERIOLOGY AND PATHOLOGY**

Time: 32 hours. Classes and laboratory work by physician and nurse instructor.

**Objects of the course**

- 1 To give the students opportunity to see, handle and observe the results of the growth of microorganisms, in order that they may better realize their importance, and the ease with which infections may be transmitted.
- 2 To give actual practice in laboratory technic, so that the students may be more careful and efficient in their nursing procedures, the care of infectious diseases, changing of surgical dressings, handling surgical instruments, supplies etc.

- 3 To give a better understanding of community health problems; to serve as a basis for graduate work in public health, as well as giving a foundation for the study of communicable diseases, medical nursing and sanitation.

#### BACTERIOLOGY

#### Recitations, 8 hours

- 1 History of bacteriology; place of bacteria in nature
  - a As a cause of decay
  - b Value in the food cycle
  - c Value in manufacturing, in the arts, in agriculture, etc.
- 2 Morphology; physiology; classifications as to form, arrangement, food requirements, oxygen requirements — pathogenic and nonpathogenic
- 3 Destruction of bacteria
  - a Physical agents
    - (1) Heat — moist and dry flame
    - (2) Sunlight
    - (3) Cold, moving air
    - (4) Dessication, electricity
- 4 Destruction of bacteria (*concluded*)
  - b Chemical agents
    - (1) Chemicals in common use: strength, methods etc.
    - (2) Fumigation (limitation in value of)
- 5 Milk production
  - a Possibilities of contamination
  - b Methods of handling
  - c Diseases transmitted by milk
  - d State regulations regarding production of milk
  - e Pasteurization
- 6 Organization of state and city board of health: work of each in the prevention of the spread of communicable diseases
- 7 The State Sanitary Code
  - a General provisions and regulations
  - b Laws regarding reportable diseases
  - c Milk regulations
  - d Provisions for inspection and sanitary supervision of mid-wifery, of barber and hair dressing shops, of factories, labor camps, etc.
- 8 Reports, papers prepared and read by students on various debated subjects; class discussion.

**Laboratory, eight 2-hour periods**

- 1 Laboratory equipment and supplies
  - Use of the microscope, with practice
    - a Make slides of cotton fibres, of wool fibres, onion skin, etc.
    - b Observe movements of paramecium in hanging drop
- 2 Make and sterilize culture, media (agar, gelatin, bouillon)  
Prepare and sterilize petri dishes and other glassware (These may be prepared for the class if time is limited)  
Study molds
- 3 Examination of yeast plants under the microscope  
Inoculate plates and plants from various sources — air of class-room, of ward, air of room after dry and after damp dusting  
Test possibility of infection from flies, fingers, hair etc.  
Test cleanliness of hands after ordinary washing, after scrubbing 5 minutes with soap and water, after soaking 3 minutes in some disinfectant
- 4 Make and examine stained preparations  
Examine and report on previous tests  
Test efficiency of various disinfectants  
Observe difference between antiseptics and disinfectants
- 5 Test efficiency of fractional sterilization of sterilization by steam under pressure  
Test to determine number of bacteria in the air  
Observation of previous tests — check on purpose of tests, and practical applications to nursing procedures
- 6 Test to determine number of bacteria in water from various sources  
Presumptive test for colon bacilli
- 7 Test to determine number of bacteria in milk — milk carelessly exposed, as in a warm kitchen, milk kept under proper conditions  
Test result of pasteurization upon number of bacteria
- 8 Method of taking throat cultures  
Demonstrate slides of pathogenic organisms  
Review and summary

**PATHOLOGY****Recitation and Laboratory, 8 hours**

- 1 Discussion of general pathological conditions  
Various causes of disease
  - a Mechanical
  - b Nutritional
  - c Invasion of microorganisms

**Microorganisms as causes of disease**

- a* Infection — nature of, symptoms and results; septicemia, toxemia

**Predisposing causes of bacterial disease****Natural defences against disease****2 Immunity**

- a* Natural
- b* Artificial
- c* Mechanism of active acquired immunity
- d* Production of passive immunity, and value of

**3 Vaccines and serums**

- a* Preparation of
- b* Action in the body
- c* Comparative value of vaccines and serums

**4 and 5 Study of bacterial disease: cause, transmission, and prophylaxis; tuberculosis, pneumonia, typhoid fever, gonorrhea, syphilis etc., (two or more, according to the time available, studied according to the following outline)***a* Direct cause

- (1) Type of organism
- (2) Staining reaction
- (3) Spore formation
- (4) Resistance to
  - (*a*) heat
  - (*b*) drying
  - (*c*) sunlight
  - (*d*) chemicals, strength, time etc.

*b* Predisposing causes*c* Methods of transmission*d* Prophylaxis**6 Collection of specimens for laboratory examination***a* Faeces*b* Gastric contents*c* Urine

- (1) Single specimen
- (2) 24-hour specimen
- (3) Sterile specimen

*d* Blood smears for Widal test**7 Examination of urine***a* Value of periodic urinalysis*b* Normal quantity of urine

- c* Normal composition of urine
  - d* Common abnormalities
  - e* Test for albumin, sugar, sp. gr., reaction, bile, acetone, blood
  - f* Observation of slides showing pus cells and casts
  - g* Pathological significance of these abnormal constituents
- 8 Examination of urine, each student bringing specimens from patients in the wards, and checking up findings with the patients' history, medication and treatment

### *Teaching equipment*

List of needed equipment furnished on request.

### *Textbooks*

- Smeeton.** Bacteriology for Nurses  
**Broadhurst.** Bacteria in Relation to Man  
**Buchanan.** Household Bacteriology  
**St George.** Textbook of Pathology for Nurses

### *Reference books*

- Broadhurst.** How We Resist Disease  
**Todd.** Clinical Diagnosis  
**Conn.** Bacteria, Yeasts and Moulds  
**Descour.** Pasteur and His Work  
**Marshall.** Microbiology  
**Roberts.** Manual of Bacteriology and Pathology  
**Fox.** Bacteriology  
**Frost and McCampbell.** General Bacteriology

## PERSONAL HYGIENE

Time: 8 hours. Classes by nurse instructor.

### *Objects of the course*

To stress:

- 1 The great importance of good health habits
- 2 The laws of health and their application to nursing; corrective exercises
- 3 The nurse as a student and teacher of hygiene
- 4 A scientific attitude toward the whole subject of preventive medicine and hygiene

### *Outline of classes*

- 1 Introduction
  - a* Habit formation in relation to health. Example: daily health record
  - b* Explanation of hygiene and allied terms. Mental and physical health and disease, etc.
  - c* Brief history (ancient and modern)
  - d* Correlation of hygiene with all other subjects taught

- 2 Hygiene of skeletal and muscular systems
  - a Laws of health and their relation to the nine biological systems
  - b Hygiene of skeletal system: good posture, prevention of skeletal deformities, cause and prevention of foot weaknesses, points of a good shoe
  - c Hygiene of muscular system: brief discussion of rational exercise, fatigue, rest, recreation, mental and physical poise
  - d Value of this knowledge and adaptation to age, sex, occupation, etc.
  - e Demonstration of some corrective exercises
- 3 Hygiene of nutrition and elimination
  - a Meaning and value of a mixed diet
  - b Causes and prevention of common nutritional disorders
  - c Relation of nutrition to mental and physical efficiency
  - d Value of metabolic charts
  - e Cause and prevention of skin and renal disorders
  - f Therapeutic value of water
- 4 Hygiene of respiration and circulation
  - a Composition of normal air
  - b Sources of impurities
  - c Ventilation; importance of temperature, humidity and air movements, ward ventilation
  - d Cause and prevention of anemia and various heart disorders
  - e Influence of poisons on the heart
- 5 Hygiene of reproductive and glandular systems
  - a Function of menstruation and cause and prevention of its common disorders
  - b The emphasis of hygienic measures
  - c Essentials of social hygiene
  - d Internal secretions and their relation to growth and repair
- 6 Hygiene of the nervous system
  - a Nature of the nervous system
  - b Causes and prevention of mental diseases
  - c Correlation of mind and body in health and disease
  - d What to do with a grievance
  - e Some principles of mental hygiene for both nurse and patient

**7 Hygiene of special senses**

- a* How to care for the eyes, especially in nursing work
- b* Need for expert examinations
- c* Protection and care of the ear
- d* Causes and symptoms of mastoiditis
- e* Hygiene of mouth, nose and throat
- f* Relation of disorders of special senses to personal efficiency

**8 Relation of personal hygiene to community hygiene**

- a* Community hygiene reflects individual standards
- b* Importance of vital statistics
- c* Social, civic, economic value of hygiene, civic clubs
- d* The nurse's educational function and responsibility in the community

***Methods of teaching***

- 1 Lecture and 10 minutes quiz each hour
- 2 Collateral reading
- 3 Daily health report submitted weekly
- 4 Home and ward problems discussed
- 5 Students make health posters

***Equipment and illustrative material***

- 1 Health charts, literature, posters, excursions
- 2 Lantern slides, gymnasium, and swimming pool (if possible)
- 3 Health scrap books and slogans

***Books for reference readings***

**Williams.** Personal Hygiene Applied  
**Park.** Public Health and Hygiene  
**Roseneau.** Preventive Medicine  
**Kimber & Gray.** Anatomy and Physiology  
**Broadhurst.** Home and Community Hygiene  
**Fisk & Fisher.** How To Live  
**Burnett.** Hearing and How To Keep It  
**Manhattan Hospital Staff.** Nursing in Diseases of Eye, Ear, Nose and Throat  
**Osler.** A Way of Life  
**Osler.** Acquaintance  
**Winslow.** The National Health Series  
**Hill.** The New Hygiene

**NUTRITION AND COOKERY**

Time: 24 hours. Eight hours lecture and recitation. Eight 2-hour laboratory periods. Taught by dietitian.

***Objects of the course***

- 1 To give the nurse a thorough knowledge of food and its relation to the human body; its classification; source; cookery; selection and care

2 To give her an understanding of the steps necessary in the preparation, by the body, of foods for use in the body as covered by digestion, absorption and metabolism

3 To make her familiar with the nutritive values of food and aid her in preparing a balanced dietary

4 To prepare her to intelligently administer the ordinary hospital diets as liquid, soft, semisolid, light and house diets

(A course in diet in disease to be given later in the course of training)

### *Outline of classes*

#### 1 The relation of food to the human body

##### *(Class)*

The needs of the body for food

Composition of body in relation to food

Food: definition, classification; sources and function

The six food principles

##### *(Laboratory)*

Preparation of clear and nourishing liquids

Tray showing clear and nourishing liquids

Discussion of points in selection of foods for liquid trays

#### 2 Fuel value of foods and energy requirements

##### *(Class)*

Needs for energy

Basal metabolism

Factors affecting food requirement

Heat value of foods

Calorie as unit of measure

Determining food requirement

##### *(Laboratory)*

Weighing of 100 calorie portions of food

Preparation of any foods to be weighed

Demonstrating day's menu of definite requirement for a nurse

#### 3 Carbohydrates

##### *(Class)*

Carbohydrates: classification, composition, source, principles of cookery, value

Cereals, fruits and toast: composition, nutritive value, principles of cookery, use in diet

*(Laboratory)*

Cereal and fruit cookery

Preparation of one or more trays for breakfast for soft diet

Discussion of foods allowed on soft tray

**4 Carbohydrates (*concluded*)***(Class)*

Vegetables: classification, composition, source, principles of cookery, nutritive value

Cream sauces, principles in preparation

*(Laboratory)*

Vegetable cookery

Preparation of cream sauces

Preparation of luncheon tray for light diet

Discussion of foods allowed on light diet

**5 Proteins***(Class)*

Proteins: classification, composition, source, effect of heat, value

Milk: production, composition, nutritive value of milk products, etc.

Eggs: structure, composition, effect of heat, principles of cookery, nutritive value

*(Laboratory)*

Milk and egg cookery

Preparation of milk products, as junket, peptonized milk, simple desserts

Preparation of eggs in different ways

Demonstration of additional ways of preparing eggs

Preparation of light supper tray

**6 Proteins (*concluded*)***(Class)*

Meats: source, structure, composition, effect of heat on various constituents, cuts, principles of cooking tough and tender cuts

Meat products: broth, beef tea, beef extract

*(Laboratory)*

Meat cookery

Preparation of meats in different ways

Demonstration of cookery of tough piece of meat and tender piece of meat (pot roast and rib roast)

Chicken cookery demonstrated

Preparation of dinner tray for house diet

Discussion of foods allowed on house diet

7 Fats, minerals and vitamins

*(Class)*

Fats: source, properties, effect of heat, emulsion value

Vitamines: source, function, effect of lack of each

Minerals: source, functions in general, specific functions

Discussion of use of salads in the diet; principles in preparation and serving, value, principle in making mayonnaise

*(Laboratory)*

Preparation of salads and salad dressings

Preparation of sandwiches

Preparation of luncheon tray for house diet

8 Digestion, absorption, metabolism and excretion

*(Class)*

Digestion and fate of foodstuffs in the body

Enzymes: source, action on food

Digestion in mouth, stomach and intestines

Fate of foods in metabolism

*(Laboratory)*

Diets used in hospitals

Preparation of one tray each for liquid, soft, light and house diets

Lesson to include new work on making of sponge cake and freezing of desserts

Laboratory to be in form of exhibit for rest of school

*Textbooks*

**Pattee.** Practical Dietetics

**Proudfit.** Dietetics for Nurses

*Reference books*

**McCollum.** Newer Knowledge of Nutrition

**Carter, Howe & Mason.** Nutrition and Clinical Dietetics

**Eddy.** The Vitamine Manual

**Friedenwald & Ruhrah.** Dietetics for Nurses  
**Pope & Carpenter.** Essentials of Dietetics  
**Hall.** Nutrition and Dietetics  
**Farmer.** Boston Cook Book  
**Farmer.** Foods and Cookery for the Sick and Convalescent  
**Rose.** Feeding the Family—Revised  
**Rose.** Laboratory Handbook of Dietetics—Revised  
**Sherman.** Food Products—Revised  
**Sherman.** Chemistry of Food and Nutrition—Revised  
**Friedenwald & Ruhrah.** Diet in Health and Disease  
 Pamphlets and Bulletins of the Department of Agriculture  
 Cornell and Teachers' College Bulletins  
 Food Charts put out by different firms

## DRUGS AND SOLUTIONS

Time: 16 hours. Eight 2-hour periods divided about equally between class, demonstration and laboratory work. Taught by physician or nurse instructor

### *Objects of the course*

- 1 To teach the student to weigh and measure drugs accurately and to prepare solutions from crude drugs or stock solutions.
- 2 To teach her the symbols and abbreviations used in *materia medica* and to prepare her for the further study of the therapeutic action of drugs.
- 3 To make her familiar with the appearance and use of the commoner drugs which she will be handling in the early part of her course.

### *Outline of classes*

- 1 (*Class*) Weights and measures (Apothecaries system): Roman and Arabic numerals; apothecaries system of weights and measures with its symbols and abbreviations; drops and minims; household measures; drill in the tables; problems, oral and written
- 2 and 3 (*Class*) Weights and measures (Metric system): Review of decimals; metric system, transposing to apothecaries system; approximates in apothecaries and household measures (*Laboratory*) Practice in use of the apothecaries and metric systems; comparison of weights and measures of the three systems. Drill and problems in approximates
- 4 and 5 (*Class*) Solutions: Arithmetical review of fractions, ratio, percentage, definition of solution, solute, solvent, and examples. Saturated and supersaturated solutions; solutions of solids, liquids and gases (examples); suspensions and emulsions; Fahrenheit and Centigrade scales; method of expressing strength of solutions; method of calculating solu-

tions from pure drug; method of making weak, from strong solutions

(*Laboratory*) Converting Centigrade degrees to Fahrenheit and vice versa; problems and drill in converting ratio to per cent and vice versa; problems in calculating the amount of drug for solutions of different strength; problems in making solutions from stock solutions

6-9 (*Class, 2 periods*) Antiseptics, disinfectants, deodorants: Physical properties; therapeutic uses; method of bactericidal action; factors to be considered in choosing; care in handling; and toxicology, first aid antidote of common solutions such as phenol, silver nitrate, potassium permanganate; bichloride, boric, iodine, creolin, lysol, formalin, Dakin's Solution, mercurchrome. Solutions for internal use, normal saline, glucose, sodium bicarbonate; precautions necessary when making solutions for internal use

(*Laboratory, 2 periods*) Practice in making these solutions; problems and drill in calculations

10 and 11 Introduction to materia medica: Old and modern theories of disease; effect on treatment; why we give drugs; meaning of terms, such as local, systemic, cumulative, rational, empiric, physiological and therapeutic, with examples: methods of administration; absorption and excretion of drugs; forms suitable for each method of administration; names and meanings of common classes of drugs such as analgesics, anodynes, diuretics and common examples; patent medicine evil; menace of self-drugging

12 and 13 (*Class*) Dosage, symbols, abbreviations: Method of calculating doses for children; method of calculating fractional doses. Orders and abbreviations used in order book. Prescription, form, abbreviations; rules for giving medicines

(*Laboratory*) Review of solutions; practice in pouring medicines; practice in measuring fractional doses and in calculating children's doses; problems in calculations; practice in reading prescriptions; drill on abbreviations

14 and 15 (*Class*) Sources and classifications of drugs: Sources of drugs; crude drugs; active principles; acids, bases, salts, coal tar derivatives; methods of preparing tinctures, extracts, emulsions, etc.; method of application of local remedies such as ointments, salves, liniments, suppositories; official and common names of drugs in frequent use; legal standards, Harrison Law; State Narcotic Law

(Laboratory) Visit to pharmacy; some of preparations made by students or demonstrated

- 16 Poisons and antidotes: Studies in groups with general principles for the treatment of poisoning by each type; demonstration or practice in preparation of general antidotes

*Note.* If 20 hours can be devoted to this subject, it is suggested that additional hours be devoted to the classes on solutions and antiseptics, disinfectants and deodorants, and that one be devoted to common cathartics, emetics and carminatives

### *Methods of teaching*

1 Class periods should be conducted by the question and answer method and the teacher should demonstrate whenever possible.

2 Encourage class discussions. Students should be urged to bring in a report of drugs being used on the wards so that there may be sufficient discussion of them to meet the student's immediate needs.

3 Laboratory periods should be held in a room having running water and facilities for preparing solutions.

4 Much drill will be found needed in the solving of problems. Blackboard drill will be found helpful.

5 While studying the various disinfectants have the students make charts giving the official and common names of each drug, efficiency, uses, disadvantages, first aid treatment.

### *Equipment and illustrative material*

Demonstration by a pharmacist or a visit to a wholesale drug house is helpful. Charts for the metric and apothecaries systems. Different kinds of measures, pitchers, funnels etc. for each student in the laboratory, and stock bottles of the common drugs for preparing solutions. Samples of crude drugs and growing medicinal plants.

### *Textbooks*

**Goostray.** Drugs and Solutions for Nurses

**Pope.** Materia Medica, Pharmacology and Therapeutics for Nurses

### *Reference books*

**Parker.** Materia Medica and Therapeutics

**Sollman.** Text Book of Pharmacology

**Stevens.** Modern Materia Medica and Therapeutics

**Stimson.** Nurses' Handbook of Drugs and Solutions

**Smith, D. E., Upton, Gage.** Mathematics for Nurses

(Published by Teachers' College)

New and Non-Official Remedies, published yearly by the American Medical Association

Useful Drugs, published by the American Medical Association

## ELEMENTARY NURSING (INCLUDING BANDAGING AND HOSPITAL HOUSEKEEPING)

Time: 80 hours. Twenty hours' lecture and recitation, 14 hours' demonstration, and 46 hours' practice. Given in the preliminary course by the instructor of nurses.

### *Objects of the course*

1 To give a clear understanding of the fundamental principles which underlie all good nursing, to develop habits of observation, system, economy and manual dexterity, and to establish a uniform and finished technic in nursing practice.

2 To prepare students to meet the problems that will confront them in their daily work, limiting their duties as far as possible to those which they can understand and safely practise in the earlier stage of their training.

3 To test the aptitude of students with a view to selecting those who are fitted to continue the work.

4 To give the student a better understanding of the principles and methods of good housekeeping and their relation to nursing work. To enable her to exercise intelligence and economy in the proper selection, use and care of materials and equipment.

### *Outline of classes*

General introduction: principles underlying all good nursing

Lecture ..... 1 hour

Beds and bed making: principal points underlying bed making; how to make a closed bed, a child's cot, and a bed with a patient in it; how to prepare a bed for a patient requiring fresh air treatment, for an operative case, a fracture case, and a stretcher case; cleansing, disinfection, and care of beds and bedding

Lecture and recitation..... ½ hour

Demonstration ..... 2 hours

Practice ..... 6 hours

The patient's physical needs and comforts in bed: giving and removing the bed pan; arrangement of pillows; use of bed rests, cradles etc.

Lecture and recitation..... ½ hour

Demonstration ..... 1 hour

Practice ..... 2 hours

**Moving and lifting patients:** lifting and turning patients; dressing and undressing patients; getting up in a chair or on a stretcher

Demonstration .....1 hour

Practice .....2 hours

**Care of the hair:** combing the hair; precautions and treatment for pediculi; washing the hair in bed

Lecture and recitation.....1 hour

Demonstration .....½ hour

Practice .....2 hours

**Bathing patients, and care of the mouth**

Lecture and recitation.....1 hour

Demonstration .....½ hour

Practice .....2 hours

**Morning and evening care**

Lecture and demonstration.....1 hour

Practice .....1 hour

**Prevention of bed sores, and care of the back:** causes of bed sores, their prevention and care; care of the back; the care of patients having involuntary evacuations; water beds, and air beds; rings

Lecture and recitation.....1 hour

**Temperature, pulse, and respiration:** the importance of accurate and careful observation

Lecture and recitation.....3 hours

Practice .....5 hours

(Composed of short periods each day spent in taking temperature, pulse, and respiration, and in practising printing and charting)

**Admission of patients, and care of their property:** what can be done to make patients feel at home; routine in admitting; precautions regarding rashes, burns, vermin etc.; listing and caring for clothes and valuables

Lecture and recitation.....1 hour

Practice .....2 hours

**Equipment and arrangement of ward unit:** care of walls, floors and furniture; utensils—their cost and care; standardization of equipment, utensils and supplies

Demonstration .....½ hour

Practice .....2 hours

General care of sick children: bathing, dressing, feeding and amusing; care of patient on a Bradford frame

Lecture and recitation.....1 hour

Demonstration .....1 hour

Practice .....3 hours

Surgical nursing: preparation of patient for dressings; preparation of patient for examinations; preparation of simple surgical tray; care of gloves and instruments

Demonstration .....1½ hours

Practice .....4 hours

Local applications for relief of inflammation: ice bag, hot water bottle, mustard paste, flaxseed poultice

Lecture and recitation.....1 hour

Demonstration .....½ hour

Practice .....2 hours

Enemata: method of administration, and purpose of simple cleansing enema

Lecture and recitation.....½ hour

Demonstration .....½ hour

Practice .....2 hours

Vaginal douche: purpose, formulas, cautions and methods

Lecture and recitation.....½ hour

Demonstration .....½ hour

Practice .....2 hours

Nursing measures in simple infectious conditions: Disinfection of linen, excreta, utensils; care of hands

Lecture and recitation.....1 hour

Care after death: what to do in case of approaching death; care of body after death; disposal of clothing and valuables

Lecture .....1 hour

Demonstration .....½ hour

Practice .....1 hour

Arrangement of work, carrying out classroom teaching, etc.

Lecture .....1 hour

Bandaging: triangular bandages; slings; binders; circular, spiral, reverse, and figure-of-8 bandages

Lecture .....½ hour

Demonstration .....1 hour

Practice .....6 hours

### *Textbooks*

Harmer. Practical Nursing.

Maxwell & Pope. Practical Nursing.

*Reference books*

- Sanders.** Modern Methods in Nursing  
**Robb.** Nursing Principles and Practice  
**Nightingale.** Notes on Nursing  
**Pope.** Nursing Procedures  
**Eliason.** Practical Bandaging  
**Davis.** Principles and Practices of Bandaging

## HOSPITAL HOUSEKEEPING

Lighting: direct; indirect

Plumbing: water supply; sewage; care of pipes, traps, sinks, lavatory equipment, etc.

Lecture ..... 1 hour

Laundry: plan and purpose; system; care of soiled linen—removal of stains; (inspection of soiled linen to avoid destruction of supplies such as hot water bags, rubber sheets, surgical instruments, etc.)

Lecture ..... ½ hour

Excursion to laundry..... ½ hour

Linen: central linen room; ward linen closets; inventories; exchange; replacements

Lecture ..... ½ hour

Excursion to hospital linen room.. ½ hour

Clothing: central room for patients' clothes; ward lockers for patients' clothes; responsibility for valuables; care of lockers and patients' clothes

Lecture ..... 1 hour

Kitchens: general kitchen; diet kitchen; food storage, care of closets; refrigerators, care of refrigerators; pantries; dining rooms

Lecture ..... ½ hour

Excursion to hospital kitchen..... ½ hour

## Waste

*a* Segregation of waste: food, paper, ashes and tin cans, surgical dressings, etc.

*b* Disposal of waste

(1) Sale of garbage when possible

(2) Baling and sale of paper

(3) Carting away ashes, tin cans and breakage

(4) Incineration of surgical dressings, etc.

(5) Reclamation of gauze and cotton

*c* Care of garbage cans

*d* Care of incinerator

Lecture ..... ½ hour

Excursion to incinerator, etc.,..... ½ hour

**Sources of waste****a Extravagance**

- (1) In ordering household supplies—drugs etc.
- (2) In use of surgical equipment and supplies
- (3) In use of linen—unnecessary changing and soiling: staining, tearing etc.

**b Carelessness**

- (1) In the use and sterilization of rubber goods and instruments
- (2) In misuse of basins and other equipment
- (3) In unnecessarily soiling blankets and other woolens
- (4) In unnecessarily soiling mattresses and pillows
- (5) In breakage of china and glassware

Lecture ..... 1 hour

***Books and pamphlets for reference reading***

**Balderston.** Housewifery

**Balderston.** Laundry Manual

**Lynde.** Physics of the Household

**Broadhurst.** Home and Community Hygiene

**Putman.** Plumbing and Household Sanitation

U. S. Government Bulletins

Bulletins published by Department of Home Economics, Cornell University

**HISTORY AND SOCIAL ASPECTS OF NURSING**

**Time:** 8 hours. First 6 hours taught by director of school; last 2 hours taught by social service worker or director of Public Health Nursing Association.

***Objects of the course***

1 To arouse interest and enthusiasm in nursing as an occupation, by introducing the student nurses early to the long and splendid history of nursing and the great leaders who have established its traditions and ideals.

2 To make them appreciate some of the obstacles that have been overcome in making the profession what it is, and some of the opportunities which are open to them in the future.

3 To explain the origin and meaning of hospital regulations and hospital etiquette, and to secure the cooperation of the student nurses in carrying out the purposes of the hospital harmoniously and effectively.

4 To interest the student from the beginning in the social as well as the medical aspects of her work and give her some realization of the social and economic conditions which bring patients to the hospital and complicate recovery.

5 To encourage in the student a sympathetic attitude toward her patients as people, a better understanding of their problems and the conditions under which they live, and to make her more ready and able to cooperate with the social service department and other agencies in helping them.

### *Outline of classes*

- 1 The origin and early development of nursing among primitive people and in ancient civilizations
- 2 Influence of Christianity on nursing under monastic orders
- 3 Aristocratic and military influences as shown in knightly orders; democratic and secular tendencies in medieval times as shown in the mendicants and secular orders
- 4 The dark period in nursing and the reform movement of the early modern period
- 5 Modern nursing established by Florence Nightingale
- 6 American nursing; modern professional ideals and standards
- 7 Social aspects of nursing and hospital work; relation to community and family welfare
- 8 Some social problems as seen in the hospital and how to meet them

### *Textbook*

**Dock & Stewart.** Shorter History of Nursing

### *Reference books*

#### *History of nursing*

**Nutting & Dock.** History of Nursing, 4v.

**Cooke.** Life of Florence Nightingale, 2v.

**Robinson, Breasted & Beard.** Outlines of European History

**Strachey.** Eminent Victorians

**Richards.** Reminiscences of Linda Richards

**Lock.** Charity and Social Life

**Myers.** History as Past Ethics

**Withington.** Medical History from the Earliest Times 1894, o. p

**Tiffany.** Life of Dorothea Dix

**Wrench.** Lord Lister

**Vallery-Radot.** Life of Pasteur

History of American Red Cross Nursing Service

Articles in Encyclopedia Britannica under medicine, monasticism, chivalry, church history, mendicant orders, St Francis etc.

#### *Social aspects of nursing*

**Devine.** Misery and Its Causes (especially chapters 1 and 2)

**Devine.** The Normal Life

Reports of the Federal Children's Bureau (especially Infant Mortality Series, no. 3, Johnstown Report)

**Ellwood.** Sociology and Modern Social Problems—chapters 4-8 inclusive

**Addams.** The Spirit of Youth and the City Streets

**Addams.** Social Ethics

**Seager.** Social Insurance

**Commons.** Races and Immigrants in America

**Steiner.** On the Trail of the Immigrant

**Lee.** Social Work with Families and Individuals, published by the New York School of Social Work and other pamphlets

**Byington.** What Social Workers Should Know about Their Own Communities (pamphlet published by Russell Sage Foundation)

### CHEMISTRY (recommended)

Time: 16 hours, divided into eight 2-hour periods covering lecture, quiz, recitation and laboratory. Taught by teacher of chemistry or nurse instructor

#### *Objects of the course*

1 To give the student nurse a more scientific background for the study of practical nursing, physiology, dietetics, household economy, materia medica and other nursing subjects.

2 To make her more observant of the chemical phenomena of everyday life, especially those chemical reactions which are of practical and economic importance in nursing and hospital work.

3 To aid in training her in accuracy of observation and in making scientific conclusions.

NOTE. It is highly desirable that all pupils should be required to have covered a good elementary course in chemistry before admission to nursing schools. It is quite impossible to teach a subject of this kind in 16 hours. All one may hope to do is to give a few foundation principles and their practical application to the work of a nurse.

#### *Outline of classes and laboratory work*

1 and 2 Introduction; Physical and Chemical Changes

(Class) Chemistry defined. Relation to the work of a nurse. Branches of chemistry. Physical states of matter. Changes in its physical state. Identification of substances. Physical and chemical changes.

(Laboratory) Bending and breaking glass tubing. Folding filter papers, etc. Simple experiments to show physical and chemical changes.

3 and 4 Elements, compounds and mixtures

(Class) Definition of elements. Physical state. Names and symbols of those in common use. Atoms. Definition of compound. Its characteristics. Nature of mixtures. Means of separating. Molecules. Use of formula. Atomic and molecular weight. Law of definite proportions. Valence. The chemical equation. Types of chemical change. Law of conservation of matter. Energy and energy changes.

(*Laboratory*) Experiments to show the difference between mixtures and compounds and types of chemical changes.

5 and 6 Oxygen and oxidation

(*Class*) Occurrence. Importance to life. Composition of air. Physical and chemical characteristics of oxygen. Use of catalytic agents. Oxygen in the body. Oxidizing and reducing agents. Oxygen as a stimulant. Ozone.

(*Laboratory*) Experiments to show the preparation and properties of oxygen; oxidation and reduction.

7 and 8 Hydrogen and its oxides

(*Class*) Physical properties and chemical behavior of hydrogen. Water; its importance to life; physical properties; chemical characteristics; foreign matter in water; water as a solvent. Heat of solution. Suspensions and colloidal solutions. Boiling point of solutions. Osmotic pressure. Hydrogen peroxide. Composition of formula. Action as bleach and as an antiseptic.

(*Laboratory*) Demonstration of preparation and properties of hydrogen. Hydrogen peroxide as an oxidizing agent. Demonstration of distillation. Simple experiments to show the distribution of water, solubility of substances and effect of dissolved substances on boiling point.

9 and 10 Acids and bases

(*Class*) Formulas of common acids. Common properties of acids with indicators, metals, bases, carbonates. Strong and weak acids. Meaning of strong and weak acid. Acids in the body. Formulas of common bases. Common characteristics. Strong alkalies and their use. Acid and basic oxides. Their reaction with water.

(*Laboratory*) Tests for characteristics of acids and bases.

11 and 12 Salts

(*Class*) Composition. Methods of obtaining salts. Normal salts. Acid and basic salts. Double salts. Hydrolysis. Hydrates. Efflorescence. Deliquescence. Salts in hard water. Importance of salts in the body.

(*Laboratory*) Experiments to show neutralization, hydrolysis, presence of water of crystallization. Softening water.

13 and 14 Introduction to organic chemistry

(*Class*) Definition. Distribution of carbon. Carbondioxide. Carbonmonoxide. Simple description of hydrocarbons, alcohols, aldehydes, ethers, organic acids, esters, alkaloids, carbo-

hydrates. Classification. Hydrolysis. Digestion of carbohydrates and products of carbohydrate metabolism.

(*Laboratory*) Test for constituents or carbohydrates. Action of reducing sugars on Fehling's Solution. Hydrolysis, fermentation. Demonstration to show digestion of starch.

#### 15 and 16 Proteins and fats

(*Class*) Nitrogen and some of its compounds. Complexity of protein molecule. Classes of proteins. Protein reactions with heat and salts of heavy metals. Structure. Hydrolysis. Saponification. Emulsification. Digestion of fat. Action of bile. Products of fat metabolism.

(*Laboratory*) Test for nitrogen. Color tests for protein. Precipitation of protein by heat and metallic salts. Experiments showing the solubility of fats in water, alcohol, ether. Demonstration to show digestion of fat and protein.

#### *Equipment*

List of teaching equipment will be furnished on request.

#### *Textbooks*

**Goostray and Karr.** Applied Chemistry for Nurses  
**Rosenholtz.** Applied Chemistry for Nurses

#### *Reference books*

**Bliss & Olive.** Chemistry for Nurses  
**Bogert.** Fundamentals of Chemistry.  
**Brownlee, Fuller, Hancock, Whitsit.** Chemistry of Common Things  
**Kendall.** Smith's College Chemistry  
**McLeod.** Chemistry for Nurses  
**McPherson & Henderson.** General Chemistry  
**McPherson & Henderson.** Chemistry and Its Uses  
**Pope.** Physics and Chemistry for Nurses  
**Sherman.** Chemistry of Food and Nutrition  
**Smith, Alex.** Textbook of Elementary Chemistry  
**Snell.** Elementary Household Chemistry  
**Vulte.** Household Chemistry

If 20 hours can be devoted to the classes, it is suggested that the additional time be devoted to organic chemistry which is so very briefly touched upon in the above outline.

#### *Methods of teaching*

1 No course in chemistry, however limited in scope, can be adequately presented by the lecture method only. There should be recitations, quizzes and laboratory work.

2 As far as possible each student should work out her own experiments in the laboratory. If this is not always possible they should be demonstrated by the teacher, followed by a quiz to make

sure that the student has understood the fundamental principles involved.

3 Each student should keep a laboratory notebook. Emphasis should be placed on accuracy in following directions, in observation and in recording the conclusions.

### First Year — 2d Semester

#### ADVANCED NURSING

Time: 24 hours. Twelve hours' lecture and demonstration' by nurse instructor, and 12 hours' practice.

##### *Objects of the course*

- 1 To secure a uniform, finished technic in nursing procedures.
- 2 To give the nurse a knowledge of the theory underlying each nursing procedure.
- 3 To train the powers of observation in noting the effects of the various treatments on the patient.
- 4 To make the nurse realize that nursing is a science, and to correlate it with the various theoretical subjects in the curriculum. (The time allowed in the required course is too short for the inclusion of this topic. A longer course is recommended in which this correlation could be made.)

##### *Topics*

- 1 Administration of drugs: Hypodermic, inhalation (croup kettle, croup tent, oxygen), inunction

##### *a Lecture and demonstration*

- (1) Hypodermic: When necessary, character of drug used, site of injection, dangers and precautions. Demonstration of technic on dummy. If solutions are used in the hospital, demonstrate the filling of a syringe when a tablet is used.
- (2) Croup kettle: Ordinary inhalation of benzoin, or something similar. Small amounts of solution should be used and renewed frequently so as to get full strength. Danger of burning. Making paper cone, or use of blanket. Mention the burning of dry leaves, such as stramonium.
- (3) Croup tent: When used. How to improvise indicated, but not demonstrated.
- (4) Oxygen: Apparatus explained. How to administer (heavier than air).

- (5) Inunction: Drug usually ordered. Mode of administration. Areas used, and cycle ordinarily followed.

*b Practice*

- (1) and (2) Hypodermic and croup kettle: Sufficient practice should be obtained in any hospital on the wards.
- (3) Croup tent: All should actually prepare a croup tent at least twice, as the instructor directs, observes and comments.
- (4) Oxygen: All should demonstrate turning on the apparatus, and show that they understand where to hold the funnel.
- (5) Inunction: Nothing to practice. Pupils should understand how the treatment is given.
- Lecture and demonstration.... 1 hour
- Practice ..... 1 hour

2 and 3 Colon irrigation, proctoclysis, and rectal feedings

*a Lecture and demonstration*

- (1) Colon irrigation: Purpose and effect. Solution used. Demonstration of method. Dummy can be used, but patient preferred as actual patient sometimes presents difficulties in getting the return.
- (2) Proctoclysis: Purpose and effect. Demonstration of apparatus used. Regulation of flow. Methods of keeping hot.
- (3) Rectal feedings: When necessary. Methods of aiding retention and absorption. Review peptonization of milk, digestion, and absorption.

*b Practice*

No time is allowed for practice in the classroom. Students obtain enough practice in giving colon irrigations on the wards. Special practice is not needed in proctoclysis and rectal feedings.

Lecture and demonstration..... 2 hours

4 Catheterization, bladder irrigation and instillation

*a Lecture and demonstration*

- (1) Catheterization: Dangers. Utensils and draping are shown on the dummy, but the nurse should actually see a patient catheterized, and should have the opportunity of catheterizing several times. This should be possible even in a small hospital.

- (2) Bladder irrigation with and without instillation. Causes, symptoms, and treatment of cystitis. Utensils and draping demonstrated on the dummy. Should be demonstrated on a patient when the opportunity presents itself, and the nurse should actually do the treatment several times. Considerable practice in this treatment is needed to effect skill and not cause the patient unnecessary suffering.

**b Practice**

No practice in the classroom is necessary. Students should get sufficient experience on the wards in catheterization. Bladder irrigations occur infrequently but practice must be on patients.

Lecture and demonstration..... 1 hour

**5 and 6 Lavage, gavage, nasal gavage, test meal**

**a Lecture and demonstration**

- (1) Lavage: Purpose and effect. Precautions to be observed. How to pass the tube. Measures to use if it is difficult to get the return. Kind and quantity of solution used. Draping of the patient, and necessary utensils demonstrated on the dummy. The treatment should be demonstrated later on a patient, and the students should have an opportunity of doing the treatment 2 or 3 times.
- (2) Gavage: If the stomach tube has been passed, no practice is needed. When necessary, and the precautions.
- (3) Nasal gavage: When used, and the precautions (Danger of getting into the trachea, observe color, give in small amounts, listen). Method explained. The nurse may never have an opportunity of giving this treatment, as it can not be ordered unless necessary. Students should be able to give this treatment if the dangers are understood.
- (4) Test meal: Purpose, time, type of food. No practice needed. Practice gained in passing the stomach tube in giving lavage. Test meals are often expressed by the doctor.

**b Practice**

No time is allowed for practice in the classroom

Lecture and demonstration..... 2 hours

## 7 and 8 Treatment of inflammation

*a* Lecture and demonstration

Review the causes and signs of inflammation, and a reflex nervous action.

- (1) Counter-irritants: Classification and effect. Mustard foot bath, cupping, stupes, cautery, cantharides plaster.
- (2) Cold: Ice coil. Compresses.
- (3) Depletion: Leeches. Wet cupping.

*b* Practice

- (1) Mustard foot bath: Not ordered frequently enough for each student to give to a patient. Should be given in classroom.
- (2) Cupping: Some difficulties encountered in securing this treatment for all. Rubber dam can be stretched over the chest of the dummy and each student demonstrate putting on the cups.
- (3) Cautery: All should fill and test to demonstrate they have a knowledge of its mechanism.
- (4) Cantharides plaster: All should apply to the dummy.
- (5) Ice coil: All should demonstrate filling the tank, attaching coil, and keeping water circulating.

Lecture and demonstration.... 2 hours

Practice ..... 3 hours

## 9 and 10 Baths

*a* Lecture and demonstration

Temperature and effect of hot, warm, and cold baths.  
Necessity of observing the pulse in hot and cold baths.  
Dangers of burning in hot baths. Use of water to drink in hot baths. Value of friction in cold baths.  
What to do for cyanosis and chill in cold baths.  
Demonstrate a hot pack, and indicate the methods of giving a hot air and vapor bath. Demonstrate sponge and sedative pack, and discuss medicated baths.

*b* Practice

- (1) Hot pack and sedative pack: These sometimes occur frequently enough on the wards to omit practice in the class room.
- (2) Sponge: All should give to student acting as patient. Method of giving friction with the vigor necessary can be demonstrated on the students.

- (3) **Slush:** After giving sponge all should demonstrate the variation necessary to make it a slush bath.
- (4) **Cold pack:** Having seen a sedative pack given, all should give a cold pack to reduce temperature, noting the difference in technic, using the student as a patient.
- (5) **Typhoid tub:** Warm water can be used, and students will volunteer to act as patients. A student can assist the instructor, demonstration and practice occurring at the same time.
- (6) **Hot air bath:** Each should improvise and prepare the dummy or patient for this treatment, so she could do it in a home if necessary.

Lecture and demonstration.... 2 hours

Practice ..... 5 hours

## II and 12 Aseptic treatments

### a Lecture and demonstration

- (1) **Aspiration:** Causes of accumulation of fluid. Transudates and exudates. When necessary. Dangers.
- (2) **Hypodermoclysis and infusion:** Purpose and effect. When each should be used. Solution necessary for infusion.
- (3) **Phlebotomy:** Purpose.
- (4) **Transfusion:** Compare direct and indirect methods. Purpose. Symptoms of hyper-transfusion.
- (5) **Lumbar puncture, salvarsan, and intraspinal treatment:** Some practical points in connection with venereal diseases. Purpose and dangers.

### b Practice

#### (1) Aspirations

- (a) **Chest:** Discuss position and method of draping. All students should test the apparatus to be sure they know how to use it. Practice in classroom unnecessary.
- (b) **Pericardium and abdomen:** Do not occur frequently. Each student, as instructor indicates method, should prepare for the treatments.
- (2) **Hypodermoclysis and infusion:** Each pupil should take tray apart and set it up again, instructor explaining use of each article. Areas used and draping should be discussed. Hypodermoclysis occurs frequently enough to make practice in classroom

unnecessary, but infusion should be demonstrated in class by each student as instructor indicates procedure.

- (3) Phlebotomy: Each student should demonstrate. Difficult to obtain enough practice in ward.
- (4) Transfusion: Direct method would have to be learned in operating room. Indirect method being a combination of phlebotomy and infusion, only necessary additions to prevent clotting need be demonstrated.
- (5) Lumbar puncture and salvarsan: Practice in class-room unnecessary.
- (6) Intraspinal treatment: Each student should demonstrate, and instructor can judge her knowledge of lumbar puncture technic.

Lecture ..... 2 hours

Practice ..... 3 hours

Classes should consist of small groups. There should never be more than twelve students in a group. For most of the practice several students can work at the same time, but in baths not more than two should be taken for practice at one time.

Practice in the classroom never takes the place of giving treatments on the wards. In order that the treatments may be used to the best advantage and that each student may have the opportunity of giving as many of them as possible, a careful record of the treatments done from time to time by each student should be accurately kept. When a rare treatment is ordered, students should be sent from other wards to give it in order that as many of them as possible may receive the benefit of the practice. No student should give a treatment until she has witnessed a demonstration and undergone proper supervision in her own execution of it.

### *Textbooks*

Harmer. Principles and Practice of Nursing  
 Sanders. Modern Methods in Nursing  
 Maxwell & Pope. Practical Nursing

### *Reference Books*

Brunton. Lectures on the Action of Medicines  
 Hare. Practical Therapeutics  
 Stiles. Nutritional Physiology  
 Halliburton. Handbook of Physiology  
 Adami. Systemic Pathology  
 Bastedo. Materia Medica  
 Hinsdale. Hydrotherapy  
 Baruch. Principles and Practice of Hydrotherapy  
 Kellogg. Rational Hydrotherapy

## DIETOTHERAPY

Time: 8 hours. Taught by dietitian.

*Objects of the course*

- 1 To give the nurse a knowledge of the commoner diseases which depend upon dietary measures for their satisfactory treatment and cure.
- 2 To aid her in the application and modification of normal requirements to the dietary treatment of all therapeutic conditions.
- 3 To assist her in planning diets for abnormal conditions.
- 4 To teach her to compute food values of diets and to chart diets.

*Outline of classes*

- 1 Diet in diseases of the gastro-intestinal tract — stomach diseases
- 2 Diet in diseases of the gastro-intestinal tract continued — intestinal diseases
- 3 Diet in diseases of the kidney  
Diet in gout
- 4 Diet in rheumatic conditions — rheumatism and arthritis  
Diet in cardiac disorders
- 5 Diet in diabetes
- 6 High caloric diets  
Diet in fevers — typhoid fever  
Diet in exophthalmic goiter
- 7 Diets — pre and postoperative  
Diet in deficiency diseases and anemia
- 8 Diet in pregnancy and lactation  
Artificial infant feeding

NOTE. In each of the above diets the following points are discussed:

- 1 Cause of the disease
- 2 Test diets, if any
- 3 Principles of treatment in regard to diet
- 4 Foods to avoid and reasons for avoiding
- 5 Foods to give and reasons
- 6 Special diets given such as Karell for Nephritis, etc.
- 7 Planning of day's diet for each disease

*Books for assigned reference reading*

Carter, Howe & Mason. Nutrition and Clinical Dietetics  
Friedenwald & Ruhräh. Diet in Health and Disease  
Sherman. Chemistry of Food and Nutrition  
Grulee. Infant Feeding  
McCollum. Newer Knowledge of Nutrition  
Hawk. Physiological Chemistry  
Eddy. The Vitamine Manual

## MATERIA MEDICA

Time: 16 hours. Lectures by physician.

*Objects of the course*

1 To continue the study of drugs from the standpoint of their practical action and use on patients, emphasizing the intelligent administration of medicines and the observation and recording of the after effects.

2 To teach student nurses the action of drugs as they occur on patients, or the effects which are expected from the drugs so that they may understand the general purpose for which different drugs are ordered, that they may cooperate intelligently with the physician in his effort to get the best results from drugs and may appreciate the importance of observing the after effects.

3 To recognize untoward or dangerous effects, idiosyncrasies and poisonous effects.

4 To familiarize the nurse with the minimum, maximum and toxic doses of the commonly used drugs and all the more dangerous drugs, so that she may better safeguard the patient from possible errors or mistakes. The nurse should know the antidote for all the common forms of poisoning, and be ready to render first aid in such cases.

5 The course should attempt to correlate the observation of the practical effects of drugs as they occur in the wards, with the class work. The course should be arranged so that the drugs having the simplest action or those requiring little preliminary knowledge of physiology should be taken up first, and these should be followed by the study of drugs whose action requires a greater knowledge of physiology. The study of each group of drugs should be preceded by a discussion of the physiology of the organs involved.

*Outline of classes*

- 1 General principles of materia medica: preparations, mode of action, methods of administration, etc.
- 2 Drugs acting locally on skin and mucous membranes
- 3 Drugs acting on the gastro intestinal tract
- 4 Drugs acting on the blood and blood forming organs
- 5 Drugs acting on the circulation; circulatory stimulants
- 6 Drugs acting on the circulation continued; Vaso constrictors, Cardiac depressants, Vaso dilators
- 7 Drugs acting on the nervous system; cerebro-spinal stimulants
- 8 and 9 Cerebro-spinal depressants

- 10 Anesthetics
- 11 Hypnotics and analgesic antipyretics
- 12 Drugs acting on nerve endings
- 13 Local anesthetics and medicinal foods
- 14 Drugs acting on kidneys and on uterus
- 15 Specifics
- 16 Organic remedies, serums, antitoxins and allergic proteins, etc.

### *Textbooks*

**Blumgarten.** *Materia Medica for Nurses*  
**Parker.** *Materia Medica and Therapeutics*

### *Reference books*

**Dock.** *Materia Medica for Nurses*  
**Foot.** *Essentials of Materia Medica and Therapeutics for Nurses*  
**Pope.** *Materia Medica for Nurses*  
*New and Non-Official Remedies* (published by American Medical Ass'n)  
**Bastedo.** *Materia Medica and Therapeutics*  
**Cushny.** *Text Book of Pharmacology and Therapeutics*  
**Sollmann.** *Text Book of Pharmacology*

## ELEMENTARY PRINCIPLES OF MASSAGE

Time: 16 hours. Taught by qualified masseuse.

- 1 Lecture — introduction: History of massage, nomenclature, contra-indications, review of muscles, their action and nerve supply
- 2-4 General massage: starting at foot, leg, thigh — left then right arms, chest, abdomen and back  
Procedure. Touch or pressure: A passive touch consists of lightly touching the affected part with one or more fingers or entire hand or with both hands. To produce a hypnotic effect and relief from insomnia the patient should be required to close her eyes. She should neither speak nor be spoken to. To relieve pain deep pressure is indicated over motor points.
- 4-5 Class — demonstration and practice  
Stroking or effleurage: Touch combined with motion, using fingers of one or both hands. When correctly applied is decidedly sedative.  
Friction: The hands are moved over the surface with varying degrees of pressure, heavier over the fleshy parts and lighter over the thin and bony surfaces. At no time so great that the hand will not glide readily over the area being treated, thus avoiding any interference with the arterial stream.

**6-8 Class — demonstration and practice**

**Kneading:** superficial, deep

**Superficial:** Use thumbs in circles, a draining and gliding movement in perfect rhythm, this means much to your patient.

**Deep kneading:** Use the whole hand making circles, picking up all the underlying muscles. In the abdomen, when this part is indicated, make your pressure between the finger tips of one hand against the heel of the other, thus lifting, rolling and stretching the underlying tissues. Effects to be produced, stimulating nerves, glands, metabolism etc.

**9 Class—demonstration and practice**

**Vibration:** One or both hands employed. With hands on patient, a fine tremor is transmitted to patient from the operator and may be deep or superficial. Effect very stimulating.

**Percussion or tapotement:** This procedure consists of blows, raps or chopping, administered with varied force using both hands alternately.

**NOTE.** In most cases a nurse would omit these last two movements and follow the kneading with stroking thus leaving her patient perfectly relaxed without fatigue and with a desire for sleep.

**10-12 Class—demonstration and practice**

**Local massage:** Important in after-treatment of orthopedic cases, using the stroking and draining movements above affected part and friction and kneading below, being extremely careful to immobilize the part in question.

**13-14 Joint movements or medical gymnastics**

**Passive:** those in which the patient has no part

**Active:** those in which the operator gives resistance

After each part is treated, foot for example, these movements, if indicated should be used, flexion, extension, circumduction etc.

**14-15 Medical head treatment**

**Procedure:** Effleurage and stimulating or sedative movements. If for insomnia, again patient should be required not to speak nor should she be spoken to.

**16 Review.**

*Books for reference reading*

- Mitchell.** Massage and Exercise in Cohen's System of Physiologic Therapeutics, volume 7  
**Palmer.** Lessons on Massage  
**Nardi.** Hand Book of Medical Gymnastics  
**Despard.** Text Book of Massage  
**McKenzie.** Exercise in Education and Medicine

**ETHICS**

Time: 8 hours. Classes and conferences by director of school.

*Objects of the course*

- 1 To follow up the work of the first term in the historical and social aspects of nursing by a fuller discussion of the principles of behavior, their origin, meaning and practical bearing on the common experiences and problems of life.
- 2 To lead pupils to a clearer understanding of what is meant by self-government and self-control, and to help them to be thoughtful and conscientious in their every-day life and work.
- 3 The effort is made here to build up broad general principles which apply equally well to all phases of life and all types of people, rather than to emphasize a special code which is restricted to one group and one type of occupation.

*Outline of classes*

- 1 Different types of ethical conduct; control by custom, tradition, force and impulse, or by free choice and rational, independent judgment; personal responsibility for conduct
- 2 Modern ethical ideals and standards; their sources and development; what goes to make character
- 3 The place of good judgment, will power and habit in ethical conduct and character
- 4 The claims of self and the claims of others; what is due to each
- 5 Ethical principles as applied to community life; public spiritedness and public service
- 6 Ethical principles as applied to one's work or profession; standards of service and efficiency
- 7 Ethical principles as applied to one's personal life — friendships, recreation, dress, expenditures, religious life, etc.
- 8 Hospital etiquette and ethics; special problems

*Books for reference reading*

- Robb.** Nursing Ethics  
**Parsons.** Nursing Problems and Obligations  
**Nightingale.** Notes on Nursing  
**Nightingale.** Talks to Pupil Nurses

**Dewey & Tufts.** Ethics

**Osler.** Acquanimitas

**Trudeau.** Autobiography

**Mackenzie.** Manual of Ethics

**McDougall.** Introduction to Social Psychology

**James.** Talks to Teachers on Psychology

**MacCunn.** Making of Character

**Emerson.** Essays

**Cabot, E. L.** Every-day Ethics

**Cabot, Richard.** What Men Live By

See also under Historical and Social Aspects of Nursing, Psychology and Problems of Professional Life

## Second Year — 1st Semester

### NURSING IN GENERAL MEDICAL DISEASES AND DISEASES OF THE SKIN

Time: 18 hours. Lecture, class and laboratory periods by physician and nurse instructor.

#### *Objects of the course*

To acquaint the student nurse with the modern methods in the field of medicine and nursing and to give her a practical understanding of the underlying social and physiological causes, the symptoms, prevention and treatment of the common medical diseases, so that she may give skilled care to her patient, able assistance to the physician and intelligent service to the community.

#### *Outline of lectures and classes*

- 1 and 3 (*Lectures*) Diseases of the blood, heart and circulatory system
- 2 (*Laboratory class*) Microscopic examination of blood, dissection of a heart. Demonstration of circulation of blood. Demonstration and reading of cardiac tracings. Demonstration of use of stethoscope, blood pressure apparatus.
- 4 (*Class*) Quiz on lectures. Nursing treatment: Accurate observation and reporting of symptoms; general and special treatments; drugs; diet; emergencies; convalescence.
- 5 and 7 (*Lectures*) Diseases of the respiratory tract
- 6 (*Laboratory class*) Dissection of lung, bronchii, trachia. Demonstration: giving of oxygen; administration of pneumonia serum
- 8 (*Class*) Quiz on lectures. Nursing treatment: personal prophylaxis and prevention of common "cold"; general and special treatments; inhalations; croup tent; counter irritants; foreign bodies; drugs; diet; emergencies; con-

valescence; pneumonia complications; tuberculosis treatment

9 and 11 (*Lectures*) Diseases of the gastro-intestinal tract and accessory organs

10 (*Laboratory class*) Use of specimens to show diseases of stomach, liver, gall-bladder. Peyer's Patches, carcinoma, intestinal parasites, demonstrate; lavage; preparation for Barium meal, etc. Examination of stomach and intestinal contents.

12 (*Class*) Quiz on lectures. Nursing treatment: general and special treatments; gavage, nasal and rectal feedings; irrigations; proctoclysis; diet; drugs; emergencies; anti-pyretic treatments; typhoid fever complications

13 (*Lecture*) Diseases of the urinary tract and constitutional diseases

14 (*Laboratory class*) Dissection of kidney; demonstration of simple urinalysis; observation of pathological specimens of kidney, glands etc.

15 (*Lecture*) Diseases of the special glands and of the nervous system

16 (*Class*) Quiz on two preceding lectures. Nursing treatment: importance of proper elimination; care of skin; drugs, diet; emergencies; diaphoretic treatments; hot pack; baths; hydrotherapy; coma; psychoses

#### COMMON DISEASES OF SKIN

Review structure and function of skin and accessory organs, hygienic care of skin, pathology of skin disease, classification of skin diseases. Assign cases for observation and report. Visit skin clinic in dispensary when possible.

#### 17 Lesions of the skin

Types of lesions in skin proper and in mucous membranes. Symptoms—local and general. Characteristic rashes. Complications, treatment and general precautions.

#### Common skin diseases

Causes, symptoms, treatment and prophylaxis of anemia of skin, hyperemia, erythema, eczema, urticaria, dermatitis, impetigo, psoriasis, erysipelas and parasitic diseases of the skin.

18 Nursing measures in skin diseases with special reference to hygiene, diet, bathing, local applications, dressing etc.

*Textbooks*

**Emerson.** Essentials of Medicine

**Stevens.** Practice of Medicine

*Reference books*

**Maxwell & Pope.** Practical Nursing

**Sanders.** Modern Methods in Nursing

**Osler & McCrae.** Principles and Practice of Medicine

**Hughes.** Compend of the Practice of Medicine

**Rosenau.** Preventive Medicine and Hygiene

**Hare.** Practical Therapeutics

**Hinsdale.** Hydrotherapy

**Baruch.** Principles and Practice of Hydrotherapy

See also reference books on pathology, dietetics, *materia medica*, etc.

## SURGERY AND SURGICAL NURSING, INCLUDING GYNECOLOGICAL NURSING

Time: 16 hours. Note. If more time can be allowed for this course give additional clinics. Lectures and clinics by surgeon.

*Objects of the course*

To give the student nurse a good general idea of the principal surgical diseases, their symptoms and treatment and the various nursing procedures in order that she may care for surgical patients intelligently, be of the greatest possible assistance to the surgeon in dressing and treatments and be able to act promptly and wisely in emergencies.

**1 Pathology****a Inflammation**

- (1) The various stages of inflammation
- (2) Its causes
- (3) Its pathological picture
- (4) Clinical phenomena
- (5) Healing by primary union
- (6) Healing by secondary union
- (7) Infections

**b Types of organisms**

- (1) Aerobic
- (2) Anaerobic
- (3) Organisms causing chronic inflammation
- (4) Portals of entry by which bacteria gain access into the body

**c Injuries****d Deformities**

- (1) Congenital
- (2) Acquired

- e* New growths
  - (1) Benign
  - (2) Malignant
- 2 Shock and hemorrhage
  - a* Definition of shock
    - (1) Prophylactic treatment of shock
    - (2) Treatment of shock
    - (3) Transfusions
      - (a) Grouping for transfusions
      - (b) Methods of transfusion
        - The direct method
        - The indirect method
        - The Lewisohn method
        - The Unger method
        - The Lindeman method
    - (4) After treatment of transfusion
  - b* Hemorrhage
    - (1) Types of hemorrhage
      - (a) Arterial hemorrhage
      - (b) Venous
      - (c) Capillary
    - (2) Symptoms of hemorrhage
    - (3) Treatment of hemorrhage
      - (a) Ligature
      - (b) Tourniquet
      - (c) Caution
      - (d) Pressure
      - (e) Styptic
    - (4) After treatment of hemorrhage
- 3 Postoperative complications
  - a* Their importance
  - b* Nausea
    - (1) Its causes
    - (2) Its treatment
  - c* Pernicious vomiting
    - The treatment of acidosis
  - d* Gastric dilatation
    - (1) Its symptomatology
    - (2) Its treatment
    - (3) Lavage
    - (4) Gastric tolerance diet
    - (5) Delafield's mixture

*e* Tympanites

## (1) Its causes and treatment

(a) Use of rectal tube

(b) The magnesium sulphate enema

(c) The irritative enema

(d) Colon irrigations

Advantages

Disadvantages

Methods used

Aids to colon irrigations

*f* Auto-intoxication

## 4 Postoperative pneumonia

*a* Its seriousness*b* Prophylaxis

(1) Anteoperative

(2) Postoperative

*c* Treatment of postoperative pneumonia*d* Pulmonary embolism

(1) Its symptomatology

(2) Its treatment

*e* Urinary retention*f* Suppression of urine

Its treatment

*g* Phlebitis*h* Thrombosis

Treatment of these conditions

*i* Hemophilia

(1) Its treatment

(2) Use of horse serum

(3) Anaphylaxis

## 5 Surgery and surgical nursing of the alimentary system

*a* The mouth

(1) The inflammatory conditions of the mouth

(2) Its care in gastro-intestinal and pharyngeal operations

*b* The jaw

(1) New growth of the jaws

(2) Anteoperative treatment

(3) Operative treatment

(4) Postoperative treatment

**c The tongue**

- (1) Diseases of the tongue
- (2) Anteoperative treatment
- (3) Operative treatment
- (4) Postoperative treatment, especially in hemiglos-  
sotomy and complete glossectomy cases
- (5) Treatment of inoperable carcinoma of the tongue

**d The pharynx****e The treatment of peritonsillar abscess****f Tonsillectomy**

- (1) Anteoperative treatment
- (2) Operative treatment
- (3) Postoperative care

**g Adenoids****h The esophagus**

- (1) Diseases of esophagus
- (2) Treatment of burns of the esophagus
- (3) Foreign bodies in the esophagus
- (4) Stricture of the esophagus
- (5) New growths of the esophagus

**i Gastrostomy**

- (1) Its indications
- (2) Anteoperative treatment
- (3) Operative treatment
- (4) Postoperative treatment

**j The stomach**

- (1) Diseases of the stomach
- (2) Gastro and duodenal ulcers

**k Treatment of ulcers**

- (1) Medical
- (2) Surgical

**l Gastroenterostomy**

- (1) Anteoperative care
- (2) Operative care
- (3) Postoperative care
- (4) The maintenance of the sterile toilet of the perite-  
neum

**m Complications after gastroenterostomy**

- (1) Hemorrhage
- (2) Vomiting

- n* Perforated gastric ulcer
  - (1) Anteoperative treatment
  - (2) Operative treatment
  - (3) Postoperative treatment
- o* Surgical treatment of cancer of stomach
  - (1) Gastric resection
- p* Surgical conditions of intestines
  - (1) Intestinal resections
  - (2) The Murphy Buttons
- q* Intussusception
  - (1) Postoperative treatment
- r* Intestinal obstruction
  - (1) Anteoperative treatment
  - (2) Operative treatment
  - (3) Postoperative treatment
- 6 Appendicitis
  - a* Classification
  - b* Symptomatology
  - c* Acute appendicitis and its treatment
    - (1) Its complications
      - (a) Abscess
      - (b) Hemorrhage
      - (c) Fecal fistula
  - d* The colon
    - (1) Its diseases
    - (2) Colostomy and colotomy
    - (3) Postoperative care of the colostomy wound
  - e* The rectum
    - (1) Its diseases
    - (2) Ischiorectal abscess and fistula
  - f* Hemorrhoids
    - (1) Their treatment
  - g* Treatment of rectal hemorrhage
  - h* Cancer of the rectum and the various operations concerned with it
  - i* Cholelithiasis
    - (1) Cholecystotomy
    - (2) Cholecystostomy
    - (3) Cholecystectomy
    - (4) Cholecystenterostomy
    - (5) Postoperative treatment

- j* Surgical diseases of the liver
  - k* Injury to the liver
  - l* Abscess of liver
  - m* Cirrhosis of liver
  - n* Surgical diseases of the pancreas
  - o* Hernia
    - (1) Varieties
    - (2) Treatment
    - (3) Anteoperative care
    - (4) Operative treatment
    - (5) Postoperative care
- 7 The surgery and surgical nursing of the glandular system
- a* Classification of glands
    - (1) Those with ducts
    - (2) Those without ducts
    - (3) Those which are a combination of 1 and 2
  - b* Diseases of the pituitary gland
    - Their treatment
  - c* Diseases of the thyroid gland
  - d* Cretinism
  - e* Myxedema
  - f* Goitre
    - (1) Its treatment
    - (2) Anteoperative treatment
    - (3) Operative treatment
    - (4) Postoperative treatment
  - g* Exophthalmic goitre
    - (1) Symptomatology
    - (2) Medical treatment
    - (3) Surgical treatment
    - (4) Anteoperative treatment
    - (5) Operative treatment
    - (6) Postoperative treatment
  - h* Tetany
- 8 The surgery and surgical nursing of the nervous system
- a* Fracture of the skull
  - b* Brain injury
    - (1) Anteoperative care
    - (2) Operative care
    - (3) Postoperative care
  - c* Brain abscess

- d* Mastoiditis and sinus thrombosis
  - (1) Anteoperative treatment
  - (2) Operative treatment
  - (3) Postoperative treatment
- e* Tumors of the brain
  - Their treatment
- f* Surgery of the spinal cord
- g* Surgery of the spinal nerves
- 9 Surgery and surgical nursing of the osseous system
  - a* Types of fractures
  - b* Reduction of fractures
  - c* Immobilization of fractures
  - d* Treatment of sprains
  - e* Strapping
  - f* Use of bandages
  - g* Strappings and splints for fractures
  - h* Plaster of Paris bandages and splints
  - i* Plaster spicas and jackets
  - j* Method of obtaining traction
  - k* Methods of suspension
  - l* Open operation for fractures
  - m* Osteomyelitis
  - n* Dakin treatment
  - o* Amputation. After treatment
  - p* Pyarthrosis
  - q* Arthroplasty
- 10 The surgery and surgical nursing of the reproductive system
  - a* Organs of reproduction
  - b* Operations on the female genital system
  - c* Perineorrhaphy
    - (1) Anteoperative treatment
    - (2) Operative treatment
    - (3) Postoperative treatment
  - d* The uterus
  - e* Inflammation of the uterus
    - Treatment of acute inflammatory condition
  - f* The cervix
    - (1) Its diseases
    - (2) Operative treatment
  - g* Malpositions of the uterus
    - (1) Use of pessaries
    - (2) Operations for retroversion

**h Prolapse of the uterus****Treatment****i Supravaginal hysterectomy****j Vaginal hysterectomy****k Malignant diseases of the uterus****l Use of X-Ray in treatment****m Acute salpingitis****(1) Its causes****(2) Its treatment****n Gonorrhea****(1) Social and economic importance****(2) Prophylactic treatment****(3) Isolation of patient with gonorrhea****(4) Treatment****o Chronic salpingitis****p Ectopic pregnancy****(1) Its symptoms****(2) Its treatments****(3) Postoperative care****q The ovary****(1) Diseases****(2) New growths****Simple cysts****Dermoid cysts****Carcinoma****r The testicle****(1) Acute inflammation of the testicle and epididymis****(2) Symptomatology****(3) Treatment****(4) Chronic inflammation of testicle and epididymis****(5) Symptoms****(6) The treatment of tuberculosis****(7) Hydrocele****(8) Palliative treatment****(9) Operative treatment****(10) Varicocele****(11) New growths of testicle****s The prostate****(1) Acute prostatitis and its treatment****(2) Hypertrophy of the prostate****(3) Suprapubic prostatectomy and perennal prostatectomy****(4) Cancer of prostate**

**11 The surgery and surgical nursing of the respiratory system****a The nose**

- (1) Deviated septum
- (2) Hypertrophy of the turbinates
- (3) Sinusitis

**b The larynx**

- (1) Foreign bodies of the larynx
- (2) Postoperative care
- (3) New growths

**c Tracheotomy**

Postoperative care

**d Injuries to the thoracic wall and their treatment****e Empyema thoracis**

- (1) Its symptomatology
- (2) Treatment
  - Anteoperative
  - Operative
  - Postoperative

**f The lungs**

- (1) Operations upon the lungs
- (2) Methods for maintaining negative pressure
- (3) Foreign bodies in the lungs
- (4) Its surgical treatment
- (5) Pulmonary tuberculosis

**12 The surgery and surgical nursing of the skin and appendages****a Surgical conditions involving the skin****b Classification of wounds**

- (1) Their treatment
- (2) Antiseptics
- (3) Lacerated wounds
- (4) Infected wounds

**c The debridement of wounds**

- (1) Dakin Solution and its chemistry
  - Its manufacture
  - Methods of application

- (2) Bacteria examination of wounds and secondary suture
- (3) Use of wet dressings
- (4) Dry heat
- (5) Suction drainage
- (6) Siphon drainage

*d* Skin grafts

- (1) Thiersch graft
- (2) Reverdian grafts
- (3) Wolf graft

*e* Burns

- (1) Symptomatology
- (2) Treatment
  - Paraffin treatment
  - Carbon monoxide

*f* The breasts

- (1) The nipples
- (2) Acute mastitis
  - Symptomatology
  - Treatment
- (3) Chronic mastitis
  - Symptomatology
  - Treatment
- (4) Carcinoma of breast
  - Its symptomatology

## 13 The surgery and surgical nursing of the urinary system

*a* Diseases of the kidney

- (1) The cystoscope and its uses
- (2) Acute infections of the kidney
  - Pyelitis and its treatment
- (3) Nephrotomy
  - Postoperative treatment
  - Infections
- (4) Renal calculus
  - Treatment
- (5) Nephrolithotomy
  - Postoperative care
- (6) Operations upon the ureter

*b* Treatment of injuries of the urinary bladder*c* Treatment of acute cystitis*d* Chronic cystitis*e* Treatment of tuberculosis of the bladder*f* Bladder stone

- (1) Litholapaxy
- (2) Suprapubic
  - Anteoperative treatment
  - Operative treatment
  - Postoperative treatment

- g* New growths of the bladder
  - (1) Fulguration
- h* Partial and complete cystectomy
- i* Radium treatment
- j* The urethra
  - (1) Internal urethrotomy
  - (2) External urethrotomy
- k* Circumcision
- 14 Clinic
  - a* Demonstration of blood transfusion
  - b* Carrel Dakin dressing
  - c* Demonstration of tracheotomy cases
  - d* Direct or indirect laryngoscope
  - e* Esophagoscopy
  - f* Proctoscopy
- 15 Visit to wards
  - a* Demonstration of various cases illustrating traction and suspension, nephrectomy, gastrectomy ectopic, etc.
- 16 Use of radium and deep X-ray
  - a* Fluoroscopy
  - b* X-ray pictures
  - c* Demonstration of various symptoms

### *Textbooks*

**Colp & Keller.** Textbook of Surgical Nursing

**Harmer.** Textbook of the Principles and Practice of Nursing

## NURSING OF CHILDREN

**Time:** 18 hours. Taught by pediatrician and nurse instructor with special experience in this field.

### *Objects of the course*

1 To help nurses to understand something of the physical and mental development of normal children and the essential principles of child hygiene and management, so that they may intelligently care for normal children and teach others to care for them properly.

2 To teach the principal diseases which affect children, what their special manifestations are, and how to adopt nursing measures to meet the needs of sick children.

3 To give nurses some knowledge of the feeding of normal children and to teach them to be intelligent and exact in the preparation of infant feedings. To emphasize the importance of proper feeding as a therapeutic measure in the diseases of infancy.

4 To give a good basis for later work where knowledge and skill in children's nursing are of essential importance. To develop interest in the social aspects of the various phases of child care.

### THE NORMAL CHILD

#### *Physical and mental development*

Lecture 1 Infancy—from birth to the establishment of first dentition

- a Appearance, weight, height
- b Normal development and growth
- c Normal excretions
- d Hygiene of nursing
- e Clothing for various seasons of year

Childhood—from the establishment of first dentition until the beginning of second dentition

- a Appearance, weight, height
- b Normal development and growth
- c Value of play, direction and supervision of
- d Wise selection of toys and books
- e Habit of correction of pernicious habits

Boyhood and girlhood—from the establishment of second dentition to puberty

- a Physical growth
- b Mental growth
- c Hygiene of adolescence
- d The child and his relationship to other individuals and to groups

#### *Feeding of normal children*

Lecture 2 Infant feeding until 8 months old

- a Regularity
- b Position of infant in breast feeding, in bottle feeding (emphasize vital importance of breast feeding)
- c Mixed feedings; supplementary, complementary
- d Method of handling bottle to guard against contamination

Infant feeding, 8 months until 3 years old

- a Regularity
- b Habit formation as to proper foods
- c Education to avoid marked "likes" or "dislikes"

## Lecture 3 Feeding of preschool and of school child

- a* Regularity
- b* Kinds of foods best suited to various types of children
- c* Food habits to be avoided
- d* Methods of making various foods acceptable and attractive to the difficult child
- e* Method of handling food peculiarities of the preadolescent

## Bathing of normal infants and children

- a* Temperature of water for various ages
- b* Temperature of room
- c* Avoidance of extremes in temperature
- d* Abnormalities which may be observed during bath
- e* Clothing adaptable to various ages and to various seasons of year

## THE SICK CHILD

## Demonstration 1 Feeding the sick infant and child

- a* Adapting methods used with normal children
- b* Necessity for extreme patience and persistence
- c* Precautions

## Demonstration 2 Bathing the sick infant and child

- a* Sponge bath, tub bath, shower
- b* Temperature of water
- c* Temperature of room
- d* Importance of individual equipment
- e* Methods of handling the infant and the child
- f* Observation of symptoms during bath
- g* Clothing best adapted to various conditions and ages
- h* Care of mouth and hair

## Therapeutic baths

- a* Mustard, sodium bicarbonate, bran
- b* Purpose of administration
- c* Methods of preparation, administration, precautions to be observed

Hot and cold packs

*a* Purpose

*b* Methods of preparation, administration, precautions to be observed

Demonstration 3 Croup tent

*a* Purpose

*b* Method of setting up, conduct and precautions to be observed

Irrigations

*a* Ear

*b* Eye

*c* Nose

Installation of medication

Purpose, equipment used, methods of administration, precautions to be observed

Lavage

Gavage

Nasal feeding

Purpose, equipment used, methods of administration, precautions to be observed

Demonstration 4 Method of obtaining specimens (boys, girls)

Special precautions used in catheterizing infants and children

Enemata

Intestinal irrigations

*a* Purposes

*b* Equipment used

*c* Methods of administration

*d* Precautions to be observed

*Medical conditions in childhood*

Lectures 1, 2, and 3 Stomatitis; marasmus; rachitis; gastro-intestinal disorders

Tonsillitis; rheumatism; chorea; cardiac disorders; nephritis

Bronchitis; pneumonia; pleurisy; empyema

Meningitis; poliomyelitis; tuberculosis; otitis media

Whooping cough

Symptoms

Etiology

Treatment

Prognosis

Complications and sequelae

*Surgical conditions peculiar to children*

- Lecture 1 Cleft palate; hare lip  
Pyloric stenosis; intussusception  
Imperforate anus  
Symptoms  
Etiology  
Treatment  
Prognosis

*Orthopedic conditions in childhood*

- Lectures 1, 2 and 3 Anterior poliomyelitis; spastic paralysis  
Tubercular spine; scoliosis; spina bifida  
Tubercular hip, knee; coxa vara  
Club foot; knock knee; bow legs; osteomyelitis

*Infant feeding*

- Demonstrations 1, 2 and 3 Artificial feeding; selection and choice of milk; certified, pasteurized and sterilized milk  
Utensils  
    *a* Use  
    *b* Care  
Materials  
    *a* Methods of preparation  
    *b* Application to particular conditions  
Preparation of formulas  
    *a* For normal infant  
    *b* Modification to meet various conditions, found in sick infants  
    *c* Preparation of special formulas  
        Buttermilk  
        Protein milk  
            Lactic acid milk  
            Acidophilous milk  
            Butter flour mixture  
            Malt soup mixtures

*Prevention of disease*

- Lecture 1 Care of expectant mother  
Home hygiene  
Methods of teaching nutrition to groups of children and mothers

*Textbooks*

**Lucas.** Children's Diseases for Nurses  
**Cutler.** Pediatric Nursing

*Reference books*

**McCombs.** Diseases of Children  
**Morse & Talbot.** Diseases of Nutrition and Infant Feeding  
**Kerley.** Practice of Pediatrics  
**Holt.** Care and Feeding of Children  
**Morse.** Care and Feeding of Children  
**Kirkpatrick.** Fundamentals of Child Study  
**Kirkpatrick.** Individual in the Making  
**Chapin and Pisek.** Diseases of Infants and Children

**Second Year — 2d Semester****NURSING IN COMMUNICABLE DISEASES**

**Time:** 12 hours. Lectures and classes by physician and nurse instructor.

*Objects of the course*

1 To teach the nurse to understand the transmission of disease, and the prophylactic measures so that she may apply intelligent means for the prevention of the spread of communicable diseases, and protect herself against infection.

2 In any infection the nursing care is one of the important parts of the treatment, hence the nurse needs to be informed of the nature of communicable diseases, their complications, and the nursing procedures indicated in each disease.

3 To overcome the fear of communicable diseases by an intelligent application of the knowledge of aseptic technic.

4 To inspire all nurses, especially public health nurses, with the ideal of concentrating their energies upon preventive measures through the dissemination of knowledge concerning the transmission of disease, and the creative and defensive means to eradicate communicable diseases.

*Outline of lectures and classes***Lecture 1 General problem**

Far reaching effects; classification of infectious diseases, terms infectious, contagious, communicable, transmissible, used interchangeably; contact infection — direct and indirect; mucous membrane point of invasion; new knowledge of prophylaxis; modern attitude toward disinfection and fumigation

**Lecture 2 Aseptic fever nursing**

Give history of Pasteur's experiment with the care of various diseases in one ward. Later experiment at the Providence City Hospital

**Class 1 Demonstration of the application of aseptic technic****Lecture 3 Scarlet fever or scarlatina (synonymous)**

Symptoms of onset: subjective, objective; importance of bed care; elimination; fresh air; diet; complications and how to prevent them; treatment: convalescent serum, diuretics; period of detention; possibility of recovered patient developing into carrier; Dick test; prophylaxis

**Lecture 4 Diphtheria, carriers, tonsillitis, Vincent's angina**

Symptoms of onset in respective diseases, differential features; importance of guarding the heart by rest; symptoms of laryngeal diphtheria; nasal and pharyngeal diphtheria; tonsillar diphtheria; administration of antitoxin muscularly and intravenously; culturing; prophylaxis; Schick test; toxin—antitoxin; importance of sufficient rest following an attack

**Lecture 5 Measles, German measles**

Great importance of knowing and recognizing onset; length of incubation period; appearance of Koplik's spots; bed care; prophylactic treatment; convalescent serum; prevention of complications; frequent errors in diagnosis of German measles and scarlet fever and vice versa; most serious aspect of German measles; onset; symptoms; period of isolation, etc.

**Lecture 6 Anthrax, tetanus, rabies**

These diseases transmitted from animals; important aspect of these diseases; diagnoses and prompt prophylaxis necessary; give characteristics of each disease and nursing care; importance of protection to oneself

**Smallpox, cowpox, chicken pox**

Smallpox absolutely preventable; review Jenner's experiment; important facts of differential features of two diseases; social aspects of smallpox; importance of all communities being revaccinated at stated intervals; treatment and nursing care of smallpox

**Lecture 7 Influenza, whooping cough, mumps**

Give history of epidemics of influenza; symptoms of each disease; importance of mortality in various age groups in whooping cough; prophylaxis; nursing care, and community responsibility in helping to control epidemics; progress of serum treatment in the prevention of whooping cough

**Lecture 8 Typhoid fever, typhus**

Symptoms; treatment; nursing care; prophylaxis; good sanitation; administration of serum; give history of decline in the incident of typhoid fever since prophylactic serum was discovered

**Lecture 9 Tuberculosis**

History of campaigns against tuberculosis; various means to eradicate tuberculosis through sanitation, better housing, better living; treatment and nursing care; heliotherapy; responsibility in controlling tuberculosis and rehabilitating the patient

**Lecture 10 Pneumonia**

Pneumonia claims highest mortality of any communicable disease; types and treatment for various types; importance of nursing care; prophylaxis through proper personal hygiene

**Lecture 11 Syphilis**

History of earliest appearance; discovery of germ; diagnosis methods of infection; importance of early diagnosis; treatment; hereditary syphilis; social, moral and economic aspects of syphilis; importance of teaching social hygiene to every community

**Gonorrhea**

History; characteristics of gonococcus; methods of diagnosis; various manifestations of disease in children as vaginitis, and ophthalmia neonatorum; manifestation in adults; mode of infection; preventive measures; importance of education in social hygiene

**Class 2** Have instructor prepare room as in a private home and have an actual demonstration as in a home; nurse enters home under aseptic precautions and prepares room for isolation

*Equipment*

Charts showing Bureau of Health organization

Lantern slides of smallpox and other exanthemata

(Cuts can be obtained from publishing companies that publish books on communicable diseases)

Intubation sets to demonstrate intubation in laryngeal diphtheria  
(Good cuts in Chapin and Pisek's book on Diseases of Children)

Charts showing anatomy of head and respiratory apparatus, especially ears and larynx

Obtain casts of exudate from communicable disease hospitals if possible

*Books and magazines for reference reading*

Have all nurses read Dr Charles P. Emerson's address on communicable diseases, which appears in the September, 1924, number of The Public Health Nurse.

Aseptic Fever Nursing. Dr D. L. Richardson. American Journal of Nursing, September 1915.

Aseptic Nursing of Infectious Disease Patients. Sarah C. Barry. American Journal of Nursing, May 1916

The Technic of Communicable Disease Nursing. Nellie S. Parks. American Journal of Nursing, November 1921

Management of Communicable Diseases from the Standpoint of Public Health Nurses. Kathryn A. Tucker. American Journal of Nursing, March 1922.

*Reference books*

**Myers.** Care of Tuberculosis

**Chapin & Pisek.** Diseases of Children

**Park.** Public Health and Hygiene

**Meara.** The Treatment of Acute Infectious Diseases

**Schamberg.** Diseases of the Skin

(Unusually good cuts of exanthem etc. in this book)

Manual of Aseptic Technic as Used at the Providence City Hospital

(Write to Dr D. L. Richardson, Superintendent of Providence City Hospital, Providence, R. I.)

**Broadhurst.** How We Resist Disease

**Paul.** Fever Nursing

**Chapin.** Sources and Modes of Infection

**Rosenau.** Preventive Medicine

(Also all books under bacteriology and pediatrics, and medical nursing)

A visit to a vaccine laboratory is most helpful if one is accessible.

Publications of the American Social Hygiene Ass'n, 370 Seventh av., New York City

## OPERATING ROOM TECHNIC

Time: 8 hours. Taught by operating room supervisor. Lectures 6 and 7 to be given by physician.

*Objects of the course*

1 To give the student nurse an appreciation of the methods and procedures in use in the operating room.

*Outline of classes*

- 1 General discussions of operating room technic
  - a Need of interest and enthusiasm in the work
  - b Conscientious observance of details, fundamental principles in technic
  - c Relation of bacteria to surgical technic
    - (1) Normal health
    - (2) Injured tissues, operative wounds
- 2 Sterilization, definition
  - a Actual flame
  - b Dry and moist heat
    - (1) Dry — baking
    - (2) Moist — boiling, steam under pressure, autoclave
  - c Chemical solutions  
(List of solutions used, strengths etc.)
- 3 Duties in anesthetic room and toward anesthetist
  - a Thorough equipment and care of anesthetic room
  - b Comfort of patient
  - c Care to and from operating room
- 4 Duties of nurse before, during and after operation
  - a Procedure before operation
  - b Procedure during operation
    - (1) Scrubbed nurse
    - (2) Circulating nurse
  - c Procedure after operation
- 5 Preparations
  - a For laparotomy
  - b For breast case
  - c For mastoid case
  - d For perineal work
  - e For kidney case
- 6 Anesthesia
  - a History
  - b Local anesthesia
    - (1) Novocaine
    - (2) Cocaine
    - (3) Stovaine
    - (4) Aylpin
    - (5) Adrenalin
    - (6) Ethyl chloride

*c* General anesthesia

- (1) Nitrous oxide — oxygen
- (2) Chloroform
- (3) Ethyl oxide — ether
- (4) Ethelyne

7 Advantages and disadvantages of different types of anesthesia

Comparison of ether and chloroform

*a* Stages of general anesthesia

Nerve blocking anesthesia

Spinal anesthesia

8 Pre and postoperative nursing care

*Books for reference reading*

**St Mary Hospital, Rochester, Minn.** The Operating Room  
**Colp & Keller.** Textbook of Surgical Nursing.

## OBSTETRICAL NURSING

**Time:** 16 hours. Lectures and classes by obstetrician and nurse instructor.

*Objects of the course*

1 To make nurses intelligent and competent in the nursing care of obstetrical cases. To enable the nurse to advise and instruct mothers in the care of their own health both before and after childbirth and in the conditions necessary for the rearing of healthy children.

2 To arouse interest in obstetrical nursing and a keener appreciation of its importance, not only to individual mothers and babies but to the welfare of the race.

This course should be preceded by an introductory talk, to be given by the instructor of nurses, on the new attitude toward obstetrics, not only in the medical field but by the public at large, emphasizing the need for thorough knowledge and skill which will enable the nurse to recognize her responsibilities in nursing the obstetric patient, and in teaching the community the need and value of proper medical advice at this time. Models and charts should be used, and demonstrations of equipment and all nursing procedures should be given wherever possible.

Lecture 1 (By obstetrician) Anatomy and physiology

Bony pelvis, male and female, normal and abnormal, bones forming it; pelvimetry, its importance in obstetrics; organs of generation, uterus, tubes, ovaries, vagina; accessory organs, breasts; associate organs, perineum, rectum, bladder, muscles, ligaments; functions of each; charts and models used for demonstration.

**Class 1** (*By nurse instructor, preferably supervisor of obstetrical service*)

Quiz in anatomy of reproductive system; outline of reproduction in lower animals beginning with one-celled animals.

**Lecture 2** Pregnancy and prenatal care

Puberty, ovulation, menstruation, impregnation; development of embryo; care of patient during pregnancy, diet, personal hygiene, exercise, care of bowels; minor discomforts not considered serious, simple remedies used for their relief.

**Class 2** Quiz on lecture. Demonstration of clothing for mother; layette for baby; abdominal binders, garters.

**Lecture 3** Complications and accidents of pregnancy

Premature terminations of pregnancy, ante-partum hemorrhage, placenta previa, premature separation of placenta; pulmonary tuberculosis, pyelitis; toxemias; cause, symptoms, treatments.

**Class 3** Nursing care in above conditions.

**Lecture 4** Mechanism of delivery

In this lecture the obstetrician demonstrates with pelvis and doll the mechanical process of delivery, illustrating attitude, flexion, rotation, extension.

**Class 4** Preparation for labor

This period should be very largely demonstration, using delivery room in institution if possible, also an ordinary room, using such materials as are found in the average home. In this arrangement the nurse is taught the technic of the hospital delivery room, and the application of the same with the simpler utensils as found in the home.

**Lecture 5** Complications of labor and obstetrical operations

Complications: Prolapsed cord, hand, or foot; hemorrhage; atony of uterus, abnormalities of fetus, precipitate labor, lacerations. Operations: episiotomy, version, pubiotomy, craniotomy, forceps, Caesarean section; demonstration of various instruments used.

**Class 5** Delivery

Quiz on mechanism of labor using pelvis and doll. In this class nurse's duties during the first, second and third stages of labor should be discussed, immediate after-care of fundus, perineum and general comfort of patient; obstetrical anesthesia.

**Lecture 6 Physiology and care of the puerperium**

Maintenance of strict asepsis; changes which occur, involution; diet, hygiene, elimination, various methods of caring for the breasts; lochia, quantity, color, odor, indications; lactation, colostrum, milk.

**Class 6 Care of normal puerperium**

In this class the diet, hygiene, exercise, elimination and care of breasts should be discussed, emphasizing different methods followed by obstetricians.

**Lecture 7 Complications of the puerperium**

Subinvolution, post-partum hemorrhage, mastitis, infections, phlebitis, thrombosis, puerperal mania, after-pains, constipation; cause, symptoms and treatment of above conditions.

**Class 7 Quiz on nursing care in above conditions. Discussion of the necessity of watchfulness for early symptoms of mania.****Lecture 8 Normal and premature child**

Characteristics, weight, length, skin, cord, stool, urine, oil bath, cleansing bath, maintenance of body temperature, clothing, food; comparison; diseases to which subjected, through what channels, preventive measures.

**Class 8 Care of normal and premature child**

Quiz on above lecture.

Nursing care of newborn.

Premature child, reasons for special care.

Maintenance of heat, methods used.

Feeding: foods to be used and methods of administering.

Conservation of energy.

Demonstration basket or box that can be fitted up in the home and articles for heating. Premature jacket.

**Textbooks**

**Van Blarcom.** Obstetrical Nursing

**De Lee.** Obstetrics for Nurses

**Reference books**

**Cooke.** A Nurse's Handbook of Obstetrics

**Williams.** Obstetrics

**Bigelow & Bigelow.** Applied Biology,

**Slemons.** Prospective Mother

**Latimer.** Girl and Woman

**Van Blarcom.** Getting Ready to be a Mother

Prenatal pamphlet published by Federal Children's Bureau.

Infant Care published by Federal Children's Bureau.

Prenatal Letters to Mothers published by Federal Children's Bureau.

## PUBLIC SANITATION

**Time:** 8 hours. Lectures and quizzes conducted by physician with board of health experience, or by sanitarian, if possible.

### *Objects of the course*

To give the nurse a general practical knowledge of the hygienic problems of the home and community, and enable her to cooperate more helpfully with the educational agencies, as well as with such administrative bodies as the local and state boards of health.

### *Outline of classes*

Although but 8 hours are given this subject, nine topics are included, thus giving the instructor a choice, as one or more of the interweaving subjects (bacteriology, nutrition and cookery, hospital housekeeping, communicable diseases, etc.) may include parts of the material suggested below.

#### 1 Air and ventilation

Five changes in air of occupied rooms. Relation of stoves or other heating devices to these changes. Temperature and humidity more important comfort factors of ordinary ventilation than oxygen and carbon dioxide. Rate of air renewal and drafts. Advantages of window ventilation. How air temperatures and humidities are measured or determined. The "comfort zone." Relation of clothing to comfort. The skin an important heat regulator for the body. Values of sunlight.

#### 2 Housing and hygiene of buildings

Construction materials: safety; air renewal; dampness. Lighting: percentage of ground used; artificial light; types, minimum regulations; relation of light to health. Other regulations: per capita floor space; fire prevention; occupants per room or house; disease transfer; building heights; traps, vents, toilets; heat; water supply; disinfection of books, rooms; care of dishes, toilets, bathrooms, control of common drinking cups, towels etc.; relations of house planning and city planning to health and living levels. Community responsibilities.

### 3 Food (see nutrition and cookery; diet in disease)

Adulteration of food: types; illustrate control by local or state legislation and U. S. Pure Food and Drug Act. United States meat inspection; cold storage; beneficial results (for example, trichinosis) and limitations (for example, chickens). Methods of food preservation: cold storage; heat (canning), pickling; drying; advantages or difficulties of each. Diseases traced to foods and their control (meats, shellfish): botulism, dysentery, typhoid, trichinosis, tapeworm. Carriers in relation to foods.

### 4 Milk (see bacteriology)

Diseases traced to milk; human, bovine. Methods of inhibiting growth of bacteria: low temperature, pasteurization. How production methods affect bacterial content. Relation of pasteurization to infant death rate. Dried milk for babies. Sanitary standards; milk quality; bacterial content. Methods of milk control. How milk is examined for sanitary quality. How to pasteurize milk with (and in emergencies without) a thermometer; how to make acidophilus milk. Meaning of certified milk; grades A, B, and C in New York State. Acidophilus milk (see diet and disease) for intestinal disturbances.

### 5 Water (see bacteriology)

Diseases carried by water. How water is examined to determine safety; the bacterial count; the coli test; typhoid isolation. Methods of water purification; general principles of action; storage; chlorine or chlorine compounds; rapid sand filters; slow sand filters; boiling better in emergencies than small house filters. Freezing; effects on typhoid.

### 6 Refuse disposal

Types of refuse (garbage, rubbish etc.): amounts of each person; relation to flies, rats, fire etc. Methods of collection, nuisances attending dumping. Comparison of process and advantages of incineration and reduction. Methods adapted to single homes; to hospitals.

### 7 Sewage disposal

Safety and avoiding nuisances main considerations. Relation to disease: flies, bathing beaches, shellfish beds, etc. Methods for single buildings vary with distance between houses, water-flushed plumbing and cost limitations; illustrate for pit and vault privies, box or pail privies, chemical closets, septic closets and subsurface drainage. More rapid or

complete digestion in community systems; illustrated by (1) septic tanks, and (2) contact beds and filters.

## 8 Vital statistics

Types kept by community or state. Values of each to individual and to community. Methods of collecting, recording, and comparing. Illustrate making of curves and graphs. Registration area.

## 9 Health administration

Powers and activities of the Federal Government; of the State Department of Health; of the local health department. How to proceed in emergencies: contagious diseases; broken sewer; unreported deaths. Organization of local health department. Interrelation with private and community organizations (clinics, hospitals etc.). Sanitary codes for locality; for state.

### *General reference books for assigned reading*

**Park.** Public Health and Hygiene  
**Rosenau.** Preventive Medicine and Hygiene  
**Broadhurst.** Home and Community Hygiene  
**Egbert.** Hygiene and Sanitation

### *Special reference books for assigned reading*

#### *Housing and hygiene of buildings*

**Herring-Shaw.** Domestic Sanitation and Plumbing  
**Keene.** Mechanics of the Household  
**Thomson.** Modern Sanitary Engineering

#### *Milk*

**Heineman.** Milk  
**Klein.** Principles and Practice of Milk Hygiene  
**Mendenhall.** Milk, (Publication 35, U. S. Child's Bureau)

#### *Water*

**Mason.** Water Supply  
**Race.** Chlorination of Water

#### *Sewage*

**Hardenberg.** Home Sewage Disposal  
**Kinnicutt, Winslow & Pratt.** Sewage Disposal

### *Vital statistics*

**Secrist.** An introduction to Statistical Methods  
**Trask.** Vital Statistics (U. S. Public Health Reports, Supp. no. 12)  
**Whipple.** Vital Statistics

### *Health administration*

**MacNutt.** Manual for Health Officers  
**Overton & Denno.** The Health Officer

*Disinfectants*

**Rideal & Rideal.** Chemical Disinfection and Sterilization

*Magazines*

American Journal of Public Health

Hygeia

The Child

Nation's Health

Public Health Reports, U. S. Public Health Service

## NURSING IN DISEASES OF THE EYE

Time: 2 hours. Lectures and classes by physician and nurse instructor.

*Objects of the course*

1 To give the nurse an understanding of the care and treatment of the eye.

2 To enable her to safely and efficiently care for patients with diseases of the eye.

*Outline of lectures and classes*

## 1 (Class) The eye

Review of the anatomy and physiology of the eye; embryology; regional anatomy; detailed structure and function of lids, lacrimal apparatus, conjunctiva, septum orbitals, extra ocular muscles, orbital content; diagram to show structures of eyeball.

Essential factors of vision. Refraction surfaces and refracting power of surfaces. Diagram to illustrate formation of image. Pupil-size, action, reflexes. Accommodation: definition, mechanism, amplitude. Retina: nuerones of, types of vision, color vision. Factors essential to binocular vision. Squint, amblyopia exanopsia. Visual tracts. errors of refraction.

## 2 (Lecture)

Eye strain: prevention and effects. Diseases of the eye: causes, effects, symptoms and treatment. External diseases with special emphasis on blepharitis, herpes zoster ophthalmicus, hordeolum, ptosis, tumors of the lids, epiphora, ophthalmia neonatorum, dacrycystis, exophthalmos, conjunctivitis, keratitis, iritis, sympathetic ophthalmitis. Intra-ocular diseases with special emphasis on cataract, glaucoma, choked disc, neuritis, diseases of the retina, cardio-vascular-renal, diabetic, toxic, infectious. Usual operative procedures.

Quiz on lecture. Assisting with examinations of the eye. Solutions used in treatment: preparation, effects, idiosyncrasies. Demonstrations of hot and cold applications, irrigation, technic for instillation of solutions, the preparations for dressings and bandaging. Use of dark room and dark glasses. Preparation of patient for operation and after care. Nurses' duties in cases of injuries or foreign bodies. Precautions in care of patient suffering from communicable diseases.

### *Reference books*

**Lewis.** Ophthalmic Nurse

Pamphlets published by New York State Committee for the Prevention of Blindness.

**May.** Manual of Diseases of the Eye

### *Teaching equipment*

Model of Eye

Charts

Skull

Material for practical demonstrations

## HYDROTHERAPY (recommended)

**Time:** 8 hours. Classes and demonstrations by special instructor qualified in this field of work.

### *Objects of the course*

To give the nurse a general idea of the principles underlying this form of treatment, and the technic of the commoner procedures used in hospital work.

#### 1 (*Lecture*) History of hydrotherapy

The physiological effects of water applied to the skin by immersion at different degrees of temperature (hot, cold, warm) and under pressure as with the douche or spray

Reaction in relation to duration of treatment

#### 2 (*Lecture*) Tonic or stimulant baths (general and local)

Indications for and physiological effects of salt rubs, hot tub bath, cold plunge, needle bath, cold douche, slush bath, cold spinal douche, mustard bath (children), Nauheim bath.

#### 3 (*Class*) Demonstration of above procedures

#### 4 (*Lecture*) Sedative baths (general and local)

Indications for and physiological effect of continuous bath, neutral bath, neutral pack, cold pack, cold sponge, fomentations to spine, compresses to throat and chest, hot immersion, foot or sitz, extreme cold, ice cap, fluxion by alternate

hot and cold, tepid spinal douche, alcohol sponge, alkaline, emollient or sulphur baths

5 and 6 (*Classes*) Demonstration of above treatments

7 (*Lecture*) Elimination treatments

Indications for and physiological effects of incandescent or turkish cabinet baths, sulphur steam baths, hot blanket pack, epsom salt half bath

8 (*Class*) Demonstration of above treatments

*Reference books for assigned reading*

Baruch. Hydrotherapy

Dieffenbach. Hydrotherapy

Kellogg. Rational Hydrotherapy

Harmer. The Principles and Practice of Nursing

### Third Year — 1st Semester

#### NURSING IN MENTAL AND NERVOUS DISEASES

Time: 16 hours. Taught by physician (neurologist or psychiatrist) and nurse instructor who has had special training in this field of nursing.

*Objects of the course*

1 To teach the student nurse the relationship between mental and physical illness and the application of general nursing principles to mental nursing.

2 To teach the underlying causes of mental disease with modern methods of treatment available both in the hospital and in the community.

3 To train the nurse in observation of symptoms as expressed in early childhood and in later life through behavior, so that the early signs of mental illness may be understood and appreciated, and so that nurses may give active and intelligent cooperation in movements for the prevention of mental illness.

4 To teach the importance of directed habits of thought, desirable associations and proper environmental conditions in early childhood and to show the relationship of make-up to mental disorders.

5 To assist in developing resourcefulness, versatility, adaptability and individuality in the nurse. To emphasize qualities essential to success in nursing.

*Outline of classes*

1 Nervous diseases: chorea, paralysis agitans, neuritis, neuralgia, migraine, epilepsy, locomotor ataxia, encephalitis, lethargia, multiple sclerosis, myelitis, aphasia

- 2 Nursing treatments in above conditions
- 3 Ancient concepts of the nature of mental disease. Nomenclature and treatment based upon these concepts. More modern and present concepts. Prevalence of mental abnormality and disease. Importance of mental defect and mental disease for the community and for the state. The relation of dependency, delinquency and inefficiency in education, industry and citizenship.
- 4 The causes of mental disease. The prevention of mental disease. The mental hygiene movement. The relation of mental hygiene to society. Methods for the prevention or relief of nervous and mental disorders and mental defects. Conservation of mental health.
- 5 The structural basis for mental life. Advantages of the psychological approach. Concept of the central nervous system as a mechanism of adjustment. The vegetative nervous system; the sensory motor system; the psychic system. Some of the more important processes of mind. General symptoms of mental disease. Effects of symptoms upon conduct. Physiological and psychological interpretation of symptoms.
- 6 Special problems of mental nursing. The admission of patients. Legal procedures — commitment and parole. Observation of symptoms. Terms used for describing mental symptoms and conditions. Records.
- 7 Some of the more important types of mental disease. Difficulties of classification. Classification of American Psychiatric Association. Psychoses depending upon known causes resulting in known organic changes in the brain; traumatic psychosis; senile psychosis; psychosis with cerebral arteriosclerosis; general paresis; psychosis with cerebral syphilis; Huntington's chorea; brain tumor and other brain or nervous diseases.
- 8 Nursing procedures in paralysis; in deteriorated, stuporous and unconscious states. Tube feeding (demonstration)
- 9 Psychoses produced by toxic agents and conditions: alcohol, drugs, and occupational poisons; infections, diseases, endocrine disturbances and other somatic diseases
- 10 Nursing procedures in delirium. The management of violent resistive and destructive patients. Continuous baths; wet packs (demonstration). Restraint, when employed.

- 11 Relation of personality to psychoses. Psychoses in which the disease seems chiefly concerned in difficulties in instinctive life—maniac depressive psychosis; dementia precox and paranoid conditions.
- 12 Nursing procedures in excitement; in depression. Precautions against injury and suicide. Nursing procedures to combat habit deterioration in dementia precox. Methods of habit training and re-education.
- 13 The psychoneuroses. Theories of the nature of the psychoneurosis. Psychoanalysis as a means of diagnosis and as method of treatment. Treatment of these conditions. Suggestion—re-education, psychotherapy. The prevention of these conditions
- 14 Nursing procedures in the psychoneuroses. The value of isolation—rest in bed, diet, massage, hydrotherapy, diversions and exercise.
- 15 Psychoses added to or dependent upon constitutional mental defect in intelligence or personality that existed and was recognizable before the onset of the psychosis. Epileptic psychoses, psychoses with psychopathic personality and psychoses with mental deficiency.
- 16 The modern treatment of mental diseases. Special medical and surgical procedures. Environment, institutional régime, type of hospital. Objects of treatment. After care. Special measures of treatment—occupations, diversions, recreation, exercise

### *Textbooks*

**Bailey.** Nursing Mental Diseases

### *Reference books*

**White.** Outlines of Psychiatry  
**Meyer & Kirby.** Notes of Clinics in Psychopathology  
**Bleuler.** Text-Book of Psychiatry  
**White.** Modern Treatment of Nervous and Mental Diseases  
**Beers.** The Mind That Found Itself  
**Davenport.** Heredity in Relation to Eugenics  
**Dubois.** The Influence of Mind in the Body  
**Thorndike.** Elements of Psychology  
**James.** Psychology  
**Laird.** Applied Psychology for Nurses  
**Eyre.** Psychology and Mental Hygiene for Nurses  
**Hart.** Psychology of Insanity  
**McDowell.** Social Psychology  
**White.** Principles of Mental Hygiene  
**White.** Mental Hygiene of Childhood  
**Tiffany.** Life of Dorothea Lynde Dix

## NURSING IN DISEASES OF EAR, NOSE AND THROAT

**Time:** 6 hours. Taught by physician and nurse instructor.

### *Objects of the course*

To give the nurse an understanding of the care and treatment of the ear, nose and throat in normal and abnormal conditions.

### *Outline of classes*

- 1 Anatomy and physiology of the nose, pharynx and larynx  
Surgical care of operations upon the septum, sinuses and external nasal deformities
- 2 The care of inflammations and infections of the nose, nasopharynx and larynx
- 3 The postoperative care of tonsilectomies, adenectomies, and other minor operative cases, such as the removal of polyps, turbinates etc.; nursing care, peculiar to these conditions
- 4 The postoperative care of tracheotomy cases, laryngectomy cases, and croup in children, with description of croup tents and inhalation mixtures  
A general consideration of sepsis, antisepsis, and asepsis as related to nose and throat operative work
- 5 Anatomy of the external and middle ear  
Diseases of the external, middle and internal ear bearing upon nursing requirements
- 6 Care of mastoid cases, preparation for operation and possible complications, with significance of same  
Acute and chronic suppurative ear cases, their care and instruments required for the surgical care of the same  
The relative value of asepsis and antisepsis in the care of ear cases as related to general surgical cases and nose and throat cases

### *Books for reference reading*

**Emerson.** Essentials of Medicine

**Bacon.** Manual of Otology

**Manhattan Hospital Staff.** Eye, Ear, Nose and Throat Nursing

## OCCUPATION THERAPY (recommended)

**Time:** 16 hours. Classes by occupation therapist. Four classes, 1 hour each devoted to discussion and observation. Four hours of practical work in basketry. Four hours of practical weaving (2 hour periods).

### *Objects of the course*

- 1 To give the nurse a general idea of the principles underlying this method of treatment, and their application with various types of patients.

2 To make her familiar with the technic of a few of the simpler occupations and to arouse her interest in acquiring a knowledge of other crafts which may be employed in teaching patients.

### *Outline of classes*

#### 1 History of occupation therapy

The inception, growth and development of occupation therapy, and the extension of its use in mental and nervous diseases to other groups, especially the orthopedic, tuberculous, and cardiac. The use of occupation therapy in military hospitals during the World War and the advent of the occupation aid.

History of the training of the occupation therapist — Supplementary training in handicrafts for the graduate nurse and supplementary training in the care of the sick for craftsmen and teachers. Present-day conditions regarding training. The ideals, problems, and necessary personal qualifications of the occupation therapist.

#### 2 Principles of occupation therapy

Diversion and substitution, the underlying psychological principles graded exercise together, form the basic principles of occupation therapy in its various applications.

#### 3 Aims in occupation therapy

To aid in bringing about cure, the primary aim. To alleviate suffering and to improve habits and morale, the secondary aim.

#### 4 Subject matter in occupation therapy

a Selection of occupations, advantages of handicrafts over purely mental occupations, disadvantages of monotonous occupations when they approach drudgery; importance of a wise selection of products within any given occupation, comparative value of amusements.

b Valuation of common occupations given below for relative technical simplicity or degree of difficulty; equipment required, simple or elaborate; suitability for ward occupations or requirement of shop space; special advantages or disadvantages in treatment of mental, orthopedic, cardiac and tuberculous patients, and amputation cases.

### *Occupations:*

Drawing and design, weaving, clay-modeling, reed work (basketry, chair-seating etc.), bookbinding, colonial rug-making, sewing and decorative needlework, cardboard con-

struction, woodwork, multigraphing, typewriting and other commercial subjects.

- c Equipment and material for basketry and hand and foot loom weaving; full details of plans and materials for at least two products each from basketry, hand loom, and foot loom weaving.

*Books and magazines for reference reading*

- Tracy. Studies in Invalid Occupation  
 Dunton. Occupation Therapy  
 Hall & Buck. The Work of Our Hands  
 Blanchard. Basketry Book  
 Turner. The Basket Maker  
 James. Poetry and Symbolism of Indian Basketry  
 James. Practical Basket Making  
 James. Indian and Other Baskets  
 Cabot. What Men Live By  
 Haas. Occupational Therapy for the Mentally and Nervously Ill  
 Haas. Articles in Hand Crafts and Occupational Therapy in the following periodicals:  
 Industrial Arts Magazine, September 1915 to February 1924  
 The Modern Hospital, Articles on occupational therapy  
 The Archives of Occupational Therapy, Wilkins & Wilkins Publishers, Baltimore, Md.

**Third Year — 2d Semester**

**PROFESSIONAL PROBLEMS**

**Time:** 8 hours. Lectures by director of school and by special lecturers representing different fields.

- 1 Ethics and etiquette. Restatement of ethical principles discussed in course in Ethics with application to special fields. Relation to official registries, organizations, and to society.
- 2 Economic problems. Letters of application, preparation of accounts, legitimate charges to patients, budgets, insurance.
- 3 Educational problems. Responsibility for professional status and maintenance of educational standards. Continuation of the educational process; institutes, special lectures, university courses. Scholarships.
- 4 Nursing organizations. American Nurses' Association; National League of Nursing Education; National Organization for Public Health Nursing. Professional magazines: American Journal of Nursing, Public Health Nurse.
- 5 Legal responsibilities. Maintaining and augmenting worth of R. N. Legal problems in case of injury to patient, accidents, abortions etc. and as witnesses to documents.
- 6 Opportunities in institutional work. Special preparation required for administration, teaching, or technical work.

- 7 Opportunities in and preparation for public health nursing.\*
- 8 Opportunities in and special problems relating to private duty nursing.\*

### *Reference reading*

- Nutting & Dock.** History of Nursing, v. 4  
**Dock & others.** History of American Red Cross Nursing (Official)  
**Nutting.** Educational Status of Nursing (U. S. Bureau of Education, Washington, D. C., Bul. 1912, no. 7)  
**Robb.** Nursing Ethics  
**Goldmark.** Nursing and Nursing Education in the United States (Report of survey)  
**Nightingale.** Notes on Nursing  
**Wald.** House on Henry Street  
**Parsons.** Nursing Problems and Obligations  
 Reports of National League of Nursing Education  
 Reports of International Council of Nurses  
 American Journal of Nursing  
 The Public Health Nurse  
 Trained Nurse  
 Pacific Coast Journal of Nursing  
 Canadian Nurse  
 British Journal of Nursing  
 Modern Hospital  
 The Survey  
 See also books on history of nursing, nursing ethics, modern social problems, etc.

## PUBLIC HEALTH AND PUBLIC HEALTH NURSING (recommended)

**Time:** 8 hours. Classes by director of public health nursing association if possible.

### *Objects of the course*

- 1 To give a brief historical background for an appreciation of modern public health and public health nursing.
- 2 To outline the outstanding problems in the field of public health and the programs that are being developed to meet these problems.
- 3 To indicate the relation of the nurse, in private duty, institutional or public health work, to these problems and programs.

### *Outline of classes*

- 1 Sanitation, the control of communicable disease and personal hygiene before the age of modern scientific knowledge
- 2 History of the development of the modern public health movement 1800-50; reasons for this development: the scientific spirit (Pasteur's work) and motives of humanitarianism

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\* If the recommended course, introduction to private duty nursing, is not given, it is suggested that at least 2 hours should be added to the above course. If the course is given, it is suggested that it be omitted and there be substituted therefor the American Red Cross Nursing Service, the Government Nursing Services and International Relationships.

- 3 Results of the application of scientific knowledge, the reduction of morbidity and mortality rates; the sanitation of the environment; the control of communicable disease
  - 4, 5 and 6 The modern movement in public health
    - a Recent developments in the control of communicable disease; vaccine and serum therapy
    - b The present age one of personal hygiene or the application of scientific knowledge in individual life—a matter of education
    - c Statement of problems on modern public health work in terms of morbidity and mortality rates; with brief consideration of their economic and social significance
      - (1) Methods of computing morbidity and mortality rates; importance of birth registration and other statistical data
      - (2) The problem stated according to the following groupings: maternity, child welfare (including school age groups), industrial, tuberculosis, venereal disease, other communicable diseases, heart and kidney diseases
  - 7 and 8 General programs which have been developed to meet these problems, public and private organizations; national, state, local
- The nurse's relation to these problems and programs in various aspects of nursing work.

### *Reference reading*

- Winslow.** The Evolution and Significance of the Modern Public Health Campaign.  
**Moore.** Public Health in the United States  
**Ravenel.** A Half Century of Public Health, American Public Health Association.  
**Gardner.** Public Health Nursing  
**Cabot.** Social Service and the Art of Healing  
**Rosenau.** Preventive Medicine and Hygiene  
**Trudeau.** Autobiography  
**Wald.** House on Henry Street

### *Current magazines*

- Public Health Nurse  
 American Journal of Nursing  
 American Journal of Public Health  
 Eugenics Review

## INTRODUCTION TO PRIVATE NURSING

Time: 8 hours. Taught by nurse who has had special experience, in this particular field of work.

*Objects of the course*

To discuss in detail the more important problems which confront the nurse in private duty work.

- 1 Living conditions and equipment
  - a Necessity for a sunny room and a good bed
  - b The need of having reliable telephone service
  - c Where to eat and what to eat
  - d Clothing, on and off duty
  - e Professional equipment
- 2 Registries, engagements, charges
  - a Distinction between official and commercial registries
  - b How to find a registry in a strange city
  - c Precautions to be taken before moving to a new state or city
  - d Sacredness of a contract
  - e Waiting time in obstetrical cases
  - f Distinction between the professional and the trades union point of view regarding charges
- 3 Care of a patient in a home
  - a Adaptation of nursing methods
  - b Adaptation to family routine, family resources, family advice, patient's habits
  - c Outside duties arising during case
  - d Necessity for establishing a definite system of work in each home
- 4 Problems arising in connection with care of medical, surgical, obstetrical, contagious, mental and children's cases
- 5 Special duty in hospitals
  - a Hospital regulations
  - b Cooperation with authorities
  - c Influence of spirit and kind of work on younger nurses or students
  - d Hours off duty; charges
- 6 Specialties in nursing
  - a Care of aged, chronic or incurable
  - b Care of well children
  - c Hourly nursing
  - d Group nursing
  - e Traveling

7 Ethical problems

8 Wider obligations of a private duty nurse

*a* As a teacher of health

*b* As a member of a profession

(1) Membership in nursing organizations

(2) Use of nursing books and magazines

*c* How to use off-duty hours and vacations to the best advantage, professional and personal

*Books for reference reading*

**Luckes.** General Nursing

**De Witt.** Private Duty Nursing

**Lounsbery.** Making Good on Private Duty

**Nightingale.** Notes on Nursing

**Robb.** Nursing Ethics

**Parsons.** Nursing Problems and Obligations

Back files of the American Journal of Nursing and other periodicals.

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