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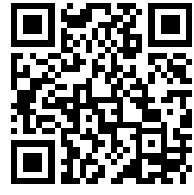

A CURRICULUM

FOR

SCHOOLS OF NURSING

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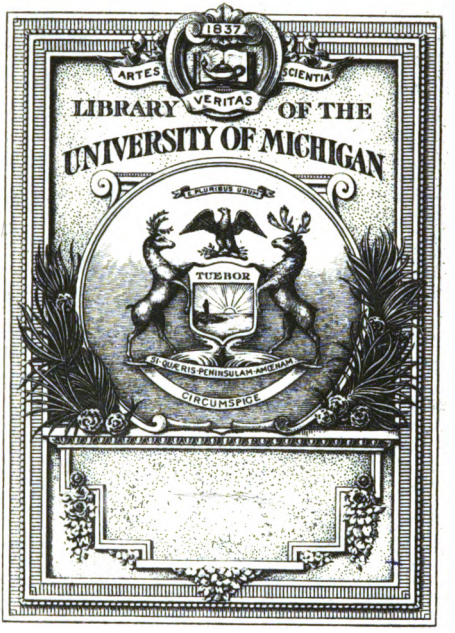

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A CURRICULUM FOR SCHOOLS OF NURSING

PREPARED BY THE
COMMITTEE ON EDUCATION
OF THE
NATIONAL LEAGUE OF NURSING EDUCATION

SIXTH EDITION
REVISED 1927

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Teachers College
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COMMITTEE ON EDUCATION

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NATIONAL LEAGUE OF NURSING EDUCATION

Membership During Period of Revision

M. ADELAIDE NUTTING, Honorary Chairman, 400 W. 119 Street, New York, N. Y.

ISABEL M. STEWART, Chairman, Teachers College, Columbia University, New York, N. Y.

S. LILLIAN CLAYTON, Philadelphia General Hospital, Philadelphia, Pa.

SISTER DOMITILLA, St. Mary's Hospital, Rochester, Minn.

STELLA GOOSTRAY, Philadelphia General Hospital, Philadelphia, Pa.

AMELIA GRANT, 39 Charlton Street, New York, N. Y.

CAROLYN E. GRAY, 402 W. 119 Street, New York, N. Y.

CARRIE M. HALL, Ex-officio, Peter Bent Brigham Hospital, Boston, Mass.

NELLIE HAWKINSON, School of Nursing, Western Reserve University, Cleveland, Ohio.

GERTRUDE E. HODGMAN, Representing Education Committee, National Organization for Public Health Nursing, Yale University School of Nursing, New Haven, Conn.

KATHERINE KIMMICK, Henry Ford Hospital, Detroit, Mich.

LAURA R. LOGAN, Illinois Training School for Nurses, Chicago, Ill.

M. HELENA MCMILLAN, Presbyterian Hospital, Chicago, Ill.

BLANCHE PFEFFERKORN, Ex-officio, 370 Seventh Avenue, New York, N. Y.

MARY M. PICKERING, 610 Parnassus Avenue, San Francisco, Calif.

LOUISE M. POWELL, School of Nursing, Western Reserve University, Cleveland, Ohio.

MARY M. ROBERTS, 370 Seventh Avenue, New York, N. Y.

EFFIE J. TAYLOR, Yale University School of Nursing, New Haven, Conn.

SHIRLEY TITUS, University of Michigan Hospital, Ann Arbor, Mich.

KATHARINE TUCKER, Representing Education Committee, National Organization for Public Health Nursing, 1340 Lombard Street, Philadelphia, Pa.

SUSIE A. WATSON, Simmons College, Boston, Mass.

HELEN WOOD, Strong Memorial Hospital, Rochester, N. Y.

Collaborators Serving on Subcommittees

R. K. ATKINSON, Russell Sage Foundation, New York, N. Y.

HARRIET BAILEY, Department of Education, Albany, N. Y.

ISABELLE W. BAKER, 1910 Kalorama Road, Washington, D. C.

MARGARET S. BELYEA, 775 Washington Avenue, Brooklyn, N. Y.

J. BEATRICE BOWMAN, Bureau of Medicine and Surgery, Navy Department, Washington, D. C.

JEAN BROADHURST, Department of Biology, Teachers College, Columbia University, New York, N. Y.

NELLIE BROWN, University of Indiana School of Nursing, Indianapolis, Ind.

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MARY DE GARMO BRYAN, Member of the American Dietetic Association: Department of Institution Management, Teachers College, Columbia University, New York, N. Y.
EULA B. Butzerin, University of Minnesota, Minneapolis, Minn.
FLORENCE E. CARLING, St. Luke's Hospital, New York, N. Y.
MARGARET CARRINGTON, Miami Valley Hospital, Dayton, Ohio.
ETHEL P. CLARKE, Indiana University School of Nursing, Indianapolis, Ind.
EDITH DOUGHERTY, Minneapolis, Minn.
KATHARINE J. DENSFORD, Illinois Training School, Chicago, Ill.
IDA DOWNS, Peking Union Medical School, Peking, China.
DR. WILLIAM R. DUNTON, Jr., Catonsville, Md.
HELEN FARNSWORTH, Junior College, Kansas City, Mo.
ELIZABETH G. FOX, The American Red Cross, Washington, D. C.
CHARLOTTE FRANCIS, Department of Chemistry, Teachers College, Columbia University, New York, N. Y.
HESTER K. FREDERICK, Johns Hopkins Hospital, Baltimore, Md.
CORINNA D. FRENCH, State Education Building, Albany, N. Y.
HARRIET FRIEND, Temple University, Philadelphia, Pa.
HARRIET E. FROST, 310 S. 10 Street, Philadelphia, Pa.
JULIET GEORGE, Henry Ford Hospital, Detroit, Mich.
ANNA GIBSON, 695 Huntington Avenue, Boston, Mass.
LEILA GIVEN, Western Reserve University School of Nursing, Cleveland, Ohio.
LOUISE GLEIM, Battle Creek, Mich.
MABEL F. HUNTLEY, 108 S. 36 Street, Philadelphia, Pa.
KATHARINE S. INK, 537 W. 121 Street, New York, N. Y.
HAZEL JENNINGS, Rochester, N. Y.
KATHRYN JENSON, Washington, D. C.
MAUD C. KELLEY, Bellevue School of Nursing, New York, N. Y.
MAY KENNEDY, 6400 Irving Park Boulevard, Chicago, Ill.
MARY LAIRD, 110 Cypress Street, Rochester, N. Y.
ALICE LAKE, Ann Arbor, Mich.
MAUDE LANDIS, Stanford School of Nursing, San Francisco, Calif.
ANNA MCGIBBON, Butler Hospital, Providence, R. I.
CALVINA MACDONALD, Cleveland, Ohio.
CAROL MARTIN, New York, N. Y.
MARY M. MARVIN, 440 E. 26 Street, New York, N. Y.
ELSIE M. MAURER, Saint Mark's Hospital, New York, N. Y.
ELIZABETH MELBY, Walter Reed Hospital, Washington, D. C.
LOUISE METCALFE, Teachers College, Columbia University, New York, N. Y.
ELIZABETH F. MILLER, Pennsylvania State Department of Health, Harrisburg, Pa.
MAUDE B. MUSE, 509 W. 121 Street, New York, N. Y.
EDNA S. NEWMAN, 509 S Honore Street, Chicago, Ill.
MARY E. NORCROSS, Philadelphia General Hospital, Philadelphia, Pa.
CLARA D. NOYES, The American Red Cross, Washington, D. C.
NELLIE S. PARKS, Willard Parker Hospital, New York, N. Y.
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GRACE PHELPS, 616 Lovejoy Street, Portland, Ore.
ELIZABETH PIERCE, The Children's Hospital, Cincinnati, Ohio.
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JUNE RAMSEY, Pasadena Hospital, Pasadena, Calif.
HELEN REDFERN, Strong Memorial Hospital, Rochester, N. Y.
GRACE L. REID, Strong Memorial Hospital, Rochester, N. Y.
MARY, M. RIDDLE, 17 N. Washington Street, Muncy, Pa.
ABBIE ROBERTS, George Peabody College, Nashville, Tenn.
MARY E. ROBINSON, Long Island College Hospital, Brooklyn, N. Y.
EMILIE G. ROBSON, 4907 W. Pine Boulevard, St. Louis, Mo.
MARIAN ROTTMAN, 440 E. 26 Street, New York, N. Y.
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CAROLINE STACKPOLE, Department of Biology, Teachers College, Columbia University, New York, N. Y.
ANNE A. STEVENS, 1221 Avenue A, New York, N. Y.
MAJOR JULIA C. STIMSON, War Department, Washington, D. C.
MINNIE STROBEL, Cleveland, Ohio.
ELNORA E. THOMSON, 578 State Street, Salem, Oregon.
HARRIET TOWNSEND, New York, N. Y.
SUSAN TRACY, 818 Center Street, Jamaica Plains, Mass.
DAISY DEAN URCH, 823 Sun Finance Building, Los Angeles, Calif.
CAROLYN C. VAN BLARCOM, 430 E. 57 Street, New York, N. Y.
MARION L. VANNIER, University of Minnesota School of Nursing, Minneapolis, Minn.
EMMA E. VOGEL, Walter Reed Hospital, Washington, D. C.
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CHELLY WASSERBERG, Johns Hopkins Hospital, Baltimore, Md.
GRACE WATSON, 414 W. 118 Street, New York, N. Y.
DR. RUTH WHEELER, Member of the American Dietetic Association, State University, Iowa City, Iowa.
HELEN YOUNG, Presbyterian Hospital, New York, N. Y.

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INTRODUCTION

The Function of the Curriculum

Since the first edition of the Standard Curriculum was published in 1917, there have been five reprintings and about 5000 copies have been sold. This seems to show that the book has been welcomed and that it has met a very real need in nursing schools. Its main objective was to help in raising general standards of teaching and to secure greater uniformity in the curricula of nursing schools throughout this country. The results in this direction are much greater than could have been expected in so short a time. It is very gratifying to know that the influence of this piece of work has spread to other countries as well, many letters having been received from foreign nurses telling of its helpfulness, particularly in the organization of new schools in countries where the modern system of nursing is now being established.

The Work of Revision

For some time it has been evident that certain changes were needed to keep the Curriculum in line with the newer developments in the field of nursing and the newer ideas in nursing education. The revision begun over two years ago, has been the work of twenty-two subcommittees composed of nurses representing all parts of the country and all branches of the profession. Reports of these sub-committees have been published from month to month in *The American Journal of Nursing*, and reprints of the different outlines have been made available, so that all might have a chance to try out and to criticise the new outlines before they should be compiled in book form.

The Education Committee is greatly indebted to all those who have assisted on the subcommittees and also to those who have sent in their criticisms and suggestions. In such a large professional body it is inevitable that there should be rather wide differences of opinion on certain phases of nursing education. Every profession has its conservatives and its liberals. There are, moreover, the specialists who are mainly concerned in securing the right-of-way for their own particular subjects and the "generalists" who want to have a more varied and "all-round" program of study. While it is of course impossible to satisfy all groups, every effort has been made to incorporate the suggestions which have come in and at the same time to strike a balance between extreme points of view.

Practical Objectives as a Basis for the Curriculum

In all branches of education people are beginning to question traditional courses of study and to demand that we get back to the concrete practical activities for which the system of education is designed to prepare and that we build up courses of study on this foundation. Such a detailed statement of objectives seems to be particularly needed in nursing education since so many people seem to be confused and uncertain about the kinds of duties and responsibilities which the nurse of today is expected to undertake. Until we

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can arrive at some clear understanding on these fundamentals, we are not prepared to say whether any course of study for nurses is adequate or inadequate, good or bad.

Another reason for a clear and definite statement of our practical objectives is that we all may understand exactly what we are committed to when we undertake the education of student nurses. This would seem to be almost as important for the trustees, officers and medical staff of the hospital which conducts a nursing school, as for the nursing staff which is more directly responsible for the management of the school and for the teaching and supervision of the student nurses. Such a statement of objectives has been prepared as a guide in the reconstruction of the Curriculum. It has been criticised by nurses in all fields of nursing and by some physicians and lay people. While certain parts are still too general and certain phases of nursing work have probably still been overlooked, it is believed that this outline (on page 44) represents fairly well the duties and responsibilities which the rank and file of nurses are now carrying, and for which the school of nursing must prepare them. Further work is being done on this analysis of nursing functions and probably in the next edition a more specific and complete list will be available.

It is recommended, however, that each school should work out its own list of practical objectives, using this outline perhaps as a basis and amplifying it to include all the special activities which are considered as essential to that particular type of school. The course of study would then be modified in accordance with the objectives which are to be reached. Such a list will need to be constantly revised and checked up from time to time by those who are responsible for the training of student nurses. It would seem desirable that students themselves should study these objectives so they may know what is expected of them and may better focus their energies and estimate their progress toward these ends.

The Basic Course

The Committee accepts the principle of the basic course in the sense that the training offered in the undergraduate nursing school should be a general as opposed to a specialized training and that it must supply the foundations on which all additional training and experience should be built. It must therefore be sound and substantial so far as it goes, and should also be broad and varied enough to serve as a preparation for those fundamental branches of nursing which occupy the large majority of the graduates of nursing schools. There is some difficulty in differentiating clearly between these general branches of nursing service and the more specialized positions which require advanced training. It seems reasonable to assume that the first group will represent the work of those nurses who are in direct contact with patients and who are practitioners of the fundamental nursing art. This would include general private duty nurses, hourly nurses, office nurses, staff nurses connected with public health nursing organizations such as visiting nursing, school nursing etc. and such institutional nurses as those on general duty.

No undergraduate nursing school could include in its program every one of the specific duties belonging to all these branches. Many adaptations would

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have to be made by the nurse herself and a number of duties would always have to be learned "on the job," or through supplementary courses running parallel with the practical experience. It is becoming a recognized part of the work of visiting nursing associations and other organizations, to initiate their new workers through classes, organized demonstrations and through group and individual conferences. Close supervision is also given especially in the early part of their service.

The Committee has decided, therefore, to omit the special elective courses which were included in the old curriculum for the purpose of giving a brief introduction to the student's chosen field of work, and to concentrate in the basic course on those fundamental principles and methods which underlie all nursing, leaving to supplementary instruction "in service," those very special techniques and adjustments which are peculiar to special branches.

For positions involving teaching (of other nurses), supervision or administration, or for highly specialized technical branches, the Committee believes that additional training and experience as well as certain definite qualifications should be required. They do not assume that the ordinary nursing school is responsible for such training except to develop as far as possible the potential qualities of leadership in each student, to give her a vision of possibilities and a sound basis on which postgraduate training can be securely built.

Electives

Although no attempt has been made in the Curriculum to provide for "specialization," one of the functions of the undergraduate nursing school is believed to be the testing out of special interests and aptitudes and some measure of vocational guidance. A general survey is therefore given of the whole field of nursing and it is recommended that some opportunity be provided for each student to get a practical insight into the main types of nursing service. This does not necessarily mean that the student must spend a definite period of time as a head nurse, an instructor, a private nurse, or a public health nurse, but that she should have some chance to demonstrate executive ability, teaching ability, and the qualities required for private nursing or public health work, as well as for operating room work, pediatric work and other types of nursing service.

This is the main purpose of the period of elective work in the three year program. It is not intended for specialization, but for the rounding out of the fundamental experience, and for further exploration and testing along the line of the student's major interests and aptitudes. It should be as truly elective as it is possible to make it.

The Length of the Basic Course

There has been much discussion on this subject, especially since the publication in 1923 of the Report on Nursing and Nursing Education in the United States[1] with its suggestion of a reduction in the period of training under certain definite conditions. The National League of Nursing Education at its meeting in 1923,[2] went on record as approving the three year curriculum for

[1] Goldmark—Nursing and Nursing Education in the United States—1923.
[2] Thirtieth Report of the National League of Nursing Education—1923.

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the majority of schools, the main reason being the difficulty of including in the shorter period of twenty-eight months all the experience which we now consider essential to a well rounded program of training. It was decided, however, that since many schools are operating on the shorter program and some states have two year laws, suggestions should be presented in the revision of the Curriculum for both the three year and twenty-eight month programs.

The Education Committee, in its work on the Curriculum, has proceeded on the principle that the essential content of theory should be the same whether it is to be fitted into the shorter or the longer period. It has outlined what it considers to be this basic content and has suggested some desirable additions, not with the purpose of carrying the student further into the specialties, but simply for the enrichment of the basic course and to meet the needs of certain types of schools. Two different arrangements are suggested for practical experience, and it is expected that other variations will be worked out by individual schools.

The Place of Public Health and Social Service in the Basic Course

It has long been contended by those who are concerned mainly in increasing the supply of "bedside" nurses, that the basic course should deal with sick nursing only and that all preventive and social aspects of nursing should be considered as belonging to the specialized field of public health nursing and relegated to a period of postgraduate training.

This is not the opinion held by the large majority of nurses and it is not the idea which has been incorporated into this Curriculum. Briefly stated, our position is that health nursing is just as fundamental as sick nursing and the prevention of disease at least as important a function of the nurse as the care and treatment of the sick. Indeed, these functions can not be separated though they are undoubtedly represented in different proportions in the different fields of nursing. Moreover, the nurse is essentially a teacher and an agent of health whatever field she may be working in, though here again the emphasis varies. All nurses must also be concerned with the social conditions which so directly affect the condition of their patients and their prospects of cure. The subordination of the "human" element in our work to the physical and technical is one of the severest criticisms we have to meet in nursing today, and it seems strange that there should be any question about the necessity for a much stronger emphasis on these human and social factors in the training, whether we are dealing primarily with sick nursing or health nursing.

Every one of these elements was incorporated into the system of nursing established by Florence Nightingale over sixty-five years ago and the principles may still be found very strongly expressed in her writings. With the recent rapid development of the public health movement, there seems to have been some tendency to identify these social and preventive elements with the work of the public health nurse and the social service nurse instead of with the basic practice of nursing itself. This was perhaps natural since there has been more opportunity to stress these elements in community health work, but it would be unfortunate if we should begin to consider them as "extras" in the nurse's training, to be obtained only through experience in public health nursing or social service, enlightening and vital as those experi-

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ences are. The Curriculum has been developed on the assumption that the social, preventive and teaching elements of nursing should be taught in all good nursing schools. Indeed it is just as essential for the private nurse or the hospital nurse as for the future public health nurse, to have this broader conception of her duties and responsibilities. It would be disastrous indeed if we should allow the great taproot of our professional training to be impoverished by the loss of those vital elements that should nourish the whole body and not one special branch.

If these elements belong to nursing and if they are to have their maximum value to the patient, the hospital and the student nurse, they must come into the training early so that they can be applied all the way through. They should not come as a special illumination at the end or as a corrective for that peculiar derangement of social vision which unfortunately affects many nurses, a sort of hospital astigmatism or myopia which makes them indifferent to everything outside their own walls, or beyond their technical duties. An effort has, therefore, been made to put more emphasis on the human and social side of the nurse's work from the beginning, while not neglecting the scientific and technical side. In the same way the idea of health protection and health teaching is brought forward and carried right along with the study of disease and the nursing care of the sick. Because of the very close relationship between social conditions and public health it has been decided to combine these two subjects in one called Modern Social and Health Movements. On the whole it is not so much a question of extra subjects and extra hours for these newer phases as a change of emphasis in existing courses where we have always tended to over stress the processes of disease and the technic of treatment and to slight the causes and the measures of prevention.

We believe that the process should be a progressive one and it should be developed as an integral part of all the nurse's experience, not as an accessory to clinical or bedside nursing. Classroom and ward teaching can be effectively supplemented by observations and visits to homes and to social and health centres, in order that students may have a clearer idea of family and social backgrounds. Such observations are for information and orientation and they do not take the place of actual work with families and social agencies. Community nursing experience is a more advanced step in the training and should be an outgrowth of interest and activities which have been firmly established in previous hospital work. Certain opportunities can be opened up to students in such an experience which neither the hospital nor the dispensary nursing service can supply and which help to round out the hospital experience. There is some difference of opinion among members of the committee and other nurses, as to whether such an experience should be recommended as an essential part of an undergraduate course in nursing for all students. The majority of the members feel that the whole matter is too unsettled and the facilities too uncertain to make such a recommendation at the present time and they prefer to wait for the projected study of undergraduate courses in public health nursing with the hope that new light will be thrown on the whole problem.

In the meantime certain objectives have been outlined for such experience and the conditions under which it should be given. These will be found on

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page 57 under Practical Instruction. It is recommended that we should try to keep these objectives clearly in view and work toward them in the most direct way possible, using all the resources available, and developing new resources where we can. It is urged that community nursing experience be provided as an elective for students where it can be secured under good conditions and that successful affiliations now in operation be continued. At the same time it is hoped that every effort will be made to develop the resources in the hospital itself and in out-patient departments[1] in order that they may be more fully utilized for the broader training of student nurses, and that they may become a much stronger influence than they now are for community health. To bring about such changes, it will be necessary to bring into hospital and dispensary positions many more nurses, who have had the wider experience of community and public health service and who can help to emphasize these aspects of the hospital and dispensary experience.

Other Changes in the Curriculum

Nothing has been more evident in the last few years than the changing attitude toward the mental aspects of disease and nursing. Where there were marked differences of opinion about putting in a course in psychology even as a recommended subject, in the old Curriculum, it is now pretty generally accepted in all the better schools as an essential subject of study. This course should be quite definitely applied to the nurse's needs, with special emphasis on mental hygiene and teaching principles.

The Committee has received recommendations from all kinds of special groups, urging more time for dietetics, tuberculosis, venereal disease, pediatrics, obstetrics and almost all the clinical subjects. If all these recommendations had been acted upon, the total number of hours would have been easily doubled.

While some advancement has been made along the whole line, the main increase has been put in the first year. In the old Curriculum the fundamental sciences were very weak in comparison with other subjects. It will be generally agreed that science teaching loses half of its value unless it can be taught with demonstrations and with some individual laboratory work. We must either drop all idea of laboratory work or give more time to these subjects.

Experience has shown that we must also give more time to the principles and practice of nursing. In the elementary course we have gathered together with the simpler nursing procedures, a number of related skills—housekeeping, bandaging, elementary massage, charting, surgical supplies, etc. These may be taught by different people, but it seems best to consider them all as phases of nursing practice.

The experience of many schools seems to be that a further extension of this course in general nursing practice is needed to cover the more advanced procedures and that this should be organized in a more systematic way with more emphasis on nursing technique than is possible in connection with the courses

[1] See the Report of the Subcommittee of the Committee on Education on the Student Nurse in the Dispensary, published by the National League of Nursing Education, New York City.

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in medical and surgical diseases. It has been decided therefore to continue this course of Nursing Principles and Practice into the second term of the first year, and to postpone the lectures in medical and surgical nursing until the second year, if necessary. The courses Elements of Pathology and Case Study, will be taken parallel with advanced nursing procedures and will help students to study and understand the general processes of disease and the kinds of disease conditions they are actually working with in the wards.

The case studies should bring together all the different elements of disease, diet, medications, nursing care, personality, social handicaps, etc., and should teach students how to adapt their nursing care to the needs of the individual patient. Once the method of study is learned, students would be expected to work out a certain number of case records under the supervision of their head nurses, and send them in regularly through the summer term as well as the academic year. It is believed that with this background the clinical lectures and classes of the second year will take on new meaning, the knowledge learned through cases will be organized and unified, gaps will be filled up, and no serious loss from the postponement of the medical and surgical lectures will be felt. Individual schools may be able to fit these additional subjects into the second term or the summer, but it does not seem possible to further increase the number of class hours in the first year unless the hours on duty are substantially reduced.

It will be noticed that the course in dietetics has been transferred from the first to the second term. This was necessary in order to relieve the congestion in the first term, but it is also considered much better to wait till chemistry and anatomy and physiology have been completed before giving courses either in nutrition or diet in disease.

The arrangement of subjects in the second and third years is suggestive merely. It is impossible to set down any definite sequence of practical experience because of the different types of hospitals, the practical necessities of the hospital service and the problems of affiliation. Mental nursing has usually been considered a third year subject and is so placed here, but the subcommittee on that subject recommends that it be put in the second year if possible because of its influence on the point of view of the nurse and its help in the care of all patients.

Elective subjects may be fitted into either the second or third year and may be open to all students or restricted to those who have shown their ability to carry a heavier schedule of work.

Adjustment of the Curriculum to Individual Schools

In spite of the clearest statements in the old Curriculum, there has been some misconception about its purpose and use. It may be well to repeat these statements about the revised Curriculum. In the first place it is not a model, nor is it a minimum curriculum such as the various states require as a basis for registration. Neither is it a required standard of the League. Because of the tendency to confusion here, it has been decided to drop the word Standard from the title. It has been agreed upon as a reasonable working basis for the higher grade of American nursing schools. For university schools it would

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seem to represent a minimum since such schools are expected to maintain a higher standard than schools with ordinary resources.

It is not expected or intended that any school should follow such a program of study slavishly. It is hoped that those responsible for schools of nursing will use it as a stimulus to their own thinking, pull their standards up to its best recommendations, adapt the Curriculum to meet their own needs and conditions and that they will improve on it wherever possible.

The Committee fully realizes the danger of putting educational materials into set and rigid forms, but if the nurses of the country will accept these outlines simply as representing the best current thought and experience of a number of representative people from all types of nursing schools, these dangers will be avoided. The last thing that the Committee wishes is to check or discourage individual initiative and experimentation.

It would be decidedly unwise for weak or backward schools to attempt at once to conform to such a program. They may have to omit some of the newer subjects entirely and scale down the number of hours one-half or one-third in the beginning, building up their curriculum as their facilities improve.

The curriculum itself is relatively useless, unless there are teachers and supervisors to interpret it, and apply it, unless the resources of the hospital and school are adequate and the conditions of life and nursing service favorable to good work. Time for study and recreation must be available as well as time for lectures and classes. All these things must be built up together or the results will be disappointing and may discredit the whole movement for the better education of nurses.

Use of Terms

There has been some questioning of the terms "preparatory" or "preliminary" as applied to the early part of the nursing course. Since this period is an integral part of the whole scheme and not, as one might suppose, a separate unit to be covered before the student is admitted to the actual nursing of patients, it is recommended that we drop both these terms and think of the first year as one complete unit, just as we do the second and third years. Any given number of months of this period may be assigned for probation. Students would of course enter together as in the present preparatory course. If two or more sections are admitted, each group would follow the program of the first year, repeating the lectures and classes so that the second year's work may be entered on by all, as directly as possible.

It is also recommended that we find some substitute for the word "probationer." "Novice" has been suggested, but "first year student" is probably the best term. "Freshman" is likely to be confusing especially where nursing schools affiliate with colleges and the first year of college and hospital do not coincide. It is suggested that we do not use the terms "junior" and "senior" to designate second and third year students, but leave them to indicate relative positions of responsibility in each particular service. It is quite possible, for instance, that in the obstetrical service a second year nurse may be the senior and a third year nurse a junior for the time being.

Further details will be given in connection with the different sections of the book.

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The Committee wishes to again thank all professional associates and also several friends who do not belong to the nursing group, for all the assistance they have given in this difficult undertaking. Further suggestions and criticisms will be most heartily welcomed.

ISABEL M. STEWART, *Chairman,*
Committee on Education of the National League of Nursing Education.

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SOME ESSENTIAL CONDITIONS IN THE EDUCATION OF NURSES

M. ADELAIDE NUTTING

Honorary Chairman of the Committee on Education

In working out a curriculum which aims to cover the ground required in the training of nurses in so satisfactory a way that it can be accepted as a standard and adopted generally in training schools, certain important facts must be kept steadily in mind. These are, first, that the education of nurses is not carried on in the usual type of school, but in hospitals and under a long established system which requires that the practical training shall be obtained through student service in the various departments. This practical training, indeed, is considered of such importance in the general scheme as to occupy almost the entire time and energy of the student. In most schools of which we have knowledge about nine-tenths of the student's time throughout the three years is devoted to practical work. This means that the theory, essential and indispensable as it is, in reality occupies everywhere a relatively small place in respect to time in the curriculum. It means also that the conditions in the hospital under which the teaching and training are conducted and under which the students live and work, are decisive factors in the situation.

A curriculum does not operate itself. It is dependent upor persons and conditions to give it life. No matter how admirably planned, it can only be made truly effective if the place in which it is carried out is of proper character and standing, and provides in its resources, teaching facilities, and administrative policy, a suitable field for the kind of education it proposes to give. This is as true of hospital training schools as of any other educational institutions. It has seemed necessary, therefore, at the outset, to try to show what the general conditions and main requirements in hospitals should be in order to ensure the satisfactory working out of a good curriculum.

This is a peculiarly difficult thing to do, because of the vastness and complexity of the hospital field. There are about as many types of hospital as there are specialties in medicine. They exhibit extreme variation in purpose, scope of work, size, and also in form of administration, ranging from that exercised by municipal authorities or responsible bodies of trustees to that of commercial stock companies or of individual enterprise. How shall we judge of the ability of any one of these hospitals to provide a suitable field for the training of nurses, or of its fitness to undertake that important task? What standards and tests can we apply? For it is evident that many hospitals are unable to provide for many of the most fundamental requirements in any form of serious educational work.

The Committee has accepted as fairly well established the standards which are outlined in the following pages. They are those which have been gradually developed through the experience and experiment of nurses who have been long engaged in hospital and training school work and in intense and continuous study of the administrative and educational problems involved. In the

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course of years certain conditions and requirements have been found to be essential to the conduct of a good and sound system of education in nursing. These conditions, which have so vital a bearing upon the situation, are found throughout the entire structure of hospital life, from foundation and purpose to intimate daily conduct of affairs. They include such matters as the purpose and standing of the hospital; its capacity, and the range and character of its services; its sources of income with particular reference to suitable provision for educational work, and the status of the school of nursing; the organization and administration of the nursing department; housing and living arrangements for staff and students, and working conditions; qualifications of supervisory and teaching staff; teaching facilities and equipment, and various other considerations.

The Purpose, Character, and Standing of the Hospital

The first and one of the most fundamental requirements is that the hospital in which it is desired to establish a school of nursing, shall be of good standing in the community, that it shall be under the general direction of a responsible body of persons, trustees, directors, or managers, of such weight and influence as to establish beyond question the purpose, dignity, and stability of the institution and to afford guarantees to the public, and to prospective students and their families in particular, that it is a suitable place to which to invite young women to enter for serious professional training. In other words, it must show that it is both able and ready to meet its obligations.

The character and standing of a hospital in any community must have a direct bearing upon the kind of teaching which it will offer. A hospital of established reputation will select with great care its officers and staff, physicians, nurses, and all others concerned in the care of the sick, and will exact from them a high quality of work, and single-minded devotion to the interests and welfare of the patients. If it does not its reputation cannot be maintained. The standards of its own work will be projected into its teaching throughout and its teaching will be of two kinds—the conscious, deliberate, and formal, and the unconscious and incidental. Not more surely by what the student is told ought to be done, than by what she sees done daily, will her ideals in work be shaped. That hospital, then, in which the teaching and training of nurses can best be carried on, is of a character which commands public confidence and respect, not only through the sound scientific nature of its work, but through its ethical and altruistic purpose. Its whole life will be permeated by the best spirit and traditions of medicine and nursing.

If the training school for nurses were simply the nursing staff of the hospital and nothing more, it could be placed upon the same basis as other hospital departments and dealt with accordingly. But in just such degree as the school is something more than the nursing staff, outside and beyond it, do new and different considerations enter into its management. Many elements which the training of nurses brings into hospital affairs do not naturally fall into any part of the administrative scheme of an institution for the care of the sick. Quite alien to the general purpose and usual activities of the hospital are the special and somewhat intricate problems of education to which the training school must give constant time and attention, or fail in its work. And be-

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cause these problems are different, dealing with matter outside of hospitals which must be viewed from other angles besides those looking to efficient hospital administration, it is essential that there should be some body of persons who are very specially concerned with them. A good many hospitals are now providing for this need by the appointment of training school committees, and it is the opinion of almost all training school superintendents who have carried on their work with and without such committees, that they are an indispensable factor in a good organization.

The composition of such a body varies in different institutions, but it has been found that a good working committee may be made up of from five to seven persons including a member of the hospital governing board, of the medical staff, the superintendent of the hospital, and the superintendent of the training school. Among other members might be a representative of the training school alumnae, and some one engaged in educational work, such as the superintendent of public schools, or the dean or director of a good college, normal, or technical school. In connection with large city hospitals, into the government of which city politics sometimes enter, a separate board of women managers has been found to be a great support and protection to the training school.

The functions of these committees, which form in some sense a board of directors, would consist in studying the needs of the school as an educational institution, not purely concerned with the temporary service of the hospital, but with the permanent service of the public, and in establishing such equitable relationships between the hospital and training school and such conditions of student life and work as will prepare for this service. They should see that suitable requirements for admission are established and maintained; that sound educational standards for both practical and theoretical work prevail: that there is a properly qualified administrative and teaching staff, given adequate status and authority in the conduct of its responsible work, and supplied with adequate school equipment and teaching material. Proper regulations should be made about such matters as tuition fees, loan funds, and scholarships.

Since these are all fundamentals which are well recognized in every school, it is certain that ways and means should be found of providing them. It will therefore be the function of the Committee or Board to require the preparation of a budget, and to secure adequate appropriations from the hospital and from other sources to place the school upon a dignified, secure, and stable basis, and to ensure for it that independence in its work and freedom for proper growth and development which are characteristics of any good educational system and toward which a satisfactory financial status is the first essential. The securing and distribution of funds for the maintenance of the school may be one of the most important functions of a training school committee in fostering good standards and ideals in the work of the school.

Type and Capacity of Hospital

The type of hospital in which a training school can best be established is that which cares for a fairly large number of patients and which has a variety of services of a suitable charater. It has long been accepted that the general

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hospital, in which all the more common forms of medical and surgical diseases are treated and which admits men and women patients, best answers to this description. General hospitals under municipal government or private endowment or maintained by contributions are found in all large cities, in most of moderate size, and in many small cities.

The actual number of beds and daily average of patients, within certain accepted limits, is of less importance than the variety and character of the services. The very large municipal hospitals of from 600 beds up to 1000 or 1500, usually offer the richest field for training, in so far as numbers and variety and character of services are concerned, and in the exceptional opportunities afforded by their clinics and dispensaries. The great difficulty here lies in securing enough expert supervisors, and qualified instructors, and enough in the way of resources and conveniences to maintain a good quality of work over such a vast area. The problem of training is difficult because of the almost unwieldy dimensions of the training field, and of the enormous bulk of work to be done. In such large city hospitals this problem may also sometimes be complicated by the fact that there may be a division, sometimes a large one, of patients with chronic diseases, providing little in the way of suitable opportunity for training, yet requiring, under the system, a definite place in the general scheme of instruction. Granted, however, means to maintain a sufficiently large staff of graduate nurses and other assistance in addition to the student nursing service, and a liberal and properly qualified staff of executive officers, supervisors, and teachers, a great municipal hospital affords a wonderful teaching field.

On the other hand, very small hospitals, even when general in character, have definite limitations not only in number of patients, and in range and variety of disease, but also in equipment and facilities. The clinical opportunities they offer for observation and training are, in the very nature of the case, too meagre and restricted to provide more than a fraction of the required ground for instruction in nursing, and their resources are insufficient to provide enough suitable supervision and teaching. While these very small hospitals are obviously unable, in most instances, to provide a satisfactory field for the entire training of nurses, they form a group of institutions frequently most needing the assistance which a training school provides. Their problem is a difficult one. Probably most of them could supply good practical training in the care of patients suffering from a few of the more common forms of disease for a period, let us say, covering not more at the extreme than 12 months. How to secure the necessary instruction in theory is the perplexing question. The elementary scientific groundwork required in nursing is sometimes provided through visiting teachers who divide their time among several not too widely separated schools. There is also a definite movement growing toward consolidation among groups of smaller schools by combining their class work for certain periods, and drawing at times upon the resources of adjacent high schools or colleges for classroom and teaching facilities. The junior college is opening up further possibilities in this direction. The success of such plans would depend greatly upon the energy and initiative of the heads of the training schools, and upon their ability to make the utmost possible use of every available opportunity. It takes women of exceptionally

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good professional training, experience, and resourcefulness, to bring forth satisfactory results from a poor field.

Given well-trained assistance in the hospital, and the certainty of a good quality of practical training, there appears to be no reason why at least one year of prescribed ground could not be covered and the students passed on to the larger schools to complete their training. Small schools should be as proud of sending their students up to certain larger hospitals to complete their training as preparatory schools are of sending theirs to colleges. The principle is the same. The necessity of a uniform arrangement of subjects is clear, for the larger school must know just what ground in theory and practice has already been covered, and must require that certain well-defined work has been done satisfactorily.

Probably most small hospitals could, under proper conditions, give an excellent ground work in the principles and the technic or art of nursing. For many of the procedures in nursing are common to all forms of illness whether labelled as medical, surgical, or some of the special types. It is the constant adaptations of these procedures to varying personalities and new situations that really constitute a considerable part of the art of nursing. In certain fundamental ways small hospitals seem to have uniquely useful opportunities open to them.

While the smaller general hospitals can meet the requirements and obligations which the establishment of schools of nursing imposes on them only by acquiring suitable affiliations with other hospitals able to provide satisfactory instruction and training in the branches of nursing in which they are deficient, it is pretty generally agreed that unless such hospitals have a daily average of about 100 patients and a fairly acute service, it is hardly possible for them to maintain schools of nursing of the usually accepted standards. In some of the European countries, particularly the Scandinavian group, an average of 100 patients is required as a minimum for hospitals attempting to maintain registered nursing schools. In the training of medical students, the Council of Education of the American Medical Association urges that hospitals, to be satisfactory for teaching purposes, should have a daily average of not less than 200 patients who can be utilized for clinical teaching. (See *Journal American Medical Association*, August 19, 1916, pages 601-607.)

There must be variations from these suggested standards in exceptional institutions, and particularly in certain states and sections where hospitals have developed slowly and are almost all quite small. They are all that is available for training purposes in such locations, and obviously the standards that are desirable in older communities, where work is further advanced, cannot and should not be wholly applied to them at present.

Between these two extremes lie a large number of hospitals capable of providing excellent teaching fields. In the order of their capacity in this direction they would stand about as follows: first, hospitals, general in character, and under municipal or private government, with from 400 to 500 beds, and having not only the four main services—medical, surgical, children's, and obstetric—but certain of the special branches, such as nervous and mental disorders, contagious diseases, and those of the eye, ear, throat, and nose, etc. These afford a practically complete field for the training of nurses. There can be no

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question of their ability under proper administration to conduct training schools of the very highest character. Next would come hospitals of the same general type and character, with from 150 to 200 beds, and a daily average of from 125 to 150 patients. These also provide excellent teaching fields.

Special hospitals present a peculiar problem. Many of them can contribute to the general scheme of training, and efforts should be made to utilize the special opportunities they provide. None of them are competent to conduct schools in which the main portion of the training to be given lies entirely outside the range of their activities or purposes. That they can cooperate largely, however, in educational work is clear, as more and more the special branches which they represent become incorporated into the regular accepted plan or scheme of the training of nurses. Such subjects as obstetrics and children's diseases are now commonly required, and it seems probable that for public health work, training in contagious diseases, and possibly in mental and nervous disorders may be called for. For nurses engaged in public school nursing, knowledge of disorders of the eye, ear, nose, and throat seems essential.

Special hospitals form numerically a very large group. They are often large, well equipped and carefully administered, and they are not infrequently well endowed and able to secure the best specialists in the branches they represent, to direct their work. The nursing in such hospitals is carried on in several ways— by the employment of a trained graduate staff of nurses, by postgraduate courses, by affiliations with regular training schools, by maintaining regular schools of nursing, or, in the case of hospitals for the insane, schools for the training both of nurses and of attendants. The organization of this very large and valuable field of training still remains to be adequately worked out, but in the main it seems fairly obvious that such hospitals can perform a better service by making their own special contribution to the training of nurses, than by conducting regular schools of nursing. Just because they are engaged in a special branch of work it is practically certain that their full energies will be thrown into efforts to make this branch still more highly and perfectly specialized. The impressions made upon the student's mind are in relation to a particular type and condition of disease—this is inescapable, and since the greater proportion of her time is spent thus, since it comes in the beginning of her training when the new work takes hold of her first interest, captures her imagination, and engages her freshest energies, it follows that nurses trained in and graduated from schools attached to special hospitals do tend to become, in a real sense, specialists. The provision which is made for training in general nursing (or for all other branches) is comparatively small, and relatively all out of proportion and, further, the order of things is reversed, and the special is made to precede the general and fundamental.

The more important special hospitals are those dealing with obstetrics, mental and nervous, contagious and children's diseases. Children's departments are now increasingly found in general hospitals, and there appears to be also an increase in the number of obstetrical wards. It is noticeable that maternity hospitals in most instances affiliate and offer three or four months of special training to be included in the regular work of the student nurse. A few offer postgraduate work also. Contagious disease hospitals occasionally affiliate with general hospitals, but they appear more frequently to employ

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salaried graduate nurses. A few offer postgraduate courses. Hospitals for the insane and for children, more commonly establish regular schools and require that the bulk of the student's training shall be received in the single field represented.

The question of affiliations is a matter of extreme importance in making up a proper curriculum for pupil nurses. It is important to ascertain fully just what any proposed affiliation has to offer, and how long a period of time should be given to it in a well-balanced curriculum. The parent school should feel itself strictly responsible for the standards both of practical and theoretical work in the affiliating school, and should see to it that proper conditions of life and work and proper guardianship are assured.

Efforts should be steadily made to bring about a better system of adjustment and to see that training in special branches follows upon a general groundwork. This could usually be easily done where the training school is under university direction, and a unifying and coördinating power can thus be provided. In every such special branch provision should be made for two types of students—those who need some training in it as a part of a general course, and those who are choosing it as a field of special work and require the longer period of training necessary for the specialist.

Hospitals and sanitaria under private ownership cannot be recommended as suitable institutions to assume the direction of training schools for nurses. Their purposes are frankly commercial, and under such government and with such ideals the exploitation of pupil nurses is practically impossible to control. The maintenance of satisfactory standards of teaching, of work, or of student life, may be assumed to be outside of their purposes and possibilities.

No attempt has been made in this study to consider the very important question of postgraduate education for nurses. It may be said in passing, however, that the same general principles which have been laid down for the training of student nurses apply to the courses for graduate nurses which are offered by hospitals. At present, these courses are seldom offered for the purpose of giving the kind of instruction needed by graduate nurses, which would include not only carefully selected experience, but suitable opportunities for observation and study. The object has usually been to secure an increase in the number of working nurses, with the result that women of ability, sometimes of superior ability, and long experience seeking further knowledge of any phase of their work, have had to enter hospitals on the basis of regular full-time workers, under a régime which required them to perform daily much in the way of routine ward work. The graduate student should have a curriculum especially arranged to meet her needs, and every facility should be given her so that she may profit to the full by both her class work and her ward experience. Most graduate students would be willing to pay for the kind of instruction they need, on the condition that they should be released from the long hours of exacting ward work, and should have the advantage of expert teaching and supervision.

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Financial Resources

Schools of nursing at present everywhere rest upon an unsound and precarious financial basis. Few of them are endowed,[1] or have any definite, assured resources for the conduct of their work beyond the provision which the hospital (whose nursing services the school is supplying) is from year to year able and willing to make. Most hospitals find it hard to get enough funds to keep their legitimate work going on a satisfactory basis. They cannot contribute to the support of schools—on the contrary, they must use the schools to help support the hospitals. A few hospitals may have some means available, but as a rule their conception of the function of the school of nursing is so imperfect as to prevent serious consideration of its needs from a financial standpoint. There is a slight awakening of interest in this aspect of affairs, but until it has taken a real hold of the minds of those responsible for the conduct of hospitals, and consequently for the training of nurses, until there is a wider understanding of the vital importance to society of the work which nurses are doing, there can be little hope that schools of nursing can be maintained upon a truly satisfactory economic basis, or that they can render their full measure of usefulness to the public.

The hospital, under certain conditions, can provide largely of the main essentials. Its wards form the indispensable laboratories for training in nursing; its daily life and disciplines in work are of incomparable value in such training, but equally necessary in any adequate system, are bodies of trained teachers and suitable places in which to teach; lecture and classrooms, laboratories, libraries, and other teaching equipment and material, scientific and technical. Equally important are suitable conditions of student life and work. These costs of education can never be neglected.

The ordinary needs for the proper conduct of the training school should be considered carefully in the making up of the hospital budget. The head of the school should be required to present an estimate of the probable expenses of her department, which should include provision for necessary developments in any desirable direction.

Where it is impossible for the hospital to supply the necessary funds, there should be no hesitation in making direct appeals to private individuals or associations, or, in certain cases, in asking for appropriations from public funds for the proper financial support of the school. No school of nursing can hope to carry on and develop its work satisfactorily without such support.

The Teaching Field (Range, Variety, and Character of Services)

It is commonly accepted in schools of nursing that a good teaching field must provide satisfactory opportunities for training in the four main branches of nursing—medical, surgical, obstetrical, and children's—and that the services must be reasonably active. Generally speaking, the value of any service from the standpoint of its use in training is directly proportionate to the number of acute cases being cared for. Chronic and convalescent cases are of limited

[1] Out of the 1800 or more schools of nursing in this country about 4 are endowed.

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value as teaching material, though they call for certain special kinds of care, certain adaptations which should have a definite place in the scheme of instruction. The degree of activity of a service may be measured by the number of admissions per bed per year. A service in which the number of admissions per bed per year averages from 16 to 20 or over, is an acute service. Below 8 per bed per year, it would rank as an inactive service, and the diseases would probably be subacute or chronic in character.

It should be kept in mind that some important diseases are usually prevalent at certain seasons of the year, offering in such periods abundant opportunities for study and training, but providing infrequent chances for such experience during the remainder of the year. Pneumonia is an example of such a disease, and in the past typhoid fever was another. Efforts should be made by supervisors and instructors to see that students whose experience in a given department has been relatively uninstructive, should have an opportunity of supplementary training later. In such cases class teaching and special ward clinics should help in making up any possible weakness in practical experience. In each service the commoner varieties of cases should be found, and when unusual forms of disease are admitted, the opportunity for observation and instruction which they present should always be utilized as far as practicable for the benefit of all student nurses.

From the standpoint of teaching, a large and active private service in a hospital presents difficulties. It makes excessive demands upon the time of both administrative and supervisory staff and occupies relatively quite too large a place in the general scheme of training. This is a distinct loss to the student, in that it substitutes the restricted experience of service with one or two individuals for the varied and instructive opportunities provided by the many patients of the large open ward. It cannot be assumed that a student who is assigned to the care of from one to three patients during a given period can learn as much as during a similar period where from thirty to forty patients may be under her observation and care.

The advantages to be derived from service in private wards are small in comparison and quite special in nature. Undue emphasis has been placed upon the value of this service, which, in the interests of good teaching and a well-balanced scheme of training, should be kept at a reasonable minimum. There is always a difference in equipment and in various details of service for such patients, but there can be no difference whatever in the essentials of nursing, and it is of the utmost importance that this point shall never be lost sight of. Standards and methods of nursing are the same, and very sick patients require special nursing, quite irrespective of their status in the hospital or their ability to pay for service. The large, open, public ward is the ideal training ground for student nurses.

A complete medical service should provide training in the care of all the usual medical diseases, and also in the nursing of communicable diseases. So important, indeed, is this in the preparation of nurses for modern public health work that it is difficult to see how they can get along without it. Affiliations should be sought which would provide training in the acute communicable diseases for those particularly needing it, even where it is not obtainable for the entire student body. Facilities for training in the care of nervous and

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mental patients should also be made available. Much progress has been made recently in the development of opportunities for training in these two important branches of nursing and they are now found in the curricula of several leading schools.

The surgical service should provide training in the care of all the ordinary surgical diseases, and should include gynecology, orthopedics, operating-room work, and training in that department in which accidents, emergencies, and minor surgical matters are handled—whether this be in a special ward or dispensary.

It is desirable that the obstetrical service be sufficiently large and active to ensure a proper training within a reasonable period. Probably the measure of training here would be determined by the number of cases rather than by the number of weeks.

The children's service should provide opportunity for the observation and handling of sick children, not only in infancy, but up through the years of childhood. It is one of the most important of all the services, and with the development of public health work calling for the widespread introduction of nurses into public schools it has become fundamental and indispensable in the scheme of training.

The dispensary or outdoor service provides invaluable opportunities for instruction. Patients visiting dispensaries for advice or diagnosis present many conditions and states of disease rarely seen in the wards. The greater the number of cases in each division under close and continued observation and treatment, the more profitable the instruction to the student nurse. The period of dispensary service may be arranged at any suitable stage of training or it may be carried on concurrently with the student's work in the hospital wards, dividing her time appropriately between a given ward service and the same clinic in the dispensary. It is difficult to lay down any precise scheme since there are as yet some hospitals with no dispensaries attached and frequently a hospital will have a pretty well-developed dispensary or clinic for which it has no corresponding hospital service. This would perhaps be particularly true of such special services as eye and ear, throat and nose and skin diseases, which are of special importance to those intending to enter public health work. The dispensary should and could play a much larger part in the training of the nurse than it has hitherto usually done, and its special resources should be as completely utilized as possible. Special study of these possibilities is urged upon directors of nursing schools. As a partial preparation for almost any form of public health work, the dispensary is of unquestionable value, and if it has a social service bureau, with follow-up work in the homes, its powers in this direction are greatly enlarged.

Where the hospital is used as a teaching ground for medical students and as a field for medical research, the value of the service to the student nurses is usually increased in certain highly important ways. They work in an atmosphere of scientific inquiry and must frequently assist in experimental work; and they share in a measure in the instruction which goes on continually. In some departments of work, however, there may be a distinct loss to student nurses, as, for instance, when much of the required assistance in operating-rooms, dressing-rooms, etc., is taken over by the medical students.

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Conditions of Life and Work for Students

The ratio of student nurses to patients cannot be worked out on any basis which is capable of general application because of the many and various factors entering into the situation. It is affected by the number and variety of services; by the character of these services—that is, whether they are acute, subacute, or largely chronic in nature—by the proportion of private patients; by the plan and arrangement of the hospital (small wards always requiring a relatively larger service than large wards), and also, in some degree, by the number of orderlies and other helpers of various kinds provided. A teaching hospital where many clinics are held and where medical students need to be looked after and often helped requires a larger staff of student nurses. There is a difference in the number of student nurses required in a medical and in a surgical ward of the same size, and a wide difference, usually, between these and the number called for in children's, maternity, infectious, or in mental wards. The operating-room offers a special problem contingent upon the number of operations daily. The dispensary and clinics must be governed by similar conditions. A movement which has been going on steadily in hospitals for the past few years, provides more graduate nurses for certain phases of work, and also employs increasing numbers of attendants, aides, or helpers to assist in wards and other departments. This is serving not only to relieve students of unsuitable work, but to reduce somewhat the hitherto very great dependence of hospitals upon student service. With this highly important advance, now in process of working out, and as yet a matter of continuous study and adjustment, it seems clear that no satisfactory conclusions as to the right proportion of students to patients or to supervisors can be reached at the present moment.

Hours of Duty

In the last analysis, the pivot upon which the whole curriculum moves is the system of hours of duty which the hospital requires of the nursing staff. The very purpose of the instruction for which the student pays by her service is frustrated by long hours. Good teaching—any teaching, in fact—is wasted on students who have been engaged in prolonged, heavy, physical effort, or in exacting forms of nursing which involve considerable mental and nervous strain. The senses are dulled, the mind works more slowly, concentration is practically impossible, wrong impressions are frequently carried away; but, worse than all of these, is the fact that the student acquires a distaste for the work which is made too difficult for her to accomplish creditably. The fact is that long hours of work for student nurses have been for a quarter of a century the greatest stumbling block to progress in nursing. The whole experience of that period goes to show unmistakably that even the minimum acceptable body of instruction cannot be established by training schools unless at the same time a system of hours is arranged which permits the students to accomplish the required study satisfactorily and without detriment to health and spirit.

Even if we do not consider the class work which as a rule has been carried on outside of the required number of hours of duty in the wards, the long

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working day, the twelve-hour night and the seven-day week, still required in most hospitals, would generally be considered excessive from the standpoint of health and efficiency alone, even for laboring men. It is strange that hospitals have been so slow in grasping and applying the findings of science on the subject of fatigue. The eight-hour working day for six days in the week has been so generally accepted as the maximum for a normal, healthy life, especially under conditions demanding physical effort and mental strain, and it has been enforced by law in so many departments of the world's work, even under the unusual demands of war, that hospitals lay themselves open to peculiarly unfavorable comparisons by their continued insistence on a policy which has been discredited not only by scientific and educational authorities, but by frankly commercial enterprises as well.

The long hours of night duty are particularly grave in their effects upon the student's capacity to reap proper advantage from her instruction. Night duty in itself, under any conditions, is disturbing to the maintenance of a good system of instruction, in that each time the student is placed on night work there is a temporary new adjustment of habits of daily life to be made. But any person who has performed twelve hours of work such as is often required in night duty or who has even been "on duty" for twelve hours, should be looked upon as quite incapable of further effort—mental or physical. Any kind of satisfactory educational work is made practically impossible by such hours.

Schools of nursing should be scrupulously sensitive in seeing that the instruction they offer is given under conditions which will in no way lessen or impair its value. It is necessary to be constantly watchful on this point, because the needs of the hospital are imperative and difficult to satisfy, and all power and control are centered there. The head of the training school is frequently all that stands between the students and the urgent demands of the hospital for a larger service than can safely be required of them. Her vigilance, courage, and sense of justice, may be the sole protection of the students against conditions of life and work which would render of little value the best quality of actual instruction which could be offered.

Although under the present system of education in nursing, tuition fees are not required from students except in a few hospitals, a very exacting form of student service *is* required. While up to a certain point, we may look upon this service *as* indispensable in our method of training, we should not forget that it is always of distinct and substantial financial value to the hospital, and that through it the student pays the equivalent of the most ample tuition fees, and also usually for her maintenance provided by the hospital. The time has come to distinguish as precisely as possible between the service which is essential to the preparation of the nurse, and the service which is essential only to the maintenance of the hospital. No hard and fast line can be drawn but a careful study of the functions of the nurse after graduation would point toward the elimination of much that has formerly been considered essential and the addition of a good deal that has not usually been included in the hospital training.

In so far as hours of work for student nurses are concerned, there is general agreement that eight hours of practical work per day is the maximum which

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can be required in a satisfactory scheme of training. The findings of the Committee,[1] the opinion of heads of training schools, and the experience of those familiar with the system, coincide in approving the eight-hour schedule and in urging its adoption. They recommend that one half-day on Sunday and another during the week be provided and that all classes come within the hours of work, making a 48-hour week. Those who have tried this system would not be willing to go back to the old, realizing that not only is the actual nursing care of the patients of better quality, but that good teaching becomes possible only in the shorter day. Furthermore, it has been shown that shorter hours and better teaching inevitably attract more and better qualified candidates to the school.

The change from a nine- or ten-hour day to an eight-hour day will necessarily call for some increase in the number of student nurses and also of graduate nurses and hospital helpers of various kinds. Here one is met at once by the lack of adequate housing accommodations, which is an almost chronic condition in our rapidly growing hospital field. One solution of the problem may perhaps lie in the adoption of the plan now being tried out in a few hospitals, of arranging for those students who have good homes in the community to live at home. A somewhat different adjustment of hours for such students makes this a practicable scheme, and it would provide a substantial increase in staff without additional expenditure for quarters and maintenance. The principle has for years been applied in arrangements for the service of special nurses in private wards of hospitals, and here it works out satisfactorily.

Housing and Living Conditions

It is hardly possible to overestimate the importance of the conditions under which student nurses live. Next to hours of work, these form the factors affecting most deeply their health, spirit, and general power to handle their work efficiently or to derive benefit from the instruction and training which is virtually offered in part payment for their services.

Among the essentials which should be provided in students' residences are single rooms for all students. Double rooms should be used only when absolutely unavoidable and should be looked upon as a temporary and undesirable expedient. Student nurses acquire their training under peculiarly difficult and exacting conditions, and are subject to certain strains and to responsibilities quite unlike those which students in any other profession whatever have to meet. They need, when off duty, the quiet and privacy of individuals rooms—they need it for rest and most particularly for study. These rooms should be comfortable and should be supplied with good beds, writing tables, and shelves for books and papers. Students' rooms should always be provided with good lights, since most of their study must be carried on in the evening. There should be such provision made for personal clothing and other necessities as will enable the student to keep her belongings in good order. The standards of living for the student must be such as she will be

[1] See pamphlet, "The Case for Shorter Hours in Hospital Schools of Nursing," prepared by the Committee on Education of the National League of Nursing Education.

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expected to apply in the homes and institutions in which she works and teaches. These standards include the maintenance of orderly and hygienic surroundings and immaculate personal cleanliness. The lavatories should provide ample facilities for this, and not less than one bathroom for six students is looked upon as meeting modern requirements.

The dietary should be especially adapted to students engaged in arduous work involving physical as well as mental strain and such disruption of normal life as night duty or special duty usually brings. No body of persons in the hospital needs more careful consideration on this point than the staff of student nurses. There should be a carefully worked out menu and the food should be well selected, well cooked, and attractively served.

Specially arranged quarters should be provided for students on night duty to ensure protection from noise and other disturbances. The whole atmosphere of the nurses' home or dormitory should be one of quiet, comfort, and refinement. There should be suitable reception and sitting rooms and such service as is necessary in maintaining a dignified, orderly, attractive, and homelike household.

A number of schools are now employing social directors, or house mothers, to look after those aspects of the students' home life to which the superintendent and staff cannot possibly give much attention owing to their other engrossing duties. Definite provision is thus made for developing a wholesome and stimulating social life in the home and for the introduction of outside interests which the student nurse particularly needs.

Tuition Fees and Scholarships. Allowances

It was for years the practice of hospitals to make a money allowance to student nurses of from five to fifteen dollars per month, to cover expenses of uniform, textbooks, and other incidentals connected with their work. An increasing number of representative hospitals are giving up this practice and are devoting the funds so released to building up their educational system through providing better teaching and supervision, shorter hours of hospital work and better living conditions.

Several schools have gone farther than this and are requiring a small tuition fee of from twenty-five to one hundred dollars for the preparatory period of training, and at least one school of nursing requires tuition fees for the entire course of training. A tuition fee for the preparatory term is a just charge in those instances where practically the entire time of students is spent in class and practice work which require the employment of several special teachers and supervisors. It should not be charged where any considerable proportion of the students' time in this preliminary period is spent in the hospital. It should be understood that the fee will not be returned to those students who do not remain after the preparatory term.

There is no doubt that the tendency at present is toward the establishment of tuition fees. Where this policy has been introduced and has been accompanied by a radical improvement in the course of study and the introduction of other features making for high standards of training, such as reasonable hours and good living conditions, the result has always been to increase rather than to decrease the number of eligible applicants and to definitely improve the class

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of women entering the school. It is useless and improper to introduce tuition fees unless these conditions are assured. In schools connected with universities and colleges tuition and other fees are charged as a matter of course.

There is little use made of scholarships in schools of nursing. A few leading schools award them, but usually at the close of the full term of training, to a student desiring further study in some special branch. There might well be a much wider use of scholarships, and they might be offered to exceptionally well qualified candidates for admission who desire to secure the training but are unable to incur even the modest personal expenses which are usually all that student nurses are required to meet. Provisions for such candidates is made in virtually all other educational institutions, and schools of nursing might, through the adoption of this policy, find a way of admitting some unusually desirable candidates.

The Administrative and Teaching Staff (Faculty of the School)

The school of nursing is peculiar in organization due to the fact that it is designed to fulfill two distinct purposes of an entirely different nature, and to direct both of them through a single organization and one administrative body. The officers of the school are also (with the exception of the instructors) officers of the hospital, and all of them exercise double functions. On the one hand the school is a department of the hospital responsible for managing its nursing service, and the functions of its officers are clearly executive. On the other hand the school is an institution responsible for the direction and development of a scheme of instruction and training, and the functions of these same officers here become purely educational. Obviously those who are to fill these offices satisfactorily must unite within themselves a rare combination of qualities and qualifications.

Roughly speaking, the single staff, which is to perform the various administrative and teaching duties in these two institutions, should include the following persons:

- The superintendent or director of nurses who is also the principal of the school
- Assistant superintendents both for day and night in accordance with the size of the hospital and school and the character of their work
- Instructors and supervisors according to the number of students, services, and subjects to be taught
- Lecturers in all the general medical and surgical, and also special subjects
- Graduate nurses as heads of nursing in all departments (medical, surgical, maternity, children's, psychiatric, dispensary, operating room, etc.)
- Dietitians and assistants as needed
- A secretarial staff large enough to handle the correspondence and records essential in the conduct of a school
- A librarian for whole or part time
- A social director or some similar official to look after the social life of the students

These may be said to constitute the minimum of offices required in the conduct of a school of professional grade which also directs a nursing service.

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It is hardly necessary to point out that the woman who is to direct the education and training of nurses, and to direct also the nursing service of a hospital which forms the main field for the work of students, must be herself an educated woman. It is not enough that she should be a well-trained nurse with varied experience and also a reliable and trustworthy woman. These two considerations are, of course, indispensable, and should be taken for granted. Nor is she to be considered qualified solely because she is an efficient executive or a good business manager. Details of office management and ward supervision can be delegated to assistants, but the superintendent of nurses must herself be able to shape the policy of the school, to guide and direct its work, and to coordinate instruction with the service of the hospital. She should understand people and be able to secure their cooperation, and she must have that kind of personality and maturity of judgment which will command the confidence and respect of her associates. It is imperative that the director of a school of nursing which undertakes to prepare young women for one of the most important of modern professions should have a sound educational background and a broad point of view, so that she will be able not only to maintain satisfactorily already established standards, but to develop new methods and and new educational policies in accordance with the needs of the times.

It is obvious that as far as practicable a similar kind of education, of training, and of personal qualities, should be required of assistants and graduate heads of departments. In addition to purely executive duties, they will all have to supervise and criticize the work of students and in many instances to assist actively in the regular teaching. It is clearly important that the heads of special departments should be prepared in some degree to teach the branches of nursing they represent. It is well to keep in mind that the future heads of all schools of nursing will be drawn from this group of officers (including instructors).

Schools of any standing require at least one full-time instructor to be responsible for teaching the groups of younger nurses. As a rule, even in the small schools, one instructor will be needed to teach nursing procedures and to follow the students' practice in the wards, and another to teach the elementary sciences. In the larger schools there may now be found several full-time as well as a number of part-time teachers.

To hold the interest of pupils and to stimulate them to their best efforts, both in their theoretical and practical work, the instructor needs to have a strong and vigorous personality and a fund of real enthusiasm for her work. She should be approachable and helpful in dealing with pupils, but at the same time should show a reasonable degree of firmness and decision in keeping them up to a good standard of work. No one should attempt to teach who has not a fairly keen, well balanced and well ordered mind, a real love for study, and a strong desire to help young nurses to enjoy their work and to get the most out of their training.

The instructor should know thoroughly the subjects she is to teach. It is not always possible to make this knowledge exhaustive, but it should be authoritative and up-to-date, and always well in advance of her class. She must be constantly refreshing and supplementing her knowledge by study and observation, or her work will inevitably suffer. The teacher of nursing prac-

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tice must also have a wide experience in the branches she teaches, and should be expert in demonstrating practical procedures.

Supervision is a form of teaching, and all that has been said is as true for the supervisor as for the teacher. The supervisor, indeed, should be a highly expert clinical teacher comparable in her own field to the clinical teacher in medicine.

In addition to sound technical and professional training, some experience and training in teaching are almost essential. Fortunately, many nurses have had normal school preparation and have taught in elementary or high schools, but most of those who plan to teach in training schools will need to take special courses, both to increase their knowledge of their subjects and to help them to teach more effectively.

As far as possible, all those who are concerned with the teaching work of the school should have these personal and professional qualifications. For many subjects in the curriculum specialists will be needed, and though it is perhaps of first importance that these should be thoroughly informed in the subjects they teach, the knowledge itself will be of small value without the ability to "get the subject over" to the pupils. Physician specialists should be employed for all subjects dealing with the actual study and treatment of disease, such as surgery, obstetrics, etc. In each of the clinical subjects, however, there are demonstrations and discussions of nursing treatment and technic which can be handled only by nurses. As far as possible, the supervisors who have charge of the practical training in these special departments should be responsible for the nursing classes and quizzes which accompany the doctor's lectures.

All good teaching requires time for preparation, and this should always be allowed for, as well as time for examinations and papers and the other routine work entailed in all branches of teaching. There are certain subjects for which special provision should be made. One of them is diet and feeding in various diseases and stages of illness. Although this is but one of numerous measures of care and treatment which together form the art of nursing, it is, on the whole, the most vitally important since it affects every patient continuously. It is generally agreed to be one of the weakest phases today of the education of nurses. Somewhere on the teaching staff of our schools there should be found nurses, thoroughly trained in nutrition and dietetics, and thoroughly familiar through study and experience with the diseases and conditions to which this knowledge should be applied. They would be in a sense specialists in the art of nourishing the sick, supervising throughout the hospital the feeding of specially difficult cases and teaching this phase of nursing to students.

The instructor whose whole time is given to teaching should not be expected to give more than from four to five hours daily in actual classroom work, and she should be set free from all routine executive duties of the hospital which have little or no relation to teaching work.

While it is important that the number of persons on the administrative staff should be sufficient for the demands of the work, its real strength must be determined, not wholly by numbers, but by the preparation and the personal qualities which each member contributes. It is practically impossible to

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conduct a good school without a well qualified body of officers and teachers, all working together in the interests of students, and of the people whom these students are ultimately destined to serve.

The new developments in nursing education which are bringing some schools of nursing under the direction of universities or are setting up working relationships with them and with colleges of various kinds, project new forms of administration and new kinds of officials. Some experiments are now being made in consolidating under one direction the theoretical work of several small hospital schools within a given area and these also point to probable administrative changes. As yet, however, there are few such departures from the familiar type of hospital owned schools, and the education of nurses will undoubtedly have to be carried on largely in the latter for some time to come and under the existing forms of organization and administration. The addition of new types of workers will not change the basic principles and policies under which hospital schools are governed. It is urgently necessary therefore to keep constantly in mind that wherever there are student nurses at work in hospitals, assigned systematically to successive services over a period of years, sharing in all of the duties and many of the responsibilities of regular members of the nursing staff, those who are to direct and supervise their work must be true educators seriously concerned with the mental development as well as with the technical training of the students.

Standards of Entrance to Schools of Nursing

Education

Schools of nursing in good standing should require all applicants to present evidence of graduation from a four-year high school, private school, or other secondary institution of approved standards, or to provide satisfactory credentials from responsible school authorities showing that they have received the equivalent of high school training. In every case the fundamental subjects, such as high school English, history, mathematics, and science should have been thoroughly covered. In most high schools the study of Latin or one modern language is also required for graduation. Training school officers should be provided with the lists of accredited high schools, and in any case of doubt should investigate the standing of the school. There is little future in nursing today for the woman who has not at least high school standing.

Nursing schools should secure the cooperation of high school principals and teachers in urging girls who are interested in nursing to complete the full high school course, and in advising them regarding the best selection of pre-nursing subjects. Wherever there is freedom for election, science courses, especially chemistry, physics, and physiology, should be chosen, and household science should be included, if at all possible. Mathematics is of relatively minor importance (apart from good sound arithmetic). It is a disputed question whether a modern language is not of more value than Latin, but one year at least of Latin is decidedly helpful in getting hold of technical terms. Music, drawing, physical training, and voice culture are all helpful to the nurse and should be included if possible. The general all-round high school course with emphasis on cultural and scientific subjects seems to give the best foundation

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on which to build a nursing training. Vocational subjects should not come in except as extras, because they take the time needed for more basic things and because they are not usually credited for college entrance. This is a matter to be considered since many nurses now wish to enter colleges for post graduate courses.

Deficiencies

Applicants who are deficient in general education but who qualify in other ways should be advised to make good the deficiency by returning to high school, attending night school, taking extension or summer courses in connection with a university or normal school, or by securing a special tutor to prepare them for the state examinations. Slight deficiencies might be made up after entering the nursing school, but this is not generally advisable, owing to the pressure of other studies and the demands of practical work. It should be distinctly understood that credits for admission to nursing schools should be made up in general cultural and scientific subjects and not in stenography, bookkeeping, and other technical courses. As a rule, such subjects as English, history or civics, chemistry, physics, biology, and arithmetic (if not covered elsewhere) should receive first place, but languages, physical geography, elementary psychology, social science, or economics, would also be of definite value to the prospective nursing student.

Advanced Standing

It is recommended that applicants who bring educational credentials in advance of high school graduation should be allowed advanced standing in nursing schools under the following conditions:

1. Graduates of approved colleges giving the regular four year course leading to the A. B. or B. S. degree should be allowed credit in time amounting to one academic year (eight or nine months), and should not be required to repeat class work which had been satisfactorily covered elsewhere.

It is suggested that this reduction in time should be allowed only in schools giving the 3-year course, to those who have graduated from college comparatively recently, and who have completed satisfactorily in college about one year's study in each of the fundamental sciences on which nursing is based—biology, chemistry, sociology, and psychology. The year of biology might include such subjects as physiology, bacteriology, botany, nutrition, hygiene, and sanitation; physics might be accepted for part of the year of chemistry, economics or social economy for the sociology requirement, and courses in ethics or education for part of the year in psychology. One year's work in a given subject usually means from two to six hours weekly throughout the year in that subject, depending on whether it is a lecture or laboratory course.

2. Students from schools of household arts, normal schools, and others representing work in advance of high school, who have completed satisfactorily such subjects in the training school curriculum as anatomy and physiology, bacteriology, chemistry, nutrition and cookery, etc., should be exempt from compulsory attendance on these courses, but should be required to take examinations with other students.

3. Credit for previous work in approved training schools should be granted,

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providing the student's character and records are satisfactory, the reasons for changing are good, and the experience in the first school is comparatively recent. A minimum of about two years should be spent in the hospital giving the diploma. Such a student should not be required to repeat work already satisfactorily covered in theory or practice.

Age

Because student nurses are in the unique position of being also regular members of the hospital nursing staff at an early stage of their training, the age of admission to schools of nursing is a matter of considerable importance. Young student nurses in all schools do perform serious duties, and hold actual responsibilities in the care of the sick, which place unusual strains upon them. From the standpoint therefore of the students' welfare as well as that of the patients they care for, it would be better if the entrance age should not be allowed to go below twenty years, with exceptions in favor of slightly younger women of superior mentality and vigor. The question immediately arises of those candidates who must either be admittted to nursing schools soon after graduating from high schools or seek some other occupation. The answer to this may perhaps lie in providing eventually pre-nursing courses which would help in preparing young women for nursing training and at the same time advance their education in cultural and other ways during the intervening period.

Health

The applicant should be of average height and weight and free from organic defects. She should present a recent certificate of good health from a physician, showing not only that her constitution is sound and her general resistance good, but that her mental and nervous make-up are normal and stable, and her whole personality of a good wholesome type. This is a protection both to the school and to the student. A certificate from a dentist should also be required. Before acceptance into the school, the student should have a thorough physical examination by the training school physician, and it is very desirable that a similar examination should be made yearly during the training so that health may be maintained at a high standard throughout.

Character and Experience

Certificates of character are usually of uncertain value, but should be required in view of the nature and responsibilities of the nurse's work. A personal interview with the applicant is always desirable. Direct correspondence between the school and the persons given as reference is advised. Wherever there seems to be any doubt as to character, a careful investigation should be made. Experience in home management, in business, and in social, educational, or club work, are distinct assets. The applicant who belongs to a cultured family with traditions of public service, who has travelled and seen something of life and people, is (other things being equal) generally found to be better fitted for success in nursing work.

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The Admission of Classes

Among the many points in the organization and administration of schools of nursing which constitute a genuine problem needing careful consideration, is the question of the number of classes admitted yearly. In some schools new classes are formed twice yearly; in others three or even four times yearly; in still others students are admitted irregularly, whenever the needs of the hospital are such that vacancies must be filled. It is hardly necessary to point out that this method makes the conduct of a good curriculum exceedingly difficult and expensive. Certain subjects must be repeated three or four times during the year, and students must of necessity enter at late dates some of the classes in which repetition is impossible, and endeavor to pick up what they can. The burden laid upon the teaching staff of constant repetition is a heavy one, which the always insufficient force of instructors complicates. So long as the hospital is so dependent on the system of student nursing service, it will undoubtedly be necessary to admit students twice yearly in order that the hospital service may not suffer from the removal at any one time of a considerable number of skilled workers, but in the interests of both students and teachers, the time of admitting classes should be kept as nearly as possible to twice yearly. The commonly accepted time in most training schools now conforms to those in other kinds of schools—in September or October for the autumn and in January or February for the spring. In establishing relationships with colleges or other similar institutions these periods will be found convenient as fitting in closely with their schemes of teaching.

Standards and Methods of Good Teaching

In teaching nurses we have always to keep clearly in view the objects of this special type of education. If the pupil is to be able to undertake the duties and responsibilities which meet her in the hospital and in various fields of nursing outside, she must have not only a certain amount of sound knowledge, a high degree of technical skill, and the spirit of service, but she must have a well trained mind, good powers of observation, high ethical standards, and the ability to handle people and to manage affairs.

The test of the teaching done in any school will be found, not in the examination records, but in the actual accomplishment of these results, and not only by the present standing, but by the future growth and progress of the members of that school.

Dr. Frank McMurry in his book on Elementary School Standards has reduced the main factors in good teaching to four, and in each case it is the pupil's reaction, not the teacher's effort, which is the basis of judgment. These four standards are

I. Motivation or purpose.
II. Consideration of values, or good judgment
III. Attention to organization or system
IV. Initiative and self-reliance

Where good teaching is being done the pupils are interested in their work—they do not need to be driven to it by threats or bribes. The work is vital to them because it meets their needs, it helps them to solve their problems,

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and arouses in them worthy and serious hopes and ambitions which persist in in their future life. They are doing real live thinking for themselves, and not simply memorizing facts; observing, comparing, judging, and learning to seek out reasons and to weigh conclusions. They show good sense in their handling of every day situations, as well as in their class work.

The pupils show also the clearness and thoroughness of their knowledge by their ability to systematize and classify their ideas and to find them when needed. They do not simply accumulate masses of scrappy, unrelated facts. Their answers to questions, their class notes, and their method of setting about a practical task will all show their ability to grasp the essential points, to subordinate the unessential, and to focus all their resources on the problem in hand.

Good teaching is shown by the degree of self-reliance, initiative, and resourcefulness developed in the pupils and their ability to adapt and apply their knowledge to new situations. The pupil who is absolutely dependent on the teacher, who cannot take any step without guidance and help, will not be of much use in the hospital or in the future work of her profession. The kind of teaching which substitutes tradition and authority for inquiry and investigation, which discourages mental activity and free self-expression, and which destroys originality and initiative, is no longer accepted as good in any branch of education.

The first thing for a teacher to do is to study her pupils to see what kind of material she has to work with, and what foundations she has to build on. She must select her subject matter with their particular needs and interests in mind, and should try to adapt her method of teaching to her class and to the subject which she has to teach.

It is well to have a fairly definite plan of the lesson worked out in advance. Slavish dependence on a textbook usually means slipshod, ineffective teaching, and rambling remarks, no matter how interesting, can never take the place of clear-cut, well directed questioning and thoughtful discussion.

The teacher will find it helpful to think out ahead the important questions she is to ask, the blackboard illustrations she is to use, the devices and material for demonstration and the plan for the pupils' practical work, reference readings, study, etc.

The work of the classroom should be organized so as to secure the maximum of cooperation and efficiency and the least loss of time and energy. This is especially important in the arrangement of classes in practical work, where, owing to lack of equipment and limited space, there is often serious waste of time for both pupils and teacher. It is scarcely necessary to state that classes should begin on time and finish on time, and that regular and prompt attendance on classes should be insisted upon.

The type of class exercise or recitation should be adapted to the subject taught, to the time available, and to the resources of the school. Those which are best adapted to the work in training schools and which are suggested in this curriculum are as follows:

The Lecture Method

This takes the form of a talk or address by the teacher, with no questions or responses by the pupil. It can be used profitably for introducing new material

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or arousing interest in a subject. It saves time, but it is limited in its teaching value unless supplemented by the other methods.

The Recitation Method

This covers a variety of class exercises—the drill, the quiz, the oral or written review, as well as the testing of assigned recitations.

The Problem or Project Method

This method is being used a good deal in all kinds of schools. It takes as a unit, not a topic of subject matter or a chapter in a textbook, but a real problem which is to be worked out by individual pupils or by the group. Where skilfully handled, great interest is usually aroused and most of the work of the class is done by the students themselves.

The Demonstration or Clinic

This is a lesson conducted at the bedside or in the demonstration room for the purpose of showing certain conditions or performing certain experiments or practical procedures for the class. It is especially useful in the teaching of disease and in combination with the previous methods is used in nearly all scientific and practical subjects.

The Laboratory Method

Pupils here actually carry out experiments and practical procedures in order to get a more complete understanding of the principles involved and to gain skill. This method is used in combination with those previously mentioned, in all the scientific subjects (anatomy and physiology, chemistry, bacteriology, etc.) and in all the practical subjects (nursing, cookery, massage, etc.). No up-to-date school or college now attempts to teach any science or art without providing laboratory facilities for each pupil. The term, field practice is sometimes used to describe the participation of the student in some practical piece of work such as ward work or visiting nursing.

The Excursion

This may be considered as a modification of the demonstration, the object usually being to give the students an insight into conditions or operations which could not be duplicated in the demonstration room. The excursion is particularly useful in giving nursing students a vivid picture of social and sanitary conditions such as the housing in a tenement district or a baby welfare station, or perhaps a museum with exhibits of sanitary procedures.

The Conference or Discussion Method

This is used with more advanced pupils, who are capable of gathering together their own material and presenting reports on their observations or practical work, which are then discussed and criticized by the class and teacher. Such a method can be most profitably used in such subjects as Professional Problems.

The Study Period

With more immature pupils it is often found helpful to arrange definite periods of supervised study, with instruction in the method of study and

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demonstrations in the use of reference materials, note taking, etc. This is particularly helpful in the early part of the training where pupils have difficulty in acquiring the habit of study and where it is important to economize every available minute of study time.

The Case Method

Various professions, such a law, social work, and medicine, use the case method in teaching their students and in each the technic varies considerably but the main idea is the same. In nursing it means that the individual patient is used as the subject of study, and the student learns to gather together and organize all the relevant material belonging to the case in hand, and to use this material in working out a plan of nursing care for the patient.

The teacher who has had no special training in teaching will find it very helpful to study some of the books on teaching which are included in the bibliography at the end of this article. It is suggested that groups of head nurses and supervisors might be organized for the study of some of these commoner teaching problems, and if regular lecturers cannot be secured from a university or normal school, a club might be formed for the discussion of teaching and administrative problems.

Teaching Equipment

To accomplish satisfactory results a school should provide for its teaching work comfortable, well lighted, well ventilated classrooms and laboratories, such as are found in all modern educational institutions. The number and size of the classrooms will depend on the size of the school, but most schools will need at least a general class and lecture room, a demonstration room, and a diet kitchen equipped for teaching. All classrooms should be supplied with ample blackboard space and either chairs and tables or chairs with the desk arm. A science laboratory for the teaching of chemistry, anatomy and physiology, bacteriology, solutions, etc., is desirable, but in a small school the regular classroom or demonstration room or the pathological laboratory may be equipped to serve for this purpose. Where the hospital does not afford a well equipped dietetic laboratory it is often possible to secure the use of a high school or technical school laboratory. Medical schools can usually furnish excellent facilities especially for the teaching of the sciences, and are now providing both facilities and teachers in certain leading schools.

Under each course will be found a suggestive list of equipment and illustrative material to be used in teaching the various subjects. While ample equipment is not enough in itself to guarantee good teaching, it is practically impossible to teach nursing subjects without a fairly complete and up-to-date equipment and abundance of illustrative material. Much of this is easily secured in a hospital (beds, linen, utensil, chemicals, laboratory supplies, etc.), and a great deal can be readily improvised by an ingenious teacher. The bulk of the material for classroom use should be kept for this purpose only and should be properly arranged and cared for, so that it will not be scattered and destroyed.

The library is a much neglected part of most schools of nursing. Its place in education hardly seems to be understood by many of them, and much more

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interest and energy should be put into securing suitable space, suitable books, and other material, and a suitable person to see that they are used and properly cared for. The library should include a good supply of general literature, well selected books, current magazines, newspapers, etc. and a liberal provision for books, periodicals, pamphlets, reprints dealing with nursing and allied subjects. A librarian either for full or for part time seems essential: the latter might perhaps serve for a small group of related schools. If at all possible a trained librarian should be employed.

A good reference library is absolutely essential to satisfactory teaching work. The size of the library is not the main thing, though it is important that it should represent a fairly wide range of subjects. The books must be up-to-date and reliable and in good condition. A special room should be set apart for the reference library, where students can read and study without interruption. It is very important that students should have easy access to the reference books and that they should be encouraged to make the fullest possible use of them. The text and reference books and magazines recommended under the different subjects of the curriculum would make a fairly complete working library for the average training school. If it is impossible to secure all of these books, the public library is usually willing to put upon its shelves books of a more general nature which will be used by pupil nurses, and in many cases will install a "travelling" unit or a branch library in the school.

Records

It is essential that a good system of records should be established which will provide full and exact statements of the work which every student has done, and which will also give certain details regarding the health, general education, personality, and character of each student who has been in the school. The importance of this matter can hardly be overemphasized. Records are needed constantly for reference by the superintendent and staff of the training school, and serve as a useful check of the actual training which each pupil is getting and of the progress she is making. A new superintendent entering a training school has no other means of determining the standing of the pupils and the instruction and experience they have had. The graduate nurse who wishes to take any of the postgraduate courses which are now offered in colleges or to enter the Red Cross will have to furnish complete records of her work in the training school. The only way in which these records can be supplied is through her school, and if they are not available, the standing of both the nurse and the hospital is likely to be seriously questioned.

The records of theoretical instruction should cover the subjects, the number of periods of class, lecture, or laboratory in each, the years in which each subject was studied, and the grades which the student has made. Class books, with a record of attendance for each class, should be kept by each teacher and the results filed on the student's card when the class has been completed.

The record of practical training in each department should include the dates of such periods and the number of days or weeks in each. As before stated, the time spent in a given department may not accurately indicate the actual training and experience of the student, but at present this seems about the only method of measurement available, except in maternity work, where the

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number of cases often determines the period of training. It is suggested that every effort be made to keep track of the number and variety of cases which the student has observed and cared for in all services, and that a blank be supplied to each student for this purpose.

It cannot be too strongly emphasized that a few simple blanks, kept with absolute accuracy, are of greater value than a very elaborate system which is poorly kept. It is obvious that properly trained secretarial help is required for handling of such records and correspondence relating to the school, and that the valuable services of expert nurses should not be employed in this way under ordinary circumstances.

University Affiliations

The desire to improve the education of nurses, and the obvious need for so doing, has led to efforts to secure for schools of nursing the benefits which universities have long and freely given to other professional schools.

Beginning with courses for graduate nurses in Teachers College, Columbia University, in the year 1900, and with the establishment a few years later of a school of nursing in the University of Minnesota, there has grown up in various universities an interest in the problems of nursing education which has led to the establishment of relationships between them and a number of schools of nursing. These connections seem as a rule to have come about more or less spontaneously, and they vary markedly in important ways.

There are a few schools of nursing which are regular departments of universities, holding in all respects the status of other professional schools. It is hardly necessary to mention that such schools are well endowed.

There are others whose connection with the university comes through some existing department such, for example, as the school of medicine. In these instances the needs of the nursing school in regard to educational policies, measures, and financial resources, must usually be presented to and approved by the medical school faculty.

There are also schools of nursing which hold a nominal connection with universities and are granted certain opportunities in the way of instruction and teaching facilities, but which in actual government are still wholly under the direction of hospital authorities. It is evident that these new relationships are going through an experimental stage, and considering the complex questions which are inherent at present in the education of nurses, it seems likely that a good deal of time and effort must go into the adjustments which will be necessary before satisfactory conditions can be established.

The advantages of university or college relationship for schools of nursing are likely to be very great. Precisely those essentials in all educational work which the hospital finds it most difficult to supply are freely available in every college or university of good standing—properly equipped classrooms, and laboratories, libraries, and other teaching material; adequately trained teachers; associations with teachers and students interested in other lines of thought and activity; the atmosphere of study—all of these and other things less tangible are to be expected from any good university connection. The results in improving the standards of theoretical work in schools of nursing, in

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helping to maintain the right balance of theory and practice, and particularly in attracting better qualified candidates can hardly be overestimated.

The value of this relationship appears to be in proportion to the degree in which the university participates in the direction of the entire scheme of training school work. Schools now established as regular departments of universities give evidence not only of excellent standards and ideals of work, but of ability to grow and develop, to try out new ideas and methods.

Where, however, the university opens up its classrooms and laboratories to classes of students from schools of nursing and fails to look into the nature of the practical training in the hospital and the conditions under which it is carried on, the result may be far from satisfactory.

The university must exact thorough work from its students, and it must require a good many hours of study. If this is combined with the usual hours of duty, there is imposed upon the student a program of study and work which it is entirely impossible for her to carry out. All university relationships presuppose a rational system of hours of duty, and there can be no escape from the ruling that every increase in the amount of theory means a corresponding decrease in the amount of practical work. The whole subject of university schools of nursing will be more fully dealt with in a special pamphlet to be prepared by the Committee on University Relations of the National League of Nursing Education.

References[1]

On Nursing Education

Goldmark, Nursing and Nursing Education in the United States

National League of Nursing Education. Annual Reports and other publications

Nutting, A Sound Economic Basis for Schools of Nursing and Other Addresses

Robb. Educational Standards for Nurses

On General Education and Teaching Methods

Charters, Curriculum Construction

Dewey, Democracy and Education

Dewey, How We Think

Harmer, Methods and Principles of Teaching the Principles and Practice of Nursing

Kilpatrick, Foundations of Method

McMurry, Elementary School Standards

Muse, Psychology for Nurses

Parker, Methods of Teaching in High Schools

Snedden, Vocational Education

Stormzand, Progressive Methods of Teaching

Strayer, and Norsworthy, How to Teach

Thorndike, Elements of Psychology

Thorndike, Principles of Teaching

[1] Only *books* have been included in this list. A wealth of valuable material will be found also in publications such as the American Journal of Nursing, The Public Health Nurse, the Modern Hospital, and other periodical literature.

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PRACTICAL OBJECTIVES IN NURSING EDUCATION

The nurse belongs to one of several professional groups within the general field of medicine, and shares with them in the effort to care for the sick, to cure disease, to prevent suffering, and to promote a high standard of health both in individual and in community life. The ultimate object is to make life safer, happier, and more useful for all members of the community.

The nurse's service is both a personal and a community service. Her duties and responsibilities have been roughly grouped according as they relate to (a) the patient, (b) the hospital and school of nursing, (c) the physician and the medical profession, (d) the household and friends of the patient, (e) the community with its social and health agencies, (f) the nursing profession, (g) the nurse herself. It must be clearly understood, however, that her association with other individuals and organizations is for the purpose of promoting the objects outlined above. For instance, the nurse does not exist to aid the physician, but both exist to promote the best welfare of the patient and the public. The same thing applies to the nurse in relation to the nursing profession or the hospital.

The content of nursing education must be based on the actual duties and responsibilities which the average nurse is expected to carry at the present time in the practice of her profession.

Duties and responsibilities listed in this outline are intended to be basic—that is, common to the rank and file of student and graduate nurses and not peculiar to any special field or any section of the country.

All students in nursing schools would be expected (a) to learn how to perform these services, outlined below, in such a way as to get the best results, (b) to know the principles underlying such procedures and to be able to make necessary adjustments to varying conditions and types of patients, (c) to reach a fairly high degree of expertness in all these procedures (with the exception probably of the more unusual ones where practice is difficult to secure), (d) to have enough foundation in knowledge and skill to serve as a basis for future growth and for possible specialization.

Nurses are expected to care for the widest variety of human beings, in all conditions of health and disease. These may be summarized as follows:

(a) Classified according to age, sex, intelligence and social status
  All ages from infants up
  Men and women, boys and girls
  All races, classes, social status, and economic condition
  All grades of intelligence from subnormal up, including many abnormal types

(b) Classified according to stage or degree of illness
  The normal (especially normal child, including the premature baby)
  The mildly ill, chronic, and convalescent
  The acutely ill, operative cases, accident cases, etc.

(c) Classified according to type of disease
  Medical diseases—all common types, including communicable diseases, tuberculosis, venereal diseases, and skin diseases

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Surgical diseases—all common types, including gynecological, urological, and ordinary orthopedic cases.
Diseases of infants and children—all common types
Obstetrical cases
Mental and nervous diseases (only incipient or mild cases)
Diseases of the eye, ear, nose, and throat (common types)

Nurses must be prepared to work in all kinds of places and under practically all kinds of conditions, (a) in hospitals, hotels, homes, tenements, factories, schools, camps, etc., (b) in city or rural districts (often isolated), (c) in all sections of their own country and sometimes in other countries, (d) under normal or emergency conditions, such as war, epidemics, etc., (e) on day or night duty.

Specific Duties and Responsibilities

A. What the nurse does for the patient

1. Secures best possible environment: safe, sanitary, comfortable, convenient, attractive, quiet, etc.

2. Keeps surroundings in best possible condition for patient's recovery. This means good housekeeping, including the cleaning (or supervision of cleaning) of floors, walls, furnishings, etc., daily attention to order, comfort, beauty, etc., ventilation, heating and lighting, disposal of wastes, garbage, etc., and destruction of vermin.

3. Secures and cares for necessary supplies, tools and equipment, including linen, clothing, dressings, drugs, instruments, rubber goods, etc.

4. Keeps up constant guard against infection from all sources and uses every precaution in handling patients' linen, utensils, excretions, etc. This includes the preparation and use of many varieties of disinfectants, methods of sterilization by heat, steam, etc., and the mastery of aseptic technic.

5. Protects from other possible dangers and hazards: injury by self or others, fire, exposure, falls, damp, draughts, drug habits, poison, etc. This includes proper use of safety measures and restraint.

6. Safeguards patient's possessions and protects his interests and welfare: includes care of clothing and valuables, economy in expenditures, etc.

7. Provides for and assists in transportation and handling: includes lifting, moving, carrying, etc., (may mean fairly extensive travel or emergency transportation in accidents).

8. Attends to physical needs and keeps patient clean and comfortable: includes bed making, bathing, care of mouth, hair, etc., dressing and undressing, excretions, change of position, prevention of bedsores, simple rubbing, etc., (special skill required in care of such types as delirious or unconscious patients, premature babies, helpless chronics, etc.).

9. Helps to build energy and resistance by providing as far as possible for rest, sleep, proper food, proper exercise, recreation, entertainment, variety, etc.

10. Helps to conserve patient's strength by relieving pain, by imparting confidence and sense of security and by guarding against physical or nervous tension or over exertion, shocks or excitement, friction, worry, suspense, etc.

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11. Affords therapeutic suggestion, companionship, sympathy, encouragement, moral support, mental stimulus, etc., and if necessary discipline and control. (This includes habit training for certain types of cases).

12. Keeps watch on patient's condition, secures services or advice of physician when necessary and keeps friends informed.

13. Prepares for and administers therapeutic treatments prescribed

(a) Local hot and cold applications, counterirritants, etc.

(b) Baths and packs: hot, cold, medicated, light baths, etc.

(c) Enemata and irrigations: enterocylsis, proctoclysis, nutritive enema, etc.

(d) Lavage, gavage, nasal feeding.

(e) Eye, ear, nose and throat irrigations, inhalations, etc.

(f) Vaginal douche, catheterization, instillation, bladder irrigation, etc.

(g) Preparation of patient for surgical operation and after care.

(h) Application of surgical dressings, handling of drainage, irrigations, etc.

(i) Application of bandages and binders, all types. Attention to surgical apparatus, frames and extensions.

(j) Preparation and administration normal diet, infant formulae, special diets for all types of disease. (This includes the evaluation of nutritive elements in foods, preparation of balanced menus, calculation of caloric feedings, etc.).

(k) Medication: all types, by mouth, hypodermic, inhalation, etc. This includes administration of an anaesthetic in emergencies.

(l) Common exercises and occupations including elements of massage.

14. Prepares for therapeutic and diagnostic measures administered by physician and assists in

(a) Major and minor surgical operations and surgical dressings (all types).

(b) Aspiration, exploration, lumbar puncture, intrauterine douche.

(c) Hypodermoclysis, intravenous, infusion, transfusion, etc.

(d) Administration of vaccines, sera, antitoxin, salvarsan, etc.

(e) Endoscopic examinations, x-ray, radium, etc.

15. Meets medical and surgical emergencies which arise in absence of physician: burns, fractures, sprains, hemorrhage, shock, convulsions, epilepsy, poison, asphyxia, emergency child birth, etc.

16. Cares for and supports dying patient and attends to necessary details after death.

17. Plans and manages daily schedule of care for single patient or group of patients. This may involve some direction and supervision of assistants, cooperation with hospital or household departments and meeting of domestic and other emergencies.

18. Makes arrangements and cares for patient when travelling.

19. Teaches and helps patients who do not know how to care for themselves and their families, to protect themselves from disease and to improve their physical and mental health. (Special attention paid to child hygiene, prenatal care, prevention of tuberculosis, etc.)

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B. What the nurse does for the physician

1. Prepares for examination of the patient and if necessary assists, placing patient in position for examination, handing instruments, taking notes, etc.
2. Observes symptoms and keeps clear and detailed records of temperature, pulse, respiration, excretions, sleep, appetite, mental condition, etc. (This covers may kinds of charts, records, and reports.)
3. Keeps physician informed of patient's condition and notifies him at once about unusual or disturbing symptoms which seem to require his attention.
4. Secures proper specimens of sputum, urine, etc., on which physician depends for diagnosis and treatment. Makes some of the more common urine tests.
5. Carries out orders for treatments and observes results. Notifies physician of undesirable results and where orders are conditional, modifies treatments, diet, medication, etc., according to patient's condition.
6. Cooperates actively in securing results physician is working for and in emergencies acts in accordance with physician's practice as far as it is possible to know it.
7. Assists by suggestions based on her own observation of patient and her previous experience. (This depends somewhat on the attitude of the physician.)
8. Observes social factors which help to cause illness or interfere with recovery, and aids in their adjustment.
9. Cooperates in carrying out scientific experiments or research, arranging details, watching and recording results, etc.
10. Helps to maintain good relations between patients and physicians and between members of the medical and nursing professions.
11. Helps to create and maintain public confidence in scientific medicine and to discourage every form of quackery.

C. What she does for the hospital and school of nursing

(Applies to any nurse working in a hospital whether its graduate or not.)

1. Makes herself familiar with the institution, its organization, departments, activities, etc., and makes all necessary contacts readily.
2. Adjusts herself to all reasonable requirements of the hospital and school, fits into their organization and activities and learns their customs and traditions.
3. Carries out the routine regulations of the hospital regarding admission and discharge of patients, orders, records, precautions, supplies, etc.
4. Contributes to the efficiency of the hospital by giving good nursing service to the hospital's patients as outlined under A, and if possible by working out new and practical ideas for improving nursing and hospital system.
5. Cooperates with other nurses, with the officers, physicians, etc., in the team work of the hospital and nursing school.
6. Carries responsibility, plans and manages her own work and when necessary gives direction and supervision to those with less experience. (This involves at least the management of an ordinary ward or department at night or for brief periods in the day.)

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7. Economizes the resources of the hospital, cares for supplies and equipment, attends to repairs, prevents losses, saves time, avoids legal complications, etc.

8. Protects and advances the reputation of the school and hospital.

9. Contributes to the morale and the social life of the school and hospital.

D. What she does for the household and friends of the patient

1. Relieves them as far as possible from strain, worry and responsibility incident to illness.

2. Teaches them how to carry out simple nursing and sanitary measures in the absence of the nurse.

3. Protects household furnishings and equipment, and cooperates with members and staff of household in saving extra work and expense.

4. Protects household and visitors from infection or other dangers to health.

5. Detects signs of disease or physical defects in members of household or habits and conditions leading to disease. Helps to prevent through simple teaching and hygienic measures. Sees that conditions needing medical attention are referred to proper medical authority.

6. Cooperates with other nurses, social workers, etc., who may be working with patient and family.

7. Helps to raise the general standard of living in homes below the normal standard and uses all ordinary educational, health and social agencies to assist in this.

E. What she does for the community and its social and health agencies

(Most of this applies to the larger community of state and nation as well as to the local community.)

1. Makes herself familiar with the fundamental health needs and with the representative social and health organizations in the community. Knows more important Board of Health regulations and helps in enforcement.

2. Helps to protect the community from infection and other dangers to health and to encourage rational methods of medical and nursing treatment.

3. Helps to teach the community how to prevent disease and how to improve health and general standards of living. (This teaching may be very informal or in form of simple talks, articles, etc.)

4. Cooperates actively with health and social agencies in the promotion of better conditions.

5. Makes her service available when possible in time of special emergency: epidemics, accidents, fires, floods, wars, etc.

6. Seeks to make adequate nursing service available to all groups in the community.

F. What she does for the nursing profession

1. Protects its standards and its good name.

2. Advances its usefulness, particularly through her own branch of nursing.

3. Cooperates in professional activities, organizations, conferences, magazines, registration movements, etc., and leads in such activities as she has special aptitude for.

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4. Contributes to its fund of knowledge through new ideas, new methods, new devices, etc., and results of personal experience, study and experimentation.

5. Assists members who are ill or unfortunate.

6. Contributes to the social life of the group and to its morale.

7. Promotes educational enterprises and supports them in every possible way.

G. What she does for herself

1. Keeps herself in good physical condition through proper habits, exercise, recreation, diet, etc., and keeps herself personally wholesome, attractive, and well poised.

2. Strengthens and increases her preparation for her professional work through study and experience, better training of her powers, wider utilization of opportunities, etc.

3. Provides for economic security and independence by businesslike habits and methods, by proper provision for sickness and old age, etc.

4. Provides for wider cultivation and enrichment of her own personal life and character through her work, her social life, her recreation, religious life, etc.

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THE COURSE OF STUDY

A. Length of Course, General Division of Time, and Basis of Credit

The course is divided into first year, second year, and third year. If the school is working on a twenty-eight or thirty month basis, it seems better to count the first two years as complete calendar years and the last as a half-year or term. One month is allowed out of each calendar year for vacations. The best time for vacations is during the summer term when no regular classes are being held.

The academic or class year has been arranged on the eight month basis as in most technical schools and colleges. It is divided into two terms of about fifteen weeks each, which allows a short time for Christmas and Easter holidays. The last week of each term is usually devoted to examinations. The first or winter term extends from October 1 to the end of January, the second or spring term from February 1 to the end of May. Where there are no affiliations with colleges, the terms may be more conveniently arranged to extend from September to December and from January to April.

The reason why the fifteen hour unit has been adopted for the lecture and class schedule is to make it easier to evaluate the work of nursing schools on the credit basis. In most colleges every unit or point of credit represents fifteen hours of class or lecture work, including examination, or thirty hours of laboratory work. This is on condition that the courses are solid and well rounded out and not just "assorted" lectures. Each hour of class or lecture is supposed to represent at least one and one-half hours' outside study or other assigned work. Laboratory work usually requires little outside preparation, hence the difference in credit.

In the schedule on pages 59–60 one hour of required study for each hour of class or lecture is indicated. This does not mean that student nurses need to study less than other students, but it is assumed that a good deal of study is going on while the student is at work with her patients, preparing her case reports, doing "rounds," etc.

No satisfactory basis has yet been established for evaluating the practical experience of the student nurse in terms of academic credit. The educational value of the ward experience is unquestioned, but the necessary amount of repetition and the variable amount of real teaching done in the wards make it difficult to use any crediting system based on hours of work. The nominal basis of one point for one month full time duty has been used by some schools, but the whole subject needs further study before any method can be recommended.

There is no reason why the division of time recommended here should be an arbitrary one. Some nursing schools prefer to spread the class work over a ten month period and others adopt the trimester plan, with three terms of ten weeks each. Such adjustments are easily made. Under the plan outlined here, new classes would be admitted in the beginning of the winter and spring terms only. The new section which enters in the spring should continue at once with its second term in order that the first year subjects may be taken

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when they are needed, and also to avoid congestion in the fall term following. It is suggested that the class and lecture schedule for this second (or summer) term might be condensed into two months instead of four, so as to leave at least two months free before beginning the next term's class work. If the teaching schedule for this section is doubled up, the concurrent practice will have to be reduced accordingly.

The plan presupposes a six day week with two half days or preferably one full day off duty every week, whether the student is on day or night duty. The time spent by the student on her professional work has been divided into (1) practical experience, (2) lecture, class, and laboratory work, and (3) study, the total of all this required work not to exceed 10 hours a day. This is still in excess of what should be required of young students in any field, but if rigidly enforced it would be a decided step in advance of what we are doing now in most nursing schools.

The evening hours should be left free from all regular class and lecture work. Popular lectures or extra-curricular activities might be fitted into evening hours if it seems advisable.

It is felt that the hours for night duty should be the same as for day duty, and that the special values to be obtained from night duty can be secured in a total period of four months, longer periods often interfering seriously with the general student program. Not more than two months night duty should be given at any one time, and the first term of night duty should be delayed till the student has completed her first two terms of class and lecture work. If possible, the first experience as night nurse should be as assistant and not in charge of a ward.

B. General Scheme of Practical Instruction

1. Division of Services	*3 Year Course*	*28 Month Course*
First term (assignments varied: wards, supply room, etc.)	4 months	4 months
Medical (includes general medical wards and diet kitchen)	5 months	5 months
Surgical (includes general surgical, gynecological, urological, orthopedic wards, and operating room)	6 months	5 months
Communicable Diseases (includes work in special divisions for contagious diseases, tuberculosis, and venereal diseases)	3 months	2 months
Pediatrics (includes infant feeding)	3 months	3 months
Obstetrics	3 months	3 months
Psychiatric and Neurological Diseases	2 months	2 months
Eye, Ear, Nose and Throat, Skin, Metabolism, or Other Specialties	1 month	
Out-patient Department (especially medical, surgical and pediatric clinics including some home service if possible)	2 months	2 months

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Electives (student might have choice of additional time in any of the services above or an affiliation with some community nursing organization) . .	4 months	
Vacation	3 months	2 months
	36 months	28 months

2. General Content of Services

Each service to which the student is assigned should be analyzed as to teaching content and some means devised to check up on what the student actually gets in her experience. Certain procedures are basic in every service: for example, the morning and evening toilets, the baths, the making of beds, the taking of temperature, pulse and respiration, etc. Care must be taken that no student does only routine procedures as she goes from one department to another. Assignments should be made by the head nurse on the case basis rather than according to certain divisions of ward duties, such as taking all the temperatures, giving all the treatments, etc. It may be wise to modify this method in larger wards where one student may be assigned to diets and another to medicines in addition to the care of certain patients. As soon as she has good command of all the fundamental procedures, the student should be made responsible for the entire care of these patients while she is on duty. In this way the individual patient is uppermost in her mind, and she is able to care better for his needs. At the same time she should become familiar with the social and economic factors which may have a relation to his illness, and should have an opportunity to study and get a complete picture of the particular disease from which he is suffering. The preventive and teaching work grows out of this knowledge and the close contact she has with her patient. Case studies should be made in each service, the number depending on the length of the service. These studies should be gone over with the student by the head nurse or department supervisor and in some cases the dietitian or social service worker, or other specialist, can be of great assistance in advising on their particular subjects. Students should be impressed with the fact that the ward is a place for study just as much as the classroom or library, and every effort should be made to connect the teaching in the ward with that of the classroom and vice versa.

Introductory Period or First Term

The student should not be counted upon for any regular ward duties during this time. Her practical experience should be arranged with the idea of arousing her interests, giving her a background for her class work, and helping her to apply the methods which she has learned in the classroom. It is also an opportunity for testing out her ability for nursing. The practice should be confined to the most elementary duties, but what she does must be done thoroughly and well, and the student must be made to feel responsible for whatever duties are assigned to her. The department in which the student has this practice is of less importance than the careful selection of patients. Only chronic, convalescent, or mildly ill patients should be assigned to the student until she has acquired a knowledge of the fundamental sciences and a

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fair degree of nursing skill in elementary procedures. Her practice should be under the careful supervision of the instructor. A short period of time should be given to the making of hospital supplies and the care of hospital linen. Excursions should be made to the various departments of the hospital, such as the central linen room, the laundry, kitchens, out-patient department, and laboratory, so that the student may have some idea of the interrelation of these departments and the necessity for cooperation to ensure the smooth running of the hospital machinery. Time should also be provided here or a little later for a short period in the dispensary and a few visits to homes with social service workers or visiting nurses, in order that the student may see for herself the conditions under which many of her patients live and the relationship of social and sanitary conditions to disease.

Medical Nursing

This time is to be divided among the medical wards, men's and women's. The medical service should provide experience in the care of all the commoner medical diseases, the greater proportion of which should be acute. A minimum experience should include cardiac, gastric, kidney, metabolic conditions, and the communicable diseases such as pneumonia and influenza. The medical wards should furnish opportunity for each student to prepare for and assist with such treatments as gall bladder drainage (non-surgical), serum and vaccine administration, preparation of patient for basal metabolism test, electrocardiograph, gastric analysis, lavage and gavage, blood tests, X-ray study, test meals, etc., as well as the commoner nursing procedures—packs, baths, irrigations, and the like. If it is at all possible the student should have an earlier and a later experience in the medical wards and also in the surgical. In her earlier period she would have the care of the less seriously ill patients and later she would be assigned to the more serious cases with the more complicated treatments.

Communicable Disease Nursing

In addition to the communicable diseases that may be cared for in general medical wards, it is important that experience should be given in the care of scarlet fever, diphtheria, measles, etc. If the hospital does not offer such opportunities, it is urged that affiliations be made with communicable disease hospitals. Only teaching hospitals where scientific medical and nursing instruction and supervision are available, and where careful clinical demonstrations are given should receive student nurses for instruction and experience in this important branch of nursing. Municipal hospitals for communicable diseases, administered under approved educational standards, provide an ideal training ground for the student. The fear of contagion which formerly prevented such affiliations has been proven to be quite unfounded. Where good conditions prevail there is less danger than in the wards of most general hospitals. Preventive aspects should be especially stressed in this service. Experience in tuberculosis nursing is extremely important for the general nurse. Sometimes it can be secured in the wards of a general hospital or a municipal hospital for communicable diseases. There is little question, how-

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ever, that a much more satisfactory experience can be secured in a tuberculosis sanitarium of good standards, where the whole environment and daily régime are definitely adapted to the care of this special class of patients. Even a month or less in such an institution often changes the whole attitude of the student toward tuberculosis and although it will not make her proficient in the care of tuberculosis patients it will give her a fair idea of the more distinctive features of that disease and the outstanding principles of tuberculosis nursing.

Dietetics

Experience in the dietary department should include the actual preparation of all the simpler types of food such as soups, jellies, light desserts, eggs, meats, etc., and also the special preparations of diets for nephritic, diabetic, hypertension, gastric ulcer and other special cases. Calculation of food values is essential. It is most important that the nurse who prepares the special trays should keep in close touch with the patients receiving them and should be able to observe the effect of the dietary treatment.

Surgical Nursing

This should be divided among the surgical wards, men's and women's, and should include gynecological, urological, orthopedic, and emergency work. In this service the student will be taught the practice of surgical asepsis, and should have ample opportunity for practice in such procedures as surgical dressings, care of patients on fracture bed, on Bradford frame, and in plaster casts, etc., as well as general treatments common to all services, such as enteroclysis, hypodermoclysis, proctoclysis, catheterization, bladder irrigations, intravenous infusion, etc.

There seems to be some question whether operating room experience is absolutely essential to the basic training of the student nurse, especially if good experience can be given in dressing rooms and accident wards. Where it is included there is a tendency to give it fairly early in the second year and to limit the duties of the student to the less responsible details of the operating room service. The main purpose of the operating room service is to give opportunity for training in aseptic technique, in team work, and in emergency work. These objectives are more important than the actual number of operations, or even the variety of cases that pass through the operating room. Some study and follow up of cases is essential to get the full value of the operating room experience.

Pediatric Nursing

This service should include the care of very young children as well as those of later years. It should provide experience in the milk room in the preparation of special formulae and infant's diets along with observation and study of the child for whom the feeding has been prepared. Medical and surgical conditions of childhood will usually be included in a good pediatric experience. Opportunity should also be given for the observation of normal children, such as may be found in the children's and well babies' clinics and in the nursery school. Dispensary experience in the children's clinic is invaluable not only from the clinical standpoint but from the standpoint of teaching and preven-

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tion. Visiting and follow up work in connection with the children's service is also very important.

If the communicable disease service includes a number of children of various ages, this may be regarded as supplementing an inadequate pediatric service. In some parts of the country where clinical resources are limited, experiments are being made with the care of sick children in homes, under the supervision of a visiting nurse association, as a means of supplementing hospital pediatric experience. Such a plan would have to be carefully safeguarded and if followed students would have to receive close supervision from expert pediatric nurses.

Obstetrical Nursing

This should be given in a special maternity ward or in an affiliated hospital devoted to obstetrical work. It should include the care of both normal and operative cases and of normal and premature babies. Experience in the prenatal and postnatal clinics is also highly desirable. The minimum experience commonly required is the observation of at least twelve cases during labor and delivery, the student assisting in not less than ten deliveries. One month out of the three assigned for obstetrics is spent in out-patient work if this can be done under careful supervision.

Nursing in Special Diseases

If at all possible experience should be given in eye, ear, nose, and throat work, skin diseases and other specialties. Much of this experience is available in the dispensary as well as in the wards. This is especially valuable experience for students who are planning to do school work or any form of public health nursing.

Psychiatric Nursing

The importance of this phase of nursing is being recognized more and more. It is now regarded as an essential part of the student nurse's basic experience. Though many general hospital patients have some psychopathic manifestations the best experience can be secured in the special hospital, where patients are recognized as mentally sick and a rational program of care can be carried out in an environment suited to their needs and where the various types of illnesses are separated and classified. The term should be divided in such a way that students will have an opportunity to participate in the care of patients suffering from the milder types of mental disorders ranging up to the more serious disturbances including the organic diseases. Time should be planned for experience in the hydrotherapy, physical training, and occupational therapy departments and in studying means for recreation and diversion. Experience should be given in planning work schedules and daily programmes for patients. Time should be spent in the social service department or in the out-patient department in which early cases are usually seen and through which follow up work and preventive measures are carried out. Opportunity should be afforded for the student to participate in the educational program of the patients and she should be a recognized factor in assisting them to make the desirable readjustments.

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Where it is impossible to correlate the theory with practical experience in a special hospital, students should be assigned to the care of patients in the general wards who have mental disturbances in association with their physical illnesses, and the experience should be made as intense and varied as the conditions will permit. Excursions and visits to state and mental hospitals, child guidance and psychopathic clinics should be arranged and will provide at least a point of view. Special cases for study should be assigned and reports of findings compared and the student directed to an understanding of the patient as a whole. In order to accomplish results in the care and treatment of patients and in the training of nurses the careful and thoughtful assignment of cases is of the utmost importance. While bedside teaching is more difficult in the care of mentally sick patients it is not less important and must be accomplished in a tactful and unobtrusive way both for the safety and good of the patients and for the teaching of the students.

Nursing in the Out-patient Department[1]

The students may be assigned for a period of two to three months at one time and rotate through the various clinics, or they may be assigned to the out-patient clinic for a short period of about two weeks as a part of their experience in surgery, medicine, obstetrics, pediatrics, etc. This latter assignment rather tends to consider the out-patient service as a means of supplementing ward experience.

The out-patient experience should be as carefully supervised as other

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[1] In a group session of the Education Committees of the National League of Nursing Education and the National Organization for Public Health Nursing, January, 1926, the following objectives were agreed upon as applying particularly to student nurse experience in out-patient departments and in connection with public health nursing associations. The main purposes of such experience would be

1. To round out the student's clinical experience.
2. To give an enlarged social viewpoint and additional basis of appreciation for community health work.
3. To give practice in adapting hospital nursing methods to home conditions under competent supervision.
4. To help students to recognize and to be sensitive to home and community problems, and to assist in working them out.
5. To give students an opportunity to test their own aptitude for the general field of community health work and to give them a clearer idea of the scope of that work so that they can make a better vocational choice on graduation.
6. To give additional knowledge of the fundamental social conditions directly related to health and information about the various agencies operating in the community for the advancement of public health and social betterment.
7. To provide additional opportunity for the practice of teaching and to demonstrate the use and value of teaching methods especially with reference to patients and families in the home.

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phases of the student's work. An effort should be made to help the student to utilize the opportunities to study the relationship of social conditions to health and to learn something of the work of the various agencies operating in the community for the advancement of public health and social betterment. The student should be given opportunity to see health teaching in groups and to gain experience in individual health teaching and in phases of nursing other than technical procedures practiced in the care of bed patients.

Certain types of disease and the incipient or chronic phases of disease can be studied more readily in the out-patient department than in the wards. This is true of certain kinds of skin disease, eye, ear, nose and throat conditions, etc. Diagnostic procedures are an important feature of many modern clinics. Excellent experience can also be obtained in dietary treatments for such diseases as diabetes and the nutritional disorders of childhood.

Electives

This period should be arranged with reference to the special aptitudes and future plans of the student and should be left as far as possible to the student's own choice as a test of vocational interest and ability. Some part of the time might be spent in special duty in the dispensary or affiliated visiting nurse association (only, however, when the practical work there can be as thoroughly supervised as the work in the hospital) or as senior nurse assisting a head nurse or supervisor in charge of some hospital department. As a means of rounding out the student's experience, an additional month or two might be spent in any service where the student's previous experience has been a little weak or where her own interest or future plans lead her to wish more experience. It is important that this should not be just a "filling in" period but should be definitely planned for. To make this period most profitable, special assignments should be made for accompanying study, reading and written work, and if possible regular conferences should be held with students in different groups.

A term report or thesis for the last term is suggested as one way of bringing together various elements in the course as a whole and testing the ability of the student to work out some specific nursing problem and present it in good form. The subject should be one that is chosen by the student, with the approval of her advisor.

Schools which are able to offer experience in connection with a public health nursing association should study the content of that service carefully and also the methods of teaching and supervision. The objectives suggested on page 56 will apply particularly to this phase of the student's experience. As stated before, this is suggested not as a special training for public health nursing but as a part of the basic preparation.

The field should provide opportunities for experience in family health work including the curative, preventive and educational aspects. The student should gain an appreciation of the fact that her relationship to the patient, to the family, to the physician, and to the community, is somewhat different than when she is a part of the hospital staff, and learn to adapt to this new situation and to know community resources. She should also gain some skill in adapting nursing procedures and technique in home situations. Cases

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should be carefully selected so that too much responsibility is not required of the student nurse and so that there will not be too many complicating factors in the home situations for her to deal with. The experience should give the student a good comprehension of how the community cares for different disease groups including pediatric, communicable disease and maternity groups.

To receive the fullest educational return from this experience the field work should be given in connection with previously established organizations which provide adequate supervision and personnel, a sufficient volume and variety of services, and methods that are in accordance with generally accepted public health nursing standards.

3. Arrangement of Practical Instruction

No fixed order of services can be recommended, as this must depend on a great many factors which vary widely in different hospitals. In general, however, it is believed to be important that experience in medical and surgical nursing should precede training in special branches, and that services demanding the more fundamental and uncomplicated measures should precede those which demand considerable differentiation and a higher degree of skill and adaptability, such as psychiatric nursing or pediatric nursing. It is generally felt that careful training in surgical asepsis should precede obstetrics, and all the regular branches of hospital service (such as pediatrics, obstetrics, communicable diseases, etc.) should be covered before the student is assigned to any form of community nursing service.

The following arrangement is suggestive only.

First Year: Elementary nursing and housekeeping, dietary department, general medical and general surgical services (including if possible some experience in orthopedics and gynecological nursing).

Second Year: Communicable disease, tuberculosis, and admitting services (if given); children's service and milk room; operating room (if given) and obstetrical service. The latter will be extended frequently into the third year.

Third Year: Psychopathic service (including practical work in hydrotherapy and occupational therapy, where possible), eye, ear, nose and throat, and electives. Dispensary work may accompany the different ward services or may be assigned in a block in the latter part of the training.

C. General Scheme of Class Instruction

1. Outline of Subjects

First Year

First Term: Fifteen Weeks	*hours*	*credits*
Anatomy and Physiology	90	4
Bacteriology	45	2
General and Applied Chemistry	45	2
Personal Hygiene	15	1
Physical Training	15	0
Elementary Materia Medica	15	1

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Principles and Practice of Nursing (Elementary)	90	4
History and Ethics of Nursing	30	2
	345	16

Weekly Schedule for Term	hours
Class and Laboratory Work	22
Practical Work in Wards and Other Departments	16
Study	22

Second Term: Fifteen Weeks	hours	credits
Elements of Pathology	15	1
Dietetics	60	3
Materia Medica and Therapeutics	30	2
Principles and Practice of Nursing (Advanced)	30	2
Psychology (including Mental Hygiene and Teaching Methods)	30	2
The Case Study Method (Applied to Nursing)	15	1
	180	11

Weekly Schedule for Term	hours
Class and Laboratory Work	12
Practical Work in Wards, Diet Kitchen, etc	36
Study	12

Second Year: Thirty Weeks	hours	credits
Nursing in General Medical Diseases[1]	30	2
Nursing in Medical Specialties: Communicable Diseases and Skin	30	2
Nursing in General Surgical Diseases[1]	30	2
Nursing in Surgical Specialties: Orthopedics, Gynecology, Urology, and Operating Room Technique	30	2
Pediatric Nursing and Infant Feeding	30	2
Modern Social and Health Movements	30	2
	180	12

[1] For the 28 month schools, one of these subjects would need to be included in the first year in order to bring up some of the third year subjects, leaving not more than 90 hours for the last year which would be 4 months only.

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Weekly Schedule for Year	hours
Lectures, Classes and Clinics	6
Practical Work	48
Study	6

Third Year: Fifteen or Thirty Weeks	hours	credits
Obstetrical Nursing	30	2
Psychiatric Nursing	30	2
Nursing in Diseases of the Eye, Ear, Nose and Throat	15	1
Emergency Nursing and First Aid	15	1
Survey of Nursing Field and Related Professional Problems	30	2
	120	8

Weekly Schedule for Term or Year	hours
Classes, Lectures and Clinics	6
Practical Work	48
Study	6

Total number of hours for the three years 825

Recommended Supplementary Courses	hours
Elements of Sanitary Science	15
Physiotherapy	15
Occupational Therapy and Recreation	15
Elements of Social Science	15

2. Schedules

It will be noted that the courses are based on a 15 hour unit, which usually means one hour a week for 15 weeks, but it is not necessary that the hours should be distributed in this way. Usually a 30 hour course is given two hours a week for one term rather than extending it throughout the school year.

Many schools find that it is helpful to plan their schedules so that for a limited period of time the students do intensive classroom work. For example, the second year students are scheduled for 180 hours of class work or approximately one hour a day, six days a week, for 30 weeks. Instead of arranging it in this way, the group might have 18 hours of class work a week, for 10 weeks. Only one group of students would be having classroom work at the same time, that is, the first, second, and third year students would not have classroom work simultaneously, but consecutively. In a school year of 30 weeks, the curriculum, irrespective of the introductory term, could be covered as follows:

	hours
Third Year Students	120
12 hours per week for the first ten weeks of the school term	
Second Year Students	180
18 hours per week for the second ten weeks of the school term	
First Year Students (Second Term)	180
18 hours per week for the third ten weeks of the school term	

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(If two classes of students are admitted in the school during the year, the schedule would have to be repeated during the summer for the second group).

No student should be placed on night duty during this intensive period of class work.

Another type of schedule for classes is to have each class relieved from the wards two afternoons a week. For example, the second year students have class on Monday and Thursday afternoons. They leave the wards at 1.00 p.m. This gives them from 1.00 p.m. to 7.00 p.m. for 3 hours of class, 2 hours of recreation, and 1 hour for meals.

In planning the practice on the wards for the introductory period instead of placing the students on the wards for 2 to 3 hours each day many schools have found it more satisfactory to have these students on the wards for a half or whole day at a time, the total amount of time for the week, however, not averaging over 3 hours a day. In this way the new student gets a better picture of a day's work on the ward, and she has a better chance to concentrate her attention on the work in hand. Where she is constantly running back and forth from ward to classroom it tends to scatter her attention.

Another plan for the introductory term is to start students for about the first ten days or two weeks with intensive class work and then gradually increase the amount of time on the wards as they gain in skill and as their growing knowledge prepares them for more responsibility.

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OUTLINES OF BASIC SUBJECTS[1,2]

ANATOMY AND PHYSIOLOGY

Time: 90 hours. Divided approximately into 30 hours of lecture or class and 60 hours of laboratory, demonstration, discussion, review, written and oral quizzes.

Teacher: The course is in charge of a qualified instructor who may be a nurse, a physician or other specially prepared teacher. There is a special advantage in having a nurse assist with the course, even if she does not direct it, in order that the subject may be properly correlated with nursing practice.

Objects of Course

1. To stimulate in the student an interest in and appreciation of the human body as an efficient machine; to give the student a practical working knowledge of the structure and function of the normal human body as the essential basis for the study of hygiene, dietetics, materia medica, and all pathological conditions, as well as for the safe and intelligent practice of nursing.

2. To discourage popular, haphazard and pseudo-scientific ways of thinking about the body and its functions; to give practice in the correct use of ordinary scientific terms; to train in habits of exact observation and reasoning, and to arouse an intelligent interest in modern scientific work.

Outline of Class and Laboratory Work

I. Introduction

(Class). Discussion of terms biology, zoölogy, botany, embryology, histology, anatomy and physiology. Brief historical introduction (See Locy, Biology and Its Makers). Biological functions common to all forms of life; eight biological systems.

(Laboratory). Dissection of one small animal,—rat, rabbit, frog or guinea pig, to show animal as a whole and eight systems.

II. Embryological Development

(Class). Embryonic origin of tissues and their development.

(Laboratory). Models, slides and diagrams illustrating egg cells, sperm cells, fertilization, the formation of the three embryonic layers and the folding off of organs.

Note: The Jewel models are good for development.

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[1] The sequence is determined by the general relationship of subjects rather than by the order of their appearance in the Curriculum.

[2] The outlines for class and lecture work are suggestive only and each school must adapt them for its own use. At the end of each outline will be found two lists of books: Group I is composed of books considered essential, while in Group II are the names of books distinctly helpful for the instructor and for wider reading by the students.

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III. The Cell

(Class). The cell, its structure and activities; osmosis and dialysis.

(Laboratory). Examination of living cell, such as amoeba, paramecium, onion cell, cells from inside of lower lip. Demonstrate plasmolysis of onion cell, also show movement of protoplasm in elodea. Slides to show the different stages of mitosis.

Note: It is suggested that material included in III, which has been covered in bacteriology, be omitted at the discretion of the teacher.

IV. Tissues

(Class). Classification of tissues. Description and function of epithelial and connective tissues. Indicate in what part of the body each is found. (Muscle and nerve tissues may be presented very briefly and taken up in detail under VII and IX).

(Laboratory). Slides illustrating various types of epithelial and connective tissues, including bone and cartilage.

V. The Skeletal System

(Class). Study of the skeleton as a whole: head, trunk, extremities, referring constantly to the formation of bones of the different parts of the skeleton as related to function. Classification of bones, and study of the various terms used to describe special characteristics such as process, foramen, tuberosity, etc., explaining their purpose in connection with these terms.

(Laboratory). Use skeleton and disarticulated bones for illustration. If available, the skull or other bones of ape, horse, or any lower animal are excellent for comparative study.

VI. The Skeletal System Continued

(Class). Chemical composition of bone. Periosteum, its function and relation to growth and repair of bone. Study of structure and function of various types of joints.

(Laboratory). Show bones treated with acid to dissolve out the mineral matter, and others that have been burned to destroy the organic material. Observation and study of fracture conditions in the wards. Indicate importance of food to growth of bones and illustrate, if possible, by child with rickets. X-ray plates are helpful. Examine sections of fresh bones from the butcher's with as many types of joints as possible. Study and illustrate joints on skeleton and living subject.

VII. The Muscular System

(Class). Histology of muscle tissue; physiological characteristics of muscle tissue; chemistry of muscle tissue; chemical changes accompanying activity; relaxation and rigor mortis.

(Laboratory). Slides of muscle cells. Demonstration showing curve of muscle contraction and changes in curve as a result of repeated stimulation (fatigue). Demonstration of good exercises for activity of various muscles.

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VIII. The Muscular System Continued

(Class). Study of the more important muscles in functional groups, especially those involved in common activities, treatments and surgical operations. Diaphragm, relation of organs in thoracic and abdominal cavity to diaphragm. Locate and describe inguinal canal, hernia, Poupart's ligament, Scarpa's triangle, tendon of Achilles.

(Laboratory). Have students locate muscles on manikins, charts and human material if available. Study gross muscle and muscle attachments in fresh specimens (rabbit, rat, frog and guinea pig). Dissect a small animal to show action of the diaphragm in respiration.

IX. Nervous System

(Class). Histology of nervous tissue. Study of the reflex arc, a receptor, afferent processes, cell bodies, efferent processes, the synapse. Types of nerve stimuli, the nerve impulse, fatigue in the reflex arc. Reflex and reaction circuits.

(Laboratory). If possible show conduction by a nerve. Examine microscopic slides showing simple receptors, e.g., tactile corpuscles, longitudinal sections of a nerve, nerve cells of cerebrum, cerebellum, cord and ganglia.

Note: Other receptors such as the eye and ear may be studied here or at the end of the course.

X. Nervous System Continued

(Class). Spinal cord. Its location in neural canal, pointing out the relationship of length of spinal cord to vertebral column in children and adults (importance of this knowledge in preparing for lumbar puncture). Gross structure. Cross section. Function. Spinal nerves; function.

(Laboratory). Show fresh or preserved specimens of brain and spinal cord. If possible have specimen showing spinal nerves. Charts and illustrations from various textbooks.

XI. Nervous System Continued

(Class). Brain. Relation to skull. Gross structure, subdivisions and function. Localization of function in cortex. Cranial nerves: function.

(Laboratory). Charts, models and fresh specimens for illustration. If possible secure a brain which will fit into an open skull to show position; point out position of different parts of the brain on skeleton and on a subject. It is suggested that the teacher make diagrams to show one sensory path and one motor path in order to give the student some appreciation of how stimuli reach the spinal cord and brain and how motor impulses are transmitted from the brain and cord to muscles. Charts and illustrations from any good anatomy are most helpful in studying both cranial nerves and paths.

XII. Nervous System Continued

(Class). Autonomic system. Its location and relation to the spinal cord and brain. Its parts and their functions.

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(Laboratory). General survey of the nervous system. From a diagram of the nervous system as a whole, showing the relationship between the autonomic and central nervous system, trace nerves from the central nervous system and the autonomic system to the various organs, e.g., salivary glands, heart, stomach, pancreas and large intestines.

XIII. Vascular System

(Class). Blood. Composition and function. Coagulation and its causes. Antibodies (briefly).

(Laboratory). Let each student take a drop of her own blood and study under the microscope. Note form, color, size and arrangement of red blood cells and formation of clot. Note white corpuscles and look for amoeboid motion. Examine slides of blood, showing leucocytes prepared with differential stains.

XIV. Vascular System Continued

(Class). Heart. Position in relation to body wall, diaphragm, organs in thoracic and abdominal cavities. Pericardium; structure of the heart; difference between right and left heart; valves. Vessels entering and leaving the heart; course of blood through the heart. Nerve supply to heart.

(Laboratory). Dissect fresh specimen of heart and lungs (sheep or beef) to show cavities, orifices, valves, vessels entering and leaving the heart. If possible trace pulmonary artery into the lungs and pulmonary veins to the heart.

XV. Vascular System Continued

(Class). Structure and function of arteries, veins and capillaries. Systemic, pulmonary and portal circulations. Discussion of principal arteries and veins. Foetal circulation (briefly).

(Laboratory). Examine capillary networks in prepared slides of various organs. Examine circulation in web of frog's foot, distinguishing between arterial, venous and capillary circulations.

XVI. Vascular System Continued

(Class). Heart beat. Factors affecting circulation. Pulse: where pulse may be taken. Blood pressure.

(Laboratory). Demonstrate use of stethoscope and sphygmomanometer. Take blood pressure of subject after various types of activity. Pith frog, open body wall and note change in position, form and color of heart during beat; discuss. If possible have living subject (child preferably) present, on whom the apex beat may be noted.

XVII. Vascular System Continued

(Class). Lymphatic system. Description and function of lymph. Anatomy and histology of lymphatic system.

(Laboratory). If possible demonstrate anatomy in which the lymphatic system has been injected. Microscopic slides of lymph nodes and ducts, and sinuses.

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XVIII. Glands

(Class). Glands: types, function, where found. The endocrine system.

(Laboratory). Slides showing various types of glands. Specimens of glands, if possible.

XIX. Respiratory System

(Class). Anatomy and histology of the respiratory system.

(Laboratory). Dissection of lungs to show trachea, bronchi and bronchial tubes, branches of the pulmonary artery and pulmonary vein. Demonstrate sinuses connected with respiratory system; teach and discuss their hygiene.

XX. Respiratory System Continued

(Class). Mechanics of respiration. Lung respiration and tissue respiration. How the respiratory gases are carried in the blood.

(Laboratory). Examine slides of sections of lungs, plain and injected. Demonstrate vital capacity and the effect of breathing on the oxygen content of air in a closed receptacle. Demonstrate that carbon dioxide is given off in respiration.

XXI. The Digestive System

(Class). Anatomy of the alimentary canal; teeth, salivary glands, tonsils, caecum, appendix, pancreas and liver. Coats of the alimentary canal.

(Laboratory). Slides showing structure of different parts of the alimentary canal, coats of the wall and glandular make-up; pancreas and liver.

XII. The Digestive System Continued

(Class). Mechanical digestion: mastication, deglutition, peristalsis, antiperistalsis and defecation.

(Laboratory). With materials or charts demonstrate tooth arrangement in infancy, youth and maturity. Demonstrate relationship between deciduous and permanent teeth in infants and young people, and structure of tooth. Peristalsis can be demonstrated in the alimentary canal of a rabbit or fluoroscopic pictures of a subject.

XXIII. The Digestive System Continued

(Class). Chemical digestion. Chemical composition of digestive secretions. Classification of foods and the digestion of each in the mouth, stomach, small and large intestines. Absorption of foods from the alimentary canal by the circulatory fluids. Metabolism or the use of foods by the cells.

(Laboratory). Chemical experiments to show digestion by saliva, gastric fluid and pancreatic fluid. Normal dietary requirements of cells, and a comparative study of cases and diets in the metabolic ward in relation to the atypical use of foods by the cells.

XXIV. Urinary System

(Class). Elimination of the wastes of metabolism. Anatomy and histology of the kidney and urinary tract.

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(Laboratory). Dissect sheep's kidneys. Show charts, models and slides of kidney. Make diagram of uriniferous tubule and show its relation to blood vessels.

XXV. Urinary System Continued

(Class). Physiology of kidney excretion. Origin and elimination of nitrogenous wastes. Description of normal urine and some of the abnormal constituents occasionally found.

(Laboratory). Examination and measurement of normal urine to show quantity, clearness, color, tests for albumen, sugar and other substances.

XXVI. The Skin

(Class). The skin. Histology. Functions.

(Laboratory). Examine slides showing skin, derma papillae, sweat glands, hair follicles and sebaceous glands.

XXVII. The Eye

(Class). Anatomy of the eye, coats and fluids, the lens and the accommodation mechanism. The retina and vision.

(Laboratory). A study of eye models. Diagrams to show hypermetropia, myopia, presbyopia, astigmatism and the effect of lenses in correcting these defects.

XXVIII. The Ear

(Class). Anatomy of the ear. Physiology of the ear, hearing and equilibration.

(Laboratory). A study of ear models and histological preparations of cochlea.

XXIX. Reproductive System

(Class). Anatomy and physiology of normal male and female reproductive organs. Hygiene of menstruation.

(Laboratory). Dissect reproductive organs of a cat, rabbit, guinea pig or rat (pregnant preferably). Use also models and preserved specimens.

XXX. Examination

Methods of Teaching

1. In the classroom, groups of 30 pupils or more can be handled, but in the laboratory, smaller groups not exceeding 15 to 20 are advised. Ten to twelve are better.

2. It is important to have pupils themselves handle material and carry out observations and experiments as far as possible. The more fresh material the better. Laboratory work arouses interest, stamps facts in the memory, trains in careful observation and clears up difficulties. Clearly written directions should be given for all laboratory exercises. Students can often work in groups of two or three, where materials and equipment are limited. Notebooks of laboratory work should be kept with diagrams and drawings, descrip-

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tions of experiments, etc. These should be handed in for inspection at regular intervals within a week of the laboratory period.

3. Demonstrations are very important and may often be substituted where time and material are limited. Some teachers advocate the observation of one or two post mortems for pupils in anatomy classes, but this would probably come more profitably in the latter part of the course.

4. The lecture method should be used to present new material; assignments made in one good textbook and supplemented by reference reading. Short papers on special topics may be assigned to pupils in turn and read in class. There should be frequent quizzes, either oral or written, or both.

5. Special emphasis should be laid on the phrases of the subject which apply to nurses' work, and correlation made with parallel courses in chemistry, bacteriology, hygiene, dietetics, nursing practice, etc.

6. Good blackboard work is essential here. A good sized blackboard and colored chalks should be provided. Students should be encouraged to use diagrams extensively in notebooks and should learn to draw on the blackboard.

7. In this outline only suggestions in division of subject matter are made, the detailed outline being left to the instructor who makes the lesson plans.

8. It is not expected that this arrangement of topics will suit all teachers. Many prefer to take the skeletal and muscular systems before tissues, some introduce the nervous system later in the course, and some take the digestive before the circulatory system. Such readjustments in the order of topics would not alter the general character of the course any more than the addition of extra hours where needed.

Equipment and Illustrative Material

Skeleton with separate skull, separate bones; compound and dissecting microscopes (one for each student, if possible), colored chalks,charts, slides and X-ray plates; papier-mache manikin and models of kidney, sweat glands, eye, ear, etc. Specimens in formalin,—brain, kidney, spinal cord, larynx, etc., modelling clay. Excellent home-made charts can be made with manila paper and wax crayons or with Bristol board and paints or water colors, and unprepared architect's cloth.

Materials to Be Kept in Classroom (for a Group of 20)

Two trays; 10 dissecting pans with paraffin (squares of soft wood or cork linoleum may be used instead of paraffin pans); flat glass dishes; 10 finger bowls; 10 small glass jars; bank pins; 8-inch square gauze; paper pins (small); 20 dissecting needles, 20 dissecting forceps, 10 scalpels, 10 pairs scissors; 10 Bunsen burners; 10 tripods; 10 wire screens; 10 small alcohol lamps; dishes for specimens, glass covered jars for specimens; labels, slides, cover slips; 5 red wax pencils; 5 dozen test tubes; 10 test tube racks; 10 glass funnels, different sizes; 10 test tube holders; stickers; cotton thread No. 36; 5 casseroles; 4 mortars and pestles; filter paper; litmus paper; 10 glass stoppered bottles; hydrochloric acid 0.2 per cent; hydrochloric acid 10 per cent; Fehling's and Benedict's solutions; iodine; sodium hydroxide; alcohol; 10 per cent formalin; 10 glass stirring rods; 10 pipettes.

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Text and Reference Books

Group I

Arey, Developmental Anatomy
Burton-Opitz, An Elementary Manual of Physiology
Gray (Lewis edition), Anatomy of the Human Body
Halliburton, Handbook of Physiology
Howell, Textbook of Physiology for Medical Students and Physicians
Kimber-Gray, Textbook of Anatomy and Physiology
Martin, Human Body (Briefer Course)
Piersol, Normal Histology
Sherman, Chemistry of Food and Nutrition
Stiles, Nutritional Physiology
Toldt, An Atlas of Human Anatomy
Williams, Textbook of Anatomy and Physiology

Group II

Bigelow, Applied Biology
Bachman & Bliss, Essentials of Physiology Including the Pharmacodynamics of the Important Typical Drugs
Brubaker, Textbook of Human Physiology
Bundy, Anatomy and Physiology for Nurses
Burton-Opitz, A Textbook of Physiology
Cannon, Mechanical Factors of Digestion
Cannon, Bodily Changes in Pain, Hunger, Fear and Rage
Dawson, Anatomy and Physiology for Nurses
Davis, Applied Anatomy
Gerrish, Anatomy
Herter, Biological Aspects of Human Problems
Hough and Sedgewick, Human Mechanism
Huxley-Barcroft, Elementary Physiology
Locy, Biology and Its Makers.
Mathews, Physiological Chemistry
May, Manual of Diseases of the Eye
McCollum, The Newer Knowledge of Nutrition
Mitchell, Textbook of General Physiology for Colleges
Parker and Haswell, Textbook of Zoology
Piersol, Human Anatomy
Pope, Anatomy and Physiology for Nurses
Ranson, Anatomy of the Nervous System from the Standpoint of Development and Function
Sabotta-McMurrich, Atlas and Textbook of Human Anatomy
Starling, Principles of Human Physiology
Stiles, The Nervous System and its Conservation
Tigerstedt, Textbook of Physiology
Walter, The Human Skeleton: An Interpretation
Wilder, History of the Human Body

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BACTERIOLOGY

Time: 45 hours divided approximately into 15 hours of lecture or class and 30 hours of laboratory, demonstration, discussion, review, written and oral quizzes.

Teacher: The course is in charge of a qualified instructor who may be a nurse, physician, or other specially prepared teacher. There is a special advantage in having a nurse assist with the course, even if she does not direct it, in order that the subject may be properly correlated with nursing practice.

Objects of the Course

1. To help the student understand the characteristics and habits of micro-organisms, that she may be better able to protect her patients, the public and herself from infection.
2. To introduce sufficient laboratory technic so that the student may appreciate the necessity for surgical asepsis and learn to apply the same careful methods in her nursing procedures, cleaning, cooking, etc.
3. To arouse interest in this very important branch of science, so that the student will continue to read and study along these lines and keep up-to-date in the latest discoveries and methods.

Outline of Class and Laboratory Work

I. Introduction

(Class). Uses of bacteriology to the nurse. History of bacteriology briefly. Biology and its divisions. Consideration of plants, dependent and independent. Eight biological systems of higher animals and parallel functions in one-celled organisms. Structure of typical plant and animal cell.

(Laboratory). The microscope: its parts, function of each, how to use and care for it, practice in focussing, using paper or linen fabric. Value of water and cover glass. Study of onion epidermis to show cell structure and plasmolysis. Demonstration of osmosis, respiration and transpiration. Sterilize bread for inoculation next period. Prepa ation of experiments to show prevalence of mold spores in dust and air.

II. Molds

(Class). Dependent plants. Parasitic and saprophytic organisms. Economic relationships. Distribution of molds. Structure. Reproduction: sexual and asexual; spore formation. Conditions favoring growth and methods of destruction. Mold diseases.

(Laboratory). Preparation of slides from the molds grown on bread. Identification, description and drawings of the molds. Set-up experiment for cultivation of yeasts.

III. Yeasts—One Group of Molds

(Class). Economic relationships. Structure. Reproduction by budding, fission and spores. Enzyme action. Fermentation (Call attention to work of Pasteur). Conditions favoring growth. Methods of destruction. Pathogenic yeast.

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(Laboratory). Observation and drawing of yeast cells and starch grains. Technic of the hanging drop. Experiment to show effect of different temperatures on growth and viability of yeast and experiment to show ability of yeast to ferment various carbohydrates. Expose or touch agar plates with finger tips or hair, swab of nose, swab of throat, glove, finger, etc. Inoculate broth in the same way.

IV-V. Bacteria

(Class). Distribution of bacteria. Structure of bacterial cell. Classification according to morphology and grouping. Methods of reproduction by fission and by spore formation. Conditions affecting growth: temperature, moisture, food supply, light, oxygen. Effect of electricity, chemicals, agitation, etc. Vital phenomena: odor, motility, light, heat, pigment, etc. Pathogenic and non-pathogenic bacteria. Work of the useful bacteria.

(Laboratory). Exhibit of various laboratory media. Description of culture growth. Examine agar plates from last lesson. Demonstration to show gas formation and acid formation by B. Coli in liquid and solid culture media. Stain bacteria with methylene blue, using inoculated bouillon from Laboratory III.

VI. Effects of Mechanical and Physical Agents on Bacteria

(Class). Mechanical agents; use and importance. Review of conditions of growth; effect of extremes of these, i.e., temperature, moist and dry heat; resistance to dryness; aerobes and anaerobes; food requirements; light. Practical applications.

(Laboratory). Inoculate bouillon with culture from (a) hands of student without first washing, (b) from hands of student after ordinary washing with soap and water, (c) from hands of student after scrubbing with soap and brush under running water for five minutes. Incubate and examine next period. Plan experiment to demonstrate difference in growth of bacteria after refrigeration and incubation; also after exposure to darkness and sunlight. Explain principles and demonstrate sterilization by hot-air sterilizer, Arnold steam sterilizer, autoclave and boiling.

VII. Effects of Chemical Agents on Bacteria

(Class). Disinfectants and antiseptics. Factors important in the use of disinfectants: kind of material to be disinfected; quantity of disinfectant in relation to quantity of material, length of exposure; strength of solution; temperature of solution. Practical applications.

(Laboratory). Examination and discussion of cultures from Laboratory VI. Test results of common chemical agents upon bacteria. Make cultures from these tests at end of period and place in incubator. Make streak on agar plate. Start pure culture, fishing from colony obtained in Laboratory III or VI. Transfer pure culture through a series of seven tubes each week, examining and making transfer, if pure.

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VIII. Bacteria and Disease

(Class). Avenues of entrance into and discharge from the body by bacteria. Growth in tissues. Disease production by toxins, endotoxins and ptomaines.

(Laboratory). Examine cultures and streaks made in Laboratory VII. Examination of prepared slides of staphylococci, streptococci, bacilli and spirilla for morphology. Charts and illustrations from textbooks on subject of lecture.

IX. Defences of the Body against Bacteria

(Class). External defences of the body. Immunity: types and modifying factors. Theories of immunity. Antibodies, phagocytes, etc. Use of vaccines, antitoxins and sera. Preparation of sera and vaccines.

(Laboratory). Slides or films, if possible, showing preparation of sera and vaccines. Hanging drop showing motility and agglutination. Examination of prepared slides showing phagocytosis. Agglutination test demonstration.

X–XI. Transmission of Bacteria

(Class). Transmission by direct and indirect contact. The rôle of insect carriers, human carriers, animals, fomites, food and filth. Bacteria in water and sewage. Sources of water supply and their relative purity. Meaning of presence of colon bacilli; presumptive and determinative tests for same. Isolating of typhoid bacilli. Methods of water purification; sewage purification. Bacteria in milk. Different standards in milk. Relation of bacteria to the milk supply. Sources of bacterial infection in milk. Methods of safeguarding milk supply. Sterilization versus pasteurization of milk.

(Laboratory). Preparation of agar plates to show the number of bacteria in various samples of water. Estimation of number of bacteria per cubic centimeter in water samples. Prepare pasteurized and raw milk dilutions and make plates of them to see method of milk examination by plating.

XII–XIII–XIV. Pathogenic Bacteria and Protozoa

(Class). Discuss commoner forms of coci, bacilli, spirilla and protozoa under such headings as (1) name, (2) type (morphology), (3) spore forming or not, (4) use of oxygen, (5) temperature: minimum, optimum, maximum, (6) mode of entrance into body, (7) mode of exit from body, (8) methods of transmission, (9) excretions, utensils, etc., to be disinfected and other nursing precautions, (10) immunity and serum therapy.

(Laboratory). Examine and draw prepared slides of bacteria discussed. Use of charts and textbooks for illustrations.

XV. Review and Examination

Methods of Teaching

1. Follow class method for presentation of subject matter as far as possible. Have outside readings and reports from assigned books or current journals.

2. Laboratory work to be given in sections, not exceeding 15 to 20 students, with facilities for each student or pair of students carrying out all the experiments. Notebooks for drawing and laboratory notes. First half hour of the

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two hour laboratory period should usually be given up to discussion of the mistakes disclosed by correction of previous week, laboratory work, explanation of new work and necessary correlation with class work.

3. Correlate as closely as possible with other subjects, especially with hygiene and practical nursing work. A short paper on "The Practical Applications of Bacteriology to Nursing" will help to focus attention on the uses of the subject.

4. No one textbook for nurses covers the ground adequately. Choose the best and supplement liberally from reference books. Recent editions of text and reference books should be used, as changes are constantly taking place in this subject.

5. Have at least one visit to a well equipped laboratory, such as might be found in the Board of Health or in the hospital itself.

Equipment and Illustrative Material

Microscopes (one for each student, if at all possible), petri dishes, test tubes, fermentation tubes (plain and prepared), racks for drying slides, cover slips, stains, oil, balsam, lens paper, platinum needles, Bunsen burners, tripods, pipettes, etc. Small utensil sterilizer, culture media and cultures from pathological laboratory. Charts, photographs and slides.

Room should be fitted up with tables or shelves where microscopes can be placed in good light. Should also have gas and running water attachments.

Text and Reference Books

Group I

Bigelow, Applied Biology
Bolduan and Grund, Applied Bacteriology for Nurses
Broadhurst, How We Resist Disease
Buchanan, Bacteriology for Students in General and Household Science
Chapin, The Sources and Modes of Infection
Hiss and Zinsser, A Textbook on Bacteriology
Jordan, Textbook of General Bacteriology
Park and Williams, Pathogenic Microorganisms
Rosenau, Preventive Medicine and Hygiene
Smeeton, Bacteriology for Nurses

Group II

Broadhurst, Bacteria in Relation to Man
Broadhurst, Home and Community Hygiene
Carey, A Textbook for Nurses in Bacteriology
Conn, Bacteria, Yeasts and Molds in the Home
Curtis, Nature and Development of Plants
Doane, Insects and Disease
Fox, Bacteriology and Protozoology for Nurses
Karsner and Ecker, The Principles of Immunology
Kilduffe, Bacteriology and Applied Immunology for Nurses
Morse, Bacteriology for Nurses
Roberts, Manual of Bacteriology and Pathology for Nurses
Zinsser, Infection and Resistance

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GENERAL AND APPLIED CHEMISTRY

Time: 45 hours arranged in 1½ hour periods to include lecture, recitation and laboratory work. This is a very inadequate time for even a moderately satisfactory course in general chemistry. If it can possibly be arranged it is distinctly advisable to increase the time to 2 hour periods, thus providing for better laboratory work and for more opportunity for the oral quiz.

Teacher: A nurse who has had an adequate preparation in general, organic and physiological chemistry is the best person to teach this course. Lacking the properly equipped nurse, however, the course can be taught quite advisedly by any available well prepared teacher of chemistry who is interested in adapting the work to the needs of this particular field.

Objects of Course

1. To serve as a basis for the intelligent study of physiology, dietetics, bacteriology, pathology, hygiene and sanitation, practical nursing and materia medica.
2. To show how knowledge of chemistry enables one to maintain a safer environment for man.

Outline of Class and Laboratory Work

I. Introduction—Physical and Chemical Changes

(Class). Introduction.—Relation of chemistry to life: plant and animal. Definitions: physics, chemistry, matter. Branches of chemistry: inorganic, organic. Three physical states of matter. Physical and chemical changes.—Changes in matter and evidences determining each: physical, chemical. Kinds of chemical changes and fact of indestructibility of matter: direct combination, decomposition, double decomposition, substitution, internal rearrangement. Agents which function in producing chemical changes: heat, light, electricity, solution.

(Laboratory). The Bunsen burner. Physical and chemical changes.

II. Energy

(Class). Energy change involved in every chemical change. Energy defined. Forms of energy: motion, heat, light, electrical, chemical. Transformation of one form of energy into another. Fact of conservation of energy. Measurement of energy in terms of the calorie. Some chemical changes important because of: (a) matter product of the change (energy change being incidental), (b) energy product (matter change being incidental). The food Calorie.

(Laboratory). Chemical energy change accompanies a chemical change in matter.

III. Kinds of Matter

(Class). Elements: meaning, number, physical state, classification (a) metals, (b) non-metals. Compounds: meaning, physical state, number, classification. Law of definite proportions. Mixtures: meaning, form of matter provided by nature, how they differ from compounds.

(Laboratory). Mixtures and compounds.

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IV-V. Atomic Theory, Valence, Symbol, Formula and Chemical Equations

(Class). Review,—fact of conservation of matter, fact of definite proportions. Atomic theory in explanation of these facts. Definition of theory and importance. Essential features of Dalton's Atomic Theory. Atom defined. Molecule defined. How does the theory explain the facts. Symbol,—correct usage. Formula,—condition which makes it possible, function, correct usage. Valence,—meaning, standard for reference, tendencies of atoms to become negative and positive on going into combination, tabular scheme showing (a) nature of valence of atoms (positive or negative tendency), (b) value of valence as mono, di, tri, etc., the structural formula and its function (contrast to empirical). Chemical equation,—function, must fulfill fact of conservation of matter, information necessary for writing, how interpret.

(Laboratory). Periods to be spent in directing the writings and usage of chemical formulas and equations.

VI. Written Quiz

VII. The Element Oxygen. Catalytic Agents

(Class). Occurrence in nature. Importance. Preparation. Physical properties. Chemical properties. Oxidation: importance in everyday life, therapeutic usage, products of act (a) oxides (b) energy. Catalytic agents: function, examples—inorganic catalyzers, organic catalyzers or enzymes.

(Laboratory). Preparation and properties of oxygen.

VIII. The Element Hydrogen

(Class). Occurrence. Chemical acts which give hydrogen in such contacts as: metals above hydrogen with water, metals above hydrogen with acids, certain metals with certain bases. Applications of such contacts to cooking and cleaning, etc. Physical properties. Chemical properties, reduction, hydrogenation.

(Laboratory). Metal contacts with water and acids.

IX. Oxidation and Reduction

(Class). Meaning. Some representative oxidizing agents. Some representative reducing agents. Function in a general way in animal metabolism and respiration. Other oxidation and reduction acts: reduction of ores, photosynthesis, bleaching and disinfectant acts.

(Laboratory). Some oxidation and reduction acts.

X-XI. Water and Related Studies

(Class). Composition. Occurrence. Uses: in body, in hygiene, in cleaning, in cooking, in therapeutics. Natural water: impurities (a) sources (b) nature (mineral, organic, gases, bacteria) (c) effect on health. Purification of water: natural methods, artificial methods. Chemical behavior: 1. with metal contacts, 2. with metallic oxides, 3. with non-metal oxides, 4. to form hydrates, 5. dehydrolysis, 6. hydrolysis. Importance of these properties in

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1. preparation of foods, 2. cleaning metals, 3. preparation of lime water, etc., 4. physiological processes, 5. disinfection.

(Laboratory). Properties of water. Some methods used for the purification of water.

XII. Hard Water

(Class). Meaning. Temporary and permanent hardness: distinction between, how formed in nature. Objections to: economic, household, personal, medicinal, health. Means for removal (softening): nature of act, agents in common use (a) effective agents for both temporary and permanent hardness (b) effective for permanent hardness. Method of determining when water is completely softened.

(Laboratory). Temporary and permanent hard water: temporary (a) preparation (b) methods of softening; permanent (a) preparation (b) methods of softening.

XIII–XIV. Acids

(Class). Occurrence. Composition. Condition in water solution with common feature which is responsible for the acidity. Definition of an acid. Common acts of hydrogen ions: taste, action with free metals above hydrogen, action with metal oxides, action with carbonates, action with bases (hydroxyl ions), action with animal tissues, action with fabrics, action with pigments. Some important acids in common use. Strong and weak acids—what determines them. What determines the intensity of acid reaction. Wisdom of selection of specific acids for specific uses. Nomenclature of acids.

(Laboratory). Acid contacts as suggested in above discussion.

XV–XVI. Bases and Salts

(Class). Bases,—Composition. Condition in water solution with common feature which is responsible for the basicity. Definition of a base. Common acts of hydroxyl ions: taste, feeling, action with acids (hydrogen ion), action with fats to form soaps, action with animal tissues, action with fabrics, action with pigments. Some important bases in common use. Strong and weak bases—what determines them. Alkalies and alkaline reaction. What determines intensity of base reaction. Wisdom of selection of specific bases for specific uses. Nomenclature of bases.

Salts,—Occurrence. Importance of Salts: as raw materials, in household, in medicines, in body. Composition: normal, acid, base. Hydrates and anhydrous forms of some salts in common use. Hydrolysis of salts—some important instances. Relation to respective acids with nomenclature.

(Laboratory). Properties of bases. Interaction of an acid and base (Neutralization). Hydration. Dehydration. Hydrolysis.

XVII. Bleaches and Disinfectants

(Class). Bleaches and stain removal,—Function. Cautions to be observed. Important bleaches: chlorine (a) source of chlorine for this use (b) nature of act (c) why unwise for general usage; sulphur dioxide (a) method of application (b) nature of act (c) objections to use; hydrogen peroxide (a) nature of

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act, (b) specific for; potassium permanganate (a) nature of act; ozone (a) nature of act. Disinfectants, (Disinfectants in common use: chlorine, and chlorine compounds, iodine, sulphur dioxide, formaldehyde, potassium permanganate, bichloride of mercury, phenol preparations, alcohol). Function. Points to be considred in the selection of disinfectant (a) effectiveness (b) nature of act (c) advantages and disadvantages (d) safety for expert or lay usage.

(Laboratory). Bleaching of fruits. Bleaching of fabrics. Some stain removals.

XVIII. The Element Nitrogen

(Class). Occurrence. Physical properties. Chemical properties: nitrogen fixation problem, instability of nitrogen compounds.

Written Quiz.

XIX-XX. The Element Carbon and Hydrocarbons

(Class). Carbon,—Occurrence. Forms of Carbon. Physical properties. Chemical properties. Two important destructive distillation processes. Important products obtained from: coal, wood. Hydrocarbons,—Some common hydrocarbons: methane, ethane, propane, benzene. Composition. Structural formulas. Some important halogen substitution products. Hydrocarbon radicals which appear frequently: methyl, ethyl, glyceryl, phenyl.

(Laboratory). Destructive distillation of coal. Destructive distillation of wood. Products of combustion of hydrocarbons (gas, gasoline, candle).

XXI-XXIII. Alcohols, Aldehydes, Ketones and Organic Acids

(Class). Alcohols (organic bases),—Constituent elements. Some common alcohols: methyl alcohol, ethyl alcohol, glycerol, phenol. Uses of alcohols. Structure, with group which is the determining feature (primary and secondary). Chemical behavior: with acids, dehydrated give ethers, products of oxidation of primary and secondary alcohols. Aldehydes,—Derivation from primary alcohol. Structure, showing characteristic group. Representative aldehydes. Oxidize to acids. Ketones,—Derivation from secondary alcohol. Structure showing characteristic group. Representative ketones. Oxidize to acids. Carbohydrates: polyhydric alcohols containing either aldehyde or ketone group—examples. Organic Acids,—Derivation from aldehydes. Some important organic acids (fatty acids). Structure with characteristic group. Final oxidation products of organic acids. Fats as glyceryl salts of certain fatty acids. Amino acids—amine substitution products on fatty acids. Some important amino acids.

(Laboratory). Alcohols and Aldehydes,—Preparation of some important alcohols. Formaldehyde an oxidation product of methyl alcohol (primary). Test for formaldehyde.

XXIV-XXV. Carbohydrates

(Class). Function. Occurrence in nature (Photosynthesis). Elements present. Structure of glucose with characteristic groupings. Classification—

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basis. Solubilities. Hydrolysis of carbohydrates: nature of act, importance of act—physiological, aids to the act, products. Fermentation—products. Possible reduction of carbohydrates to fats in the body. Oxidation of glucose: products of partial oxidation (pathological significance), products of complete oxidation (normal), caloric value reviewed. Identification tests in common use: Benedict or Fehlings for glucose—diagnostic importance, iodine for starch and dextrin.

(Laboratory). Carbohydrates—Test for reducing sugars. Hydrolysis of sucrose by boiling (with acid as catalyzer). Fermentation acts. Test for starch and dextrin.

XXVI-XXVIII. Fats and Proteins

(Class). Fats,—Occurrence and physical state (solid fats and oils). Function. Elements present. Structure—glycerides of fatty acids. Solubilities. Hydrolysis of fats: nature of act, importance of act—physiological, aids to the act, products. Oxidation of fats: products of partial oxidation (pathological significance), products of complete oxidation (normal), caloric value. Soaps: composition, manufacture (a) materials used (b) chemistry of act, soluble and insoluble, hard and soft, cleansing action. Proteins,—Occurrence. Function in the body. Structure and relation to amino acids. Classification with composition and body sources. Solubilities. Hydrolysis of proteins: nature of act, importance of act—physiological, enzymes as catalytic agents, products of act. Coagulation of: by heat—temperature varies for different proteins, through action of precipitating reagents (acids, alcohol, salts of heavy metals). Tests. Complete and deficient proteins. End products of metabolism of: simple proteins, nucleoproteins—pathological importance. Possibility of converting proteins into glucose in body.

(Laboratory). Fats,—Emulsification of fats. Making of soap—saponification. Action of soap on hard water. Proteins,—Test for nitrogen. Color reactions: Xanthoproteic, Biuret. Coagulation: by heat, by reagents—protein altered. Precipitation from solution—unaltered.

XXIX-XXX. Digestion of Carbohydrates, Fats and Proteins

(Class). Carbohydrates: in mouth, in stomach, in intestines. Fats: in stomach, in intestines. Proteins: in stomach, in intestines. Hydrolytic changes produced by bacteria.

(Laboratory) Digestion of: starch, fats, proteins.

XXXI. Examination

Methods of Teaching

It is impossible to teach chemistry by the lecture method alone. Discussions and frequent quizzes are necessary for purposes of clarification and opportunities for self-expression on the part of the students. As far as possible it is by all means advisable that each student should work out her own experiments in the laboratory. However, demonstrations are recommended in a brief course such as this outline suggests, when the success of the experiment requires an undue expenditure of time for proper technic or greater skill than the student has acquired.

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Not more than 16 students should be taken together in one laboratory section under one instructor, unless the laboratory facilities provide for a larger number, and unless there is adequate provision for assistance. Suggested time limits for classroom and laboratory work respectively have purposely been omitted. Flexibility for time apportionment between these two phases of the work makes for greater efficiency in the administration of the course. For some lessons it is advisable that the classroom work should occupy the major portion of the time allotment, while for other lessons the laboratory work should be given more time.

The arrangement for distribution of individual supplies for the day's laboratory work is of prime importance. The shorter the laboratory period, the more necessary it is that the student should spend the minimum amount of time obtaining the materials for her use.

Much time and annoyance are saved by obtaining all the main supplies for the entire course at the same time.

Equipment

The room for the laboratory work should be well ventilated and well lighted. A hood for carrying away odors of disagreeable gases is desirable but not essential. A laboratory table with adequate working area, with drawers for the equipment outfit for each student is necessary. Sinks can be placed at such intervals along the table as to be made available for water and drainage for four people if the students are opposite each other on both sides of the table. There should be faucet fittings for each student. Provision for a gas burner for each student is necessary. Where gas is not available gasoline burners, which are on the market as substitutes for gas usage in the laboratory, are advised. Cupboard space for storage of stock supplies is necessary.

Individual equipment is recommended as follows: 1 Bunsen burner and tubing, 1 iron ring—medium, 1 pinch clamp, 1 wire gauze, 1 test tube holder, 1 test tube rack, 10 soft glass test tubes, 1 hard glass test tube—one-hole rubber stopper to fit, 1 test tube brush, 1 glass rod, 1 wing top, 1 mortar and pestle, 1 pair forceps, 2 glass plates, 1 triangular file, 1 funnel, 1 Florence flask 250 cc., 2 glass bottles with 8 oz. wide mouth and two-hole stopper to fit, 2 watch glasses, 1 evaporating dish—medium size, 1 thistle tube, 2 beakers 150 cc. and 250 cc., filter paper, matches, glass tubing, 1 small shallow tin pan, 1 deflagrating spoon, 1 asbestos mat, 1 retort stand, 1 Centigrade thermometer.

The initial cost of this equipment is not more than $4 per capita at the very outside, while the upkeep is not more than 50 cents per capita providing the best glass (pyrex) and the best porcelain (possibly Coors) are used.

Text and Reference Books

Group I

Bartlett and Ink, The Principles of Chemistry and Their Application
Bogert, Fundamentals of Chemistry
Goostray and Karr, Applied Chemistry for Nurses
McPherson and Henderson, Chemistry and Its Uses
Sherman, Chemistry of Food and Nutrition

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Group II

Beery, Chemistry Applied to Problems of Home and Community
Brownlee and Others, Chemistry of Common Things
Mathews, Physiological Chemistry
Norris, Organic Chemistry
Slosson, Creative Chemistry

PERSONAL HYGIENE

Time: 15 hours.

Teacher: Classes conducted by the instructor of nurses. To be accompanied by at least 15 hours in physical exercises (taught, if possible, by an instructor of physical education).

Objects of Course

1. To impress upon the pupil the paramount importance of good health, and to help her to form sound health habits which will enable her to function effectively in her professional life.
2. To show the close relationship between hygiene and all nursing work in the prevention of disease and promotion of health, and to develop a "health consciousness" which recognizes the social implications of personal hygiene.
3. To emphasize the opportunities and obligations of the nurse as a teacher of personal and public hygiene.

Outline of Classes

I. The Meaning of Health and the Health Problem

Various ideals and conceptions of health—ancient—modern. Standards of community health as shown in morbidity and mortality statistics. Factors influencing health—heredity, environment, individual differences. Social and economic value of health. Importance of health to the nurse. Special problems to be met in the student's new environment and new duties. The nurse as a teacher of health.

II. A Lesson in Accounting

(After physical examinations and "health inventory," students to bring the "health inventory" to class, giving their own health habits and conditions of health). Importance of periodic health examinations. Our assets and liabilities. (Discussion of "findings" of physical examination). Comparison of "health scores." Importance of good health habits and how to form them. Have students decide on specific habits to be acquired during term and plan for periodic "check up" to determine progress.

III. Exercise and Posture

Muscular activity in relation to health. Beneficial effects of exercise. Kinds of exercise and adaptations to age, sex, occupation, climate, etc. Relative value of different kinds of exercise. Fatigue, its symptoms and effects.

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Methods of rest and relaxation. Importance of posture and right methods of sitting, standing, walking, bending, etc.

IV. Food and Food Habits

Relation of food and food habits to health and efficiency. Energy requirement of average nurse on active duty. Importance of well balanced meals. Conditions which interfere with digestion and nutrition. Food fads, overeating and under-eating.

V. Respiration

Essentials of respiration. Principles of ventilation. Sources of impurities in the air. Effect of temperature and moisture, still and moving air. "Breathing exercises," uses and limitations. Colds, causes, prophylaxis, treatment. Tonsil troubles. Adenoids. Sinuses. The use of the voice—tone, pitch, quality, etc.

VI. Circulation

Meaning and importance of "good circulation." Causes and effects of poor circulation. Effect on heart of over-strain, violent exercise, poisons. Relation between infectious disease and cardiac disorders. Prevalence and prevention of cardiac disorders.

VII–VIII. Elimination of Waste

Excretory organs and excretions. Care of the skin. Bathing. Kinds of baths for well people. Care of the teeth, hair, nails, and hands. Soaps and toilet accessories. Prevention and treatment of common skin infections. Elimination of body waste through the kidneys. Importance of drinking sufficient amount of water. Constipation, common causes and prevention.

IX. Functional Periodicity

Relationship of the reproductive organs to the normal function of menstruation. Common disorders. Precautions and ordinary measures to observe—bathing, exercise, avoidance of medication and exposure.

X. Clothing

Function of clothing. Materials: cotton, silk, wool, linen, etc., and their various uses. Adaptations of clothing to climate, occupation, etc. Hygienic clothing for the nurse on and off duty. How to choose a proper shoe. Care of the feet; excessive perspiration, corns, bunions, ingrowing nails. Fallen arches. Preventive exercises.

XI. Vision and Hearing

Conditions for normal vision. The causes and effects of common eye troubles. Care and protection of the eyes. Avoidance of eye strain. Need of expert advice and treatment in eye defects. Common disorders of hearing, their causes and effects. Protection and care of the ears.

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XII. Mental Health

Nature of the nervous system and its relation to health. Conditions in modern life which produce high nervous tension and fatigue. Importance of relaxation and sleep for the conservation of nervous energy. Importance of developing correct mental habits. Significance of early training in developing a well balanced nervous system. Necessity for work, recreation, companionship, and desirable outlets for the emotions.

XIII. Social Hygiene

Meaning and scope of social hygiene. Problems of sex education. Sex instinct, the strongest of all normal fundamental instincts. Biological foundation. Relation to other instincts. Normal sex development. Importance of clear understanding of biological laws, education, frankness, healthy thinking and actions. Effects of ignorance and wrong teaching in the community at large.

XIV. Checking up Health Account

Comparison of "Health Score" made at beginning and at end of course. Discussion of results.

XV. Examination

Methods of Teaching

1. The class and discussion method with occasional lectures will probably prove most satisfactory. In addition, special projects might be worked out by the pupils. If possible, a course of physical exercises should accompany class work.

No outline of physical exercises is given since it is advisable to adapt the exercises very definitely to the needs of the individual student. General exercises should be given to improve posture, strengthen the arches, etc. Suitable exercises may be found in several of the books noted below.

2. Hygienic rules should be based on scientific principles, using courses in anatomy and physiology and bacteriology as groundwork.

3. As a knowledge of hygiene is not of much use unless it is consistently applied, emphasis should be placed on the forming of hygienic habits. An individual "Health Inventory" based upon a physical examination and the awarding of a "Health Score" to each pupil with points for good habits, and demerits for untoward habits might prove an incentive to the pupil to form new health habits and so raise her "Health Score." Records should be kept by the pupils so that progress can be checked. At the end of the course another examination should be given and a comparison made of "Health Score" obtained at the beginning and at the end of the course.

4. Emphasis should be placed upon the nurse as a "Teacher of Hygiene"—her opportunities and responsibilities.

5. If a textbook is used it should be liberally supplemented by assigned readings in reference books, magazines, and pamphlets.

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Equipment and Illustrative Material

Lantern slides. Moving pictures. Posters, popular material, exhibit material, etc.

If possible, gymnasium or room fitted up with simple apparatus.

Suggested Projects

1. Get a blank map of the town, city or county in which the hospital is located and have students locate, by walks and rides, important parks, lakes, and centers of interest. Later, hospitals, health centers, etc., might be added to get a picture of the health resources of the community.
2. Have each student keep a record of her diet for a few days and then criticize it in relation to her size, weight, activity, etc.
3. Make a poster showing how to avoid colds. Trace the travels of a cold in a hospital group and its consequences.
4. Have student keep a record of every opportunity which she has to teach health to her patients in the wards.
5. Make poster of "Mental Maxims."
6. Collect material on the subject of sex education which could be used in teaching young girls, boys, and their parents.
7. Have students collect posters and literature on nutrition, mental hygiene, conservation of vision, social hygiene, and other topics discussed during course. This material with other work of students such as notebooks, posters, etc., might be used for an exhibit at end of course.

Text and Reference Books

Group I

Bigelow, Sex Education
Fisher and Fisk, How To Live
Hill, The New Hygiene
Williams, Personal Hygiene Applied
Woman's Foundation for Health—Positive Health Series

Group II

Bellows, Individual Exercises
Binder, Health and Social Progress
Broadhurst, How We Resist Disease
Cabot, What Men Live By
Crampton, Physical Exercise for Daily Use
Hill, The New Public Health
McCollum, Newer Knowledge of Nutrition
Mosher, Woman's Physical Freedom
National Health Series
McLaughlin, Personal Hygiene
Howell, The Human Machine
Galloway, Life and Marriage
Gillette, Food for Health's Sake

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Means, Exercise for Health
Tobey, The Quest for Health
Williams, Your Mind and You
Rose, Feeding the Family
Rosenau, Preventive Medicine and Hygiene
Royden, Sex and Common Sense
Sadler, The Essentials of Healthful Living
Thom, Child Management (pamphlet)

DIETETICS

ELEMENTS OF NUTRITION AND COOKERY

Time: 45 hours divided as follows: 15 periods of one hour each to lectures; 15 periods of two hours each to laboratory work, to run parallel. The course is to be given after the course in chemistry is completed.

Teacher: The course is conducted by a trained hospital dietitian.

Objects of Course

1. To give pupils a practical knowledge of the principles and methods underlying simple cookery for well and sick people.
2. To make them familiar with the nutritive values of foods, and to enable them to arrange a balanced dietary for the well or for convalescent patients according to the demands of age, physical activity, climate, etc.
3. To help them to understand and administer the ordinary hospital diets. (Dietary treatment of special disease conditions is given as a special course immediately after the completion of this course).

Outline of Classes on Nutrition

I. Functional Classification of Food

Use of different foods in body building and repair, considered from standpoint of students themselves, guided by their weight charts, their knowledge of food customs of people in different climates, and their own personal desires in their daily dietary. Show necessity for finding out relation between food, activity, sex, age, climate, disease.

II. The Nutrients

Their classification on basis of chemical composition, their sources and cookery principles. Function of each nutrient and examples of each—General: for energy, building material, regulation of body processes. Special: proteins, fats, carbohydrates, ash (mineral), water, vitamins. Physiological processes involved in nutrition—Preparation of foodstuffs for use by cell (digestion and absorption); utilization by cells (assimilation); disposal of waste by cell (excretion); definition of metabolism.

(This lesson is mainly review of work already covered in Physiology and Chemistry).

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III. Energy Value of Food

Forms of energy: work, heat, etc. Conservation of energy: unit of measure, the calorie; method of determining energy; energy value of different nutrients; determination of energy value of some common foodstuffs, using average servings.

IV–VI. Food Requirements of Normal Adult Body

Method of determination. Factors modifying energy requirements: muscular activity, size, shape, age. Determining of total energy requirements for a day, using student for the analysis (average number of calories required by her when (1) sleeping; (2) sitting at rest; (3) at light exercise; (4) playing tennis). Comparison of results with standard of various authorities. Modification for age, size, sex, etc.

(Explanation of Routine Hospital Diets). Liquid, soft, light, regular.

VII–IX. Requirements for Body Building and for Regulation of Body Processes

Proteins—Nitrogen available only in form of protein. Body requirements. Nutritive ratio. Result of protein insufficiency or excess. Sources of proteins. Fundamental principles underlying protein cookery. Minerals and water—Source. Body requirements. Function. Cookery to preserve mineral content.

X. Foods Making for Energy

Carbohydrates and fats: (1) source, composition, use of diet; (2) starch and sugar cookery; (3) fat cookery.

XI. Vitamins

Function, source, vitamin requirements of body, results of insufficiency. Cookery to preserve vitamin content.

XII–XIV. Balanced Diet

(1) For normal child up to 12 years of age; (2) in adolescence; (3) decreased requirements for old age; (4) dietary needs during pregnancy and lactation period. Milk modification. Balanced diet for normal adult.

XV. Examination

Outline of Laboratory Work in Cookery

Fifteen two-hour periods.

A. Breakfast

I. Fruits and cereals. Fruits—raw: orange juice, shredded orange, etc.; stewed: apples, apple sauce, etc.; baked: apples, quinces, bananas; dried fruits: prunes, apricots, figs.

Cereals—Cracked grains, coarsely ground, finely ground, flaked.

II. Breads and Beverages

Breads—popovers, bran muffins, girddle cakes, waffles, biscuits.

Beverages—coffee, tea, cocoa.

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III. Eggs and Toast
Eggs—poached, scrambled, soft cooked, omelets. Toast.
IV. Plan, Prepare and Serve Breakfasts with—fruit, cereal, eggs, bread, beverage.

B. Luncheon or Supper
V. Main Dishes—cheese souffle, fondue, creamed and scalloped dishes, etc.
VI. Salads—fruit, vegetable, meat, fish.
VII. Desserts—junket, blanc mange, bread puddings, gelatine.
VIII. Plan, Prepare and Serve Luncheons (Include frozen dessert with luncheon or supper).

C. Dinner
IX. Soups—creamed and with stock. Poultry.
X. Meats and Fish—broiled, roasted, stewed, etc.
XI. Vegetables—all common types, including potatoes.
XII. Plan and Serve Meals for Normal Adult—breakfast, dinner, supper.

D. Miscellaneous
XIII. Liquid and Soft Diets—planned on meal basis, as, for example:
A. Liquid Diet Trays—(without milk).
Breakfast—orange juice, hot malted milk (made with water), tea or coffee.
Luncheon—clear soup, beef juice, water ice.
Supper—lemon albumin, tea, gelatine dessert.
B. Soft Diet Trays.
Breakfast—orange juice, well cooked cereal, toast, tea or coffee.
Luncheon—milk toast or poached egg on toast, cocoa, junket.
Supper—cream soup, cream sauce plus purèed vegetable, toast, custard.

XIV. Light Diet—planned on meal basis, as, for example:
Breakfast—orange, soft cooked egg, bacon, toast, coffee.
Luncheon—lamb chop, stuffed baked potato, chopped spinach, gelatine with whipped cream, toast.
Dinner—consommè, broiled chicken, baked potato, creamed asparagus tips, ice cream.

XV. Diet for Children, 3, 6, 10 years—(planned on meal basis).
A Day's Dietary for a Child of Three:
Breakfast—orange juice, wheat products, toast and butter, milk.
Dinner—cream of pea soup, poached egg, baked potato, toast or bread and butter, tapioca cream.
Supper—steamed rice, milk, bread and butter, date marmalade. (And 10.30 and 5.30 supplementary feeding.)
A Day's Dietary for a Child of Six:
Breakfast—baked apple, oatmeal, milk, dry toast and butter.
Dinner—split pea soup, croutons toasted, spinach, bread and butter, stewed prunes.
Supper—baked potato, bread, milk, creamed rice pudding. (And 10.30 a.m. feeding of milk and crackers).

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A Day's Dietary for a Child of Ten:

Breakfast—baked apple or stewed prunes, well cooked cereal, dry toast and butter, milk.

Dinner—baked fish, potatoes or rice, creamed onions, milk, bread and butter, stewed fruit, cookies or chocolate blanc mange.

Supper—cream soup, baked potato, milk, bread, apple sauce.

(Suggestion: It is suggested that the class be divided into thirds; each group to undertake the preparation of an entire day's dietary for a child of either 3, 6 or 10. After the entire day's dietary is cooked and ready for consumption there should be a comparison of trays in which variation or increase in food intake for children of various ages should be brought out).

Methods of Teaching

1. Under ideal conditions the most satisfactory method of teaching the laboratory work for this course would, no doubt, be by the modified project method, or "meal basis" plan. Because of the limited amount of time and the great mass of material to be presented, it has been necessary to combine the old formal method of teaching with the project method. It is highly recommended that, when conditions permit, the entire laboratory course shall be given on the "meal basis" plan entirely. For example, instead of teaching carbohydrate cookery through the preparation of separate foods (no attempt being made to prepare a meal), carbohydrate cookery might be learned through the cooking of one entire meal (breakfast, for example, where the cooking of cereal, bread stuffs, etc., would appear). The value of such a method of instruction lies in the fact that the student will think and visualize meals, which, of course, is the only way that food is usually served.

2. Both in "Elements of Nutrition and Cookery" and in "Diet in Special Disease Conditions," it is highly recommended that the "case study" method of teaching be used as often and as extensively as possible. The individual patient should be used as an object of study and as illustration of various nutrition problems. His chart should be examined, the laboratory findings carefully noted and the case followed day by day, while the lecture and laboratory work is interspersed with reference to, or about, the patient who presents such a nutrition problem.

The students themselves should be used as objects of study also. Their daily dietary needs (in relation to age, activity, etc.) should be discussed, and they should have some experience in planning their own meals. In laboratory periods IV, VIII, XII, the class might be divided into pairs, each pair of students planning, cooking, serving and eating a meal (or two meals). Such meals should be carefully criticized by the students themselves in regard to caloric content, choice of foods and preparation of same, appearance of meal, taste, etc.

3. These lectures and laboratory periods (in the two dietetic courses) are in no way intended to take the place of regular diet kitchen experience. The diet kitchen service should be looked upon as a more intensive laboratory course and should be given only under the close supervision of a dietitian and should be planned with the educational need of the student, rather than the economic need of the hospital, in mind.

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It is highly recommended that when the dietetic courses and the diet kitchen service are completed, the nutritional needs of the patient shall be continuously kept in the foreground of the student's mind through the interest and effort of both dietitian and head nurses. Efforts should be made to make the nutrition needs of the patient as important and vital as their medical and surgical needs.

Equipment

Individual or Desk Equipment

One glass measuring cup—8 oz., 1 aluminum measuring cup—8 oz., 1 custard cup—5 oz., 1 custard cup—9 oz., 1 baking dish, 2 teaspoons, 2 tablespoons—kitchen, 1 wooden spoon, 1 case knife, 1 fork, 1 paring knife, 1 Dover egg beater, 1 egg whip, 1 spatula 8″ or 10″, 1 asbestos holder, 1 pancake turner, 1 biscuit or cookie cutter, 1 salt shaker, 1 pepper shaker, 1 pie tin, 1 cake tin, 1 layer cake tin, 1 mixing bowl—2 qt., 1 mixing bowl—1 qt., 1 double boiler—1 qt., 2 frying pans—1 small and 1 medium, 1 lemon juicer, 1 grater, 1 vegetable strainer, 1 drinking glass, 1 jelly mold—small, fancy, 1 strainer—medium, 1 flour shaker— 1 cup, 1 dish pan—6 qt., 1 gas lighter, 1 soap tray, 1 soap shaker, 1 scrub brush, 1 vegetable brush, 1 plate scraper.

Large Equipment

Ten magnesium or white enamel top tables, 1 gas or electric range—2 oven, 20—2 burner gas plates (1 for each student), 5 sinks with hot and cold water, 1 cabinet for food charts, etc., 1 refrigerator—large. One large dish and supply cabinet containing dishes for tray service, also, the following containers: 1 sugar, 1 flour, 1 coffee, 1 rice, 1 oatmeal, 1 cornmeal, 1 powdered sugar, 1 tapioca, 1 brown sugar, 1 corn starch, 1 tea, 1 cocoa, 1 soda, 1 baking powder, 1 nutmeg, 1 cocoanut, 1 ginger, 1 cinnamon, 1 chocolate, 1 mustard, 1 paprika, 1 salt, 1 cream tartar, 1 pepper, 1 gelatine, 1 walnut, 1 raisin, 1 cloves.

One cupboard for broom and cleaning supplies, 1 waste basket, 1 garbage can.

Common or Shared Equipment

Ten rolling pins, 5 apple corers, 5 pyramid toasters, 2 quart measures, 5 funnels—½ cup, 2 bread knives, 2 butcher knives, 1 grapefruit knife, 5 can openers, 2 corkscrews, 5 ice picks, 2 chopping bowls—18″, 2 chopping knives, 2 meat grinders, 5 fancy jelly molds—1 pt., 5 potato ricers, 2 potato mashers—family size, 1 pair butter paddles, 5 meat forks, 1 enamel soup ladle—family size, 1 bread box—6 loaves, 1 sugar can—20 lbs., 1 flour can—50 lbs., 1 salt can—10 lbs., 5 gram scales with weights, 5 colanders—assorted sizes—1 to 2 qts., 2 glass pitchers, 5 baking sheets, 2 angel cake tins—2 qt., 10 provision jars—1 qt., 1 heavy grater, 5 nutmeg graters, 5 sink strainers, 1 large kettle—5 qt., 2 wire sieves with handles, 2 tea kettles— 6 qts., 2 ice cream freezers— 1 qt., 6 asbestos mats, 1 pastry brush, 1 paper towel holder, 1 broom, 1 dust pan, 8 dozen dish towels, 4 dozen dish towels.

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For Tray Service

Five tea pots—individual, 5 coffee pots—individual, 12 plates—dinner, 12 plates—breakfast, 12 plates—salad or pie, 12 plates—bread and butter, 12 fruit dishes, 12 cereal bowls, 12 cups and saucers, 12 bouillon cups, 10 egg cups, 10 trays, 10 creamers—individual, 10 sugars—individual, 12 tumblers, 12 sherbets, 12 knives—dessert, 12 butter spreaders, 12 forks—dessert, 12 forks—salad, 12 teaspoons, 12 spoons—bouillon.

TEXT AND REFERENCE BOOKS

Group I

Carter, Howe and Mason, Nutrition and Clinical Dietetics
Farmer, Foods and Cookery for the Sick and Convalescent
Friedenwald and Ruhrah, Dietetics for Nurses
Lincoln and Barrows, Home Science Cook Book
Lusk, Elements of the Science of Nutrition
McCollum and Simmond, The Newer Knowledge of Nutrition
Pattee, Practical Dietetics
Proudfit, Dietetics for Nurses
Rose, Feeding the Family
Rose, Handbook of Laboratory Dietetics
Sherman, Food Products
Spring, Individual Recipes
Wheeler and Wheeler, Dietetics and Dietotherapy
Wood and Weeks, Fundamentals of Dietetics
Willard and Gillett, Dietetics for High Schools

Group II

Alvarez, Mechanics of the Digestive Tract
Carlson, Control of Hunger in Health and Disease
Cannon, The Mechanical Factors in Digestion
Macleod, Physiology and Biochemistry in Modern Medicine
Sherman, Chemistry of Food and Nutrition

Pamphlets and Bulletins, Posters and Charts from American Child Health Association, Philadelphia; American Child Health Association, New York City; Association for Improving the Condition of the Poor, New York City; Teachers College, Columbia University, New York City; Cornell University, Ithaca, N. Y.

DIET IN DISEASE

Time: 15 hours of lecture. If there is no metabolism ward in the hospital where the student can secure practical experience in handling special diets, such as weighed diets, etc., it will be necessary to give, in addition to the 15 hours of lecture, a laboratory course of not less than 10 two-hour periods. Under either condition—where there is, or is not, a metabolism ward—special care should be taken to tie up the theory as much as possible to the individual patient (i.e. case study).

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The course, Diet in Disease, is to follow the course in Elements of Nutrition and Cookery.

Teacher: A physician or nurse who is familiar with the problems of diet in relation to special diseases, or a well trained dietitian.

Objects of Course

1. To apply the fundamental principles of cookery and nutrition to the dietary treatment of the commoner special disease conditions. In each of the conditions mentioned below general principles of feeding should be discussed, how these principles apply to the particular problem being discussed, typical menus should be examined, and the hospital routine diet lists for the dietetic treatment of each special condition should be given the student.

2. The work in the metabolism ward or laboratory should be such as to give the student a practical knowledge of how to prepare weighed diets of various kinds, how to cook special dishes such as agar preparations, salt-free bread, washed bran muffins, etc. The charting of diets should be emphasized and the importance of accurate records in metabolism studies made clear.

Outline of Lectures

I. Routine Hospital Diets

High caloric, low protein, salt-free and purin-free diets, high fat, low fat, constipation regime, etc.

II–III. Diet in Diseases and Disorders of the Gastro-intestinal Tract

Intestinal stasis; hypoacidity; constipation; diarrhea; gall-bladder conditions.

IV. Treatment of Certain Individual Dietetic Problems

Vomiting; distention; parenteral feedings—rectal, peritoneal, intravenous; subcutaneous; regulation of acid and base intake; regulation of fluid intake, limitation of fluids and forcing of fluids.

V–VI. Malnutrition (Emaciation) and Obesity

Anorexia; bulimia; polyphagia.

VII. Feeding in the Acute Fevers

Pneumonia, typhoid fever, scarlet fever, tonsillitis, etc.

VIII. Principles of Diet for Long Continued and Depleting Conditions.

Tuberculosis, anemia.

IX. Cardiac Insufficiency, Arteriosclerosis

Principles of diet for acute and chronic decompensation; Karrell diet; cardiac diet; diet in cases of arteriosclerosis.

X–XI–XII. Nephritis, Pyelitis and Cystitis, Diabetes

XIII. Rickets, Scurvy, Pellagra, Hypo and Hyperthyroidism

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XIV. Feeding the Sick Child

An application of the general principles laid down in I–XIII to the feeding of sick children. Special points at which child's diet must be safeguarded in contrast with that of the adult should be stressed: i.e., growth and quality of proteins, minerals and vitamins, etc.

Note: While one lecture is given over to the Feeding of the Sick Child, it is expected that this particular phase of the work will be more adequately given in, and during, the student's pediatric service.

Infant feeding is included under Diseases of Infants and Children.

XV. Examination

Methods of Teaching and Illustrative Material

As in preceding course.

Text and Reference Books

As in preceding course.

ELEMENTARY MATERIA MEDICA

Time: 15 to 20 hours, divided about equally between class and laboratory work.

Teacher: The course is to be given in the first term preferably by a nurse instructor.

Objects of Course

1. To familiarize the student with common drugs used as disinfectants and antiseptics, presenting these in groups according to their common characteristics.
2. To insure accuracy and afford practice in making up solutions commonly used by the nurse; to teach tables, arithmetic and method necessary for this purpose.
3. To furnish a basis for the further study of Materia Medica and Therapeutics.

Outline of Class and Laboratory Work

Introductory Review of Arithmetic

1 to 5 hours depending on the background of the class. It is suggested that students be asked to review before admission Roman and Arabic numerals, Apothecaries' System of Weights and Measures, fractions, decimals, percentage, etc., and that a test should be given to determine which students might be exempt from further review and what additional hours may be necessary for drill before proceeding with I.

I, II. Metric System

(Class). Presentation of Metric System (entire). Assignment of list of approximate equivalents which must be memorized.

(Laboratory). Drill in metric system and equivalents. Practice in weighing and measuring.

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III, IV. Solutions

(Class). Characteristics of a solution, solvent, solute, solubility. Common solvents. Saturation and supersaturation. Ionization. Effect of temperature. Change from Fahrenheit to Centigrade. Methods of action as disinfectants. Effects upon bacterial and body cells.

(Laboratory). Experiments to demonstrate solubility and give practice in weighing and measuring. Presentation of method of making up solutions from pure drug. Practice. Making saline solution.

V, VI. Common Disinfectants, Antiseptics and Deodorants

(Class). Presentation of common disinfectants and antiseptics in groups, contrasting and comparing the source, physical and chemical properties, the method of action, factors influencing use, care in handling, etc. Beginning with coal tar group—phenol, creolin, etc.

(Laboratory). Presentation of method of making up solutions from stock solutions, practice of solving problems and making up weaker solutions from stock solutions, alternating discussion and practice.

VII, VIII. Common Disinfectants, Antiseptics and Deodorants (Continued)

(Class). The silver and mercuric compounds: bichloride of mercury, silver nitrate, etc.

(Laboratory). Presentation of methods of finding the ratio of strength, and per cent of strength of solutions of unknown strength. Practice. Presentation of method of obtaining fractions of tablets. Practice.

IX, X. Common Disinfectants, Antiseptics and Deodorants (Continued)

(Class). The halogens—iodine, chlorine compounds such as chlorinated lime, Dakin's solution; acids and alkalies; aniline dyes, gaseous disinfectants and essential oils, etc.

(Laboratory). Making up these solutions. Practice of all types of problems in and out of class.

XI, XII. Crude Drugs and Pharmaceutical Preparations

(Class). Demonstration and discussion of crude drugs, active principles and pharmaceutical preparations. (Reading assignments and written reports to teach source of world's drug supply). Drugs in household: selection, storing. Dangers of habit formation. Legal standards and drug legislation.

(Laboratory). Experiments to show active principles of plants. Practice in measuring dosage for children, etc. Abbreviations. Practice in reading prescriptions.

XIII. Commoner Drugs Applied Locally

(Class). Ointments, liniments, emollients, pastes, plasters, suppositories, etc. Action and methods of application.

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XIV. Commoner Poisons and Antidotes

(Class). Studied in groups—acids, metallic salts, alkaloids, etc., with general principles for the treatment of poisoning by each type. Demonstration or practice in preparation of general antidotes. Emphasis on care in handling drugs and precautions against poisoning.

XV. Examination—Written and Practical

Note. If it is impossible to have the class continue at once with the more advanced course in materia medica and therapeutics, two or three additional hours should be given at this time to the discussion of a few of the drugs used most frequently in the wards, and to the special precautions necessary in the handling of potent drugs such as morphine, strychnine, etc.

Methods of Teaching

1. Use problem and discussion methods when possible. Every practice problem should be one the nurse may later have to solve.
2. Much drill is required to afford proficiency in solving solution problems and in making up solutions commonly used.

Equipment and Illustrative Material

Drugs in different forms. Samples of crude drugs and growing plants when possible. Charts for metric and English systems and all the different kinds of measures—pitchers, measures, funnels, etc. (a set for each pupil in the laboratory section), and stock bottles of all the common drugs for making up solutions.

Text and Reference Books

Group I

American Medical Association, Useful Drugs
American Medical Association, New and Non-official Remedies (published yearly)
Blumgarten, Materia Medica for Nurses
Goostray, Drugs and Solutions for Nurses
Parker, Materia Medica for Nurses
Smith-Upton-Gage, Mathematics for Nurses (pamphlet)
Stimson, Drugs and Solutions

Group II

American Medical Association, Propaganda for Reform
American Medical Association, Nostrums and Quackery
Bachman and Bliss, Essentials of Physiology and Pharmacodynamics
Bastedo, Materia Medica, Pharmacology, Therapeutics and Prescription Writing
Brunton, Lectures on Action of Medicine
Dock and Quimby, Textbook of Materia Medica for Nurses
Hare, Textbook of Practical Therapeutics
Osborne, Principles of Therapeutics
Sainsbury, Drugs and the Drug Habit
Sollman, Textbook of Pharmacology

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MATERIA MEDICA AND THERAPEUTICS

Time: 30 hours. Materia Medica and Therapeutics should be given the second term of the first year.

Teacher: Physician, nurse instructor, or pharmacist. The instructor should be specially prepared.

Objects of Course

1. To continue the study of drugs in their relation to therapeutics, considering in each instance other therapeutic agencies used to treat disease, and emphasizing the accurate and intelligent administration of medicines and the reporting of results.
2. To teach the commonly used drugs (a) in groups according to the systems affected, and (b) in classes having a similar source or action.
3. To make the nurse familiar with precautions in administration and the methods, physical and psychic, which secure the best action of a drug.
4. To familiarize the student with the toxic doses and physiological limit of the poisonous drugs used in medicine. To make her familiar with idiosyncrasies, incompatabilities, various types of antidotes and other emergency treatments.

Outline of Classes

I. Introduction

Brief history of materia medica. Factors influencing the development of modern medicine. Outstanding characteristics of modern medicine. Growing responsibility of nurse. What a nurse should know about each common drug. The advantages of studying drugs in groups and classes. The important laws of drug action (systemic). Terms used to express methods of drug action: cumulative, untoward, etc.

II–IX. Drugs Which Act Chiefly upon Central Nervous System

Including central stimulants, central depressants, especially caffeine, atropine, camphor, strychnine, the opiates, hypnotics, analgesics and anaesthetics.

X–XI. Drugs Which Act upon Peripheral Nerve Endings

Diaphoretics, motor stimulants, secretory and motor depressants, local anaesthetics and anodynes, mydriatics and myotics.

XII–XVII. Therapeutic Agencies and Drugs Acting upon the Circulatory System

Including heart stimulants and depressants, vasomotor constrictors and dilators, and blood stimulants.

XVIII–XIX. Therapeutic Agencies and Drugs Affecting Respiration

Including respiratory stimulants and sedatives, expectorants and antiseptics.

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XX–XXIII. Therapeutic Agencies and Drugs Affecting the Digestive System

Including acids and alkalies, emetics, antiemetics, digestants, stomachics, carminatives, intestinal antiseptics, cathartics, antidiarrheics and anthelmintics.

XXIV. Therapeutic Agencies and Drugs Affecting the Urinary System

Including diuretics and urinary antiseptics.

XXV. Therapeutic Agencies and Drugs Affecting the Reproductive System

Including emmenagogues, uterine sedatives, ecbolics.

XXVI. Therapeutic Agencies and Drugs Affecting Metabolism and Nutrition

Including vitamin products, glandular preparations, cod liver oil, iodinized salt, etc.

XXVII. Specifics and So-called Specifics

Including quinine, optochin, mercury, salvarsan, emetine, radium, atophan and chalmoogra oil.

XXVIII. Heliotherapy

Including sunlight, Alpine light, ultra violet, infra red, X-ray, etc.

XXIX. Serum Therapy

Serum, vaccines, toxins, pollen extracts, etc.

XXX. Examination

METHODS OF TEACHING

1. Same general principles as outlined under Elementary Materia Medica.
2. Every opportunity should be taken to tie up the class work with the ward work. Students should be asked to report on the action of drugs being used on their wards. The teacher should visit the wards and quiz the students on the medicines which are being given to different patients and the effects they have observed. Any unusual action of drugs, such as a drug rash, or any case where a rare or new drug is being used, should be brought to the attention of the whole class in the form of a clinic.
3. Frequent short tests, both oral and written, should be given. The analysis of prescriptions to determine the amount of any given drug being given in one dose or in 24 hours, is often helpful.

EQUIPMENT AND ILLUSTRATIVE MATERIAL

Same as under Elementary Materia Medica—also bedside charts.

TEXT AND REFERENCE BOOKS

Same as under Elementary Materia Medica.

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ELEMENTS OF PATHOLOGY

Time: 15 hours. Lecture, demonstration and laboratory work. Pathology should be given as soon as possible after the first term and should serve as a foundation for courses in medical nursing, surgical nursing, etc.

Teacher: The course is conducted by a pathologist with the assistance of a nurse instructor, if necessary.

Objects of the Course

This course is intended to help the student understand the more generally accepted causes of disease, the nature of some of the more common disease processes, and the meaning of terms used in describing pathological conditions. It should give practical help in understanding treatments which are prescribed for patients, the reasons for the various specimens required, and the need of special care in securing and preserving them.

Outline of Lecture, Demonstration and Laboratory Work

I. Introduction of Pathology

(Lecture). Importance of knowledge of pathology to the nurse. Relation to anatomy and physiology, bacteriology and chemistry. Classified causes of disease. Growth of tissue, progressive and regressive changes. Progressive changes: (1) hypertrophy, normal, physiological, compensatory, disease; (2) hyperplasia; (3) regeneration. Regressive changes: (1) atrophy, normal, senile, disuse, physiological, pressure; (2) degeneration, cloudy swelling, fatty infiltration, pigmentation, calcification; (3) necrosis, mechanical, chemical, changes in blood supply, bacterial.

II–III. Inflammation and Repair

(Lecture and Demonstration). Inflammation defined. Etiology. Elements of inflammatory reaction: serum, fibrin, red blood cells, leukocytes. Symptoms of inflammation. Types of reaction: serous, fibrinous, purulent, hemorrhagic. Clinical types: local and diffuse. Process of repair. Sinus formation. Adhesions. Fistula. Scar formation and results. Demonstration of plates showing inflammatory process. Bedside clinic, if possible.

IV. Special Inflammation, Tuberculosis

(Lecture and Demonstration). Review etiology and portal of entrance to body. Sites of infection: lungs, pleura, glands, intestines, meninges, peritoneum, bones, kidneys, Fallopian tubes. Types of lung infection, pulmonary, pneumonic, miliary. Laboratory tests: purpose and significance.

V. Special Inflammation (Continued), Syphilis

(Lecture and Demonstration). Review etiology and methods of infection. Stages. Lesions: respiratory tract, alimentary tract, circulatory system, bones, reproductive system, congenital, late hereditary, nervous system. Laboratory tests: Wassermann, blood or spinal fluid; colloidal gold, spinal fluid; Treponema pallida, tissue or smear.

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VI. Tumors, Benign

(Lecture and Demonstration). Definition of tumor: general characteristics of tumors; classes of tumors, benign and malignant. General characteristics of benign tumors. Types: (1) epithelial tumors (from ectoderm), wart, papilloma, adenoma, cystadenoma, pigmented moles; (2) connective tissue tumors, fibroma, lipoma, chondroma, osteoma, myoma, hemangioma, ganglion; (3) congenital tumors, teratoma, dermoid cysts. Demonstration of plates pathological specimens. Bedside clinic.

VII. Tumors (Continued), Malignant

(Lecture and Demonstration). Definition, etiology unknown; general characteristics, especially metastasis. Types: (1) carcinoma, tissues involved, sites, prevalence; (2) sarcoma, tissues involved, sites, types, (a) glioma, (b) dura endothelioma, (c) melanoma, (d) hypernephroma. Social aspect and importance of early recognition of symptoms. Pictures, specimens, bedside clinic.

VIII. Necroscopy

(Demonstration).

IX–X. Blood

(Lecture and Demonstration). Hemoglobin estimation, Tallquist and Sahli methods. Calculation by students of their own hemoglobin by former method. Color index, red and white blood cell count. Demonstration by technician but students might make some estimates. Differential counting. Examination of stained specimens to show abnormal blood cells. Demonstration of coagulation time and hemolysis tests for transfusion. Examination and discussion of blood sheets showing normal and abnormal laboratory findings in relation to respective cases. Brief related discussion of anemia, pernicious and secondary: leukemia, myelogenous and lymphatic.

XI. Sputum. Spinal Fluid

(Lecture and Demonstration). Source of sputum. Inspection of specimens: amount; consistency and appearance, frothy, mucoid, purulent, bloody; odor; color; casts of bronchi; living tissue; Dittrich's plugs. Precautions, methods and time for collecting sputum. Examination and discussion of laboratory findings on charts in relation to diseases of patients.

Spinal fluid tests: Normal pressure, appearance and amounts. Chemical tests for globulin and significance. Inspection of prepared slides: cell count; smear; characteristics of fluid in different diseases such as meningitis, poliomyelitis, tabes dorsalis, and cerebrospinal syphilis.

XII. Gastric Contents and Feces

(Lecture and Demonstration). Fasting contents: gross examination to show normal amount, consistency, color, odor, and presence of food residue. Specimen for demonstration. Microscopic examination to determine presence of blood, pus, epithelial cells, tumor cells, and organisms. Chemical examina-

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tion to determine amount of free hydrochloric acid and blood. Explanation of a test meal and comparative examination of gastric contents after this procedure. Findings in carcinoma and gastric ulcer.

Feces: abnormal colors, consistency, form. Inspection of specimens to show food residue, mucus, blood, pus, shreds of mucous membrane, gall stones and the more common intestinal parasites. Chemical examination to indicate the presence of bile or blood. (This does not include the study of infants' stools). Examination and discussion of various laboratory reports of gastric contents, and feces, in relation to respective disease conditions.

XIII–XIV. Urine

(Lecture, Demonstration and Laboratory). Analysis of urine. Characteristics of normal urine reviewed. Variations from the normal and the more common conditions in which they are found. Demonstration and explanation of the renal function test. Individual laboratory work on characteristics of urine, normal and abnormal. Explanation, demonstration and practice in testing for albumen, acetone, and diacetic acid. Demonstration and explanation of pus and casts. Characteristics of urine in diabetes and nephritis.

XV. Examination

Methods of Teaching

1. It is suggested that this outline be used as guide in the choice of material, rather than as a course in its entirety.
2. Laboratory work on the part of the student should be encouraged when possible and practicable such as in the study of blood and urine.
3. Demonstrations by the teacher should take the place of laboratory work when experiments require either skilled technic or much time.
4. Normal and abnormal specimens should be shown together for comparative purposes whenever possible.
5. The necroscopy is justified because it, and it only, shows the human organs in their relationships, makes the discussion of pathological conditions more interesting and real, and stimulates nurses to appreciate more keenly the symptoms produced by the condition of their patients.

Equipment and Illustrative Material

Normal and pathological specimens, patients' charts showing laboratory findings in various diseases, X-ray plates, illustrations from texts and magazines, microscopes and prepared slides, projection microscope, reflectoscope, lantern slides, necroscopy, individual patients.

Text and Reference Books

Group I

Adami and McCrae, Textbook of Pathology
Councilman, Disease and its Causes
Gibson, Clinical Laboratory Technic for Nurses
Hawk, Physiological Chemistry
Journal of American Medical Association

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MacCallum, Textbook of Pathology
Osler, Practice of Medicine
Todd, Clinical Diagnosis by Laboratory Methods
Woolley, Fundamentals of Pathology

Group II

Delafield and Prudden, Textbook of Pathology
French, Index of Differential Diagnosis
Mallory, Principles of Pathologic Histology
Mathews, Physiological Chemistry
Rosenau, Preventive Medicine
St. George, Textbook of Pathology for Nurses
Stevens, Practice of Medicine
Wood, Chemical Microscopical Diagnosis

PRINCIPLES AND PRACTICE OF NURSING (ELEMENTARY)

[This course includes courses previously listed as Elementary Nursing, Hospital Housekeeping, Bandaging and Massage. These subjects are all so closely related that it seems best to group them under one course. The work is arranged in units which may be taken up consecutively or better in two parallel series, A, D, F and G, forming one; and B, C and E, the other. It is assumed that sudents will not be caring for acutely ill patients during this period. Their work will be with chronics, convalescents and the mildly ill.]

Time: 90 hours, divided into 45 lesson periods of two hours each, about half of each period to be spent in class and demonstration work and half in laboratory practice and quiz. It is assumed that students will carry out procedures once, under the teacher's supervision, in the hours assigned to laboratory or demonstration room work, and will then have further practice outside these hours, both in the demonstration room and in the ward.

Teacher: Instructor of Practical Nursing, who may be assisted by other members of the staff specially qualified to teach the units outlined under A, D, F and G.

Objects of 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 fine technic in nursing and allied skills.

2. To develop a love for nursing, a pride in good workmanship, and a keen interest in the human side of the nurse's work as well as in its scientific and practical side.

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

4. To test the aptitude of students, with a view to selecting those who are fitted to continue their training as nurses.

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Hospital Housekeeping and Supplies

Unit A—20 Hours

I. The Hospital as a Home for Sick People

(It is suggested that the Superintendent of the Hospital might give this introductory talk).

(Class). Meaning of the term hospital. Purpose of the hospital. Importance of good location and provision for light, air, safety, etc., in structure of hospitals. Outline of various departments of a modern hospital and relation of these to one another. Functions of the nursing service and what it means to the hospital and the patients. Importance of good housekeeping and nurse's responsibility for patients' surroundings. Some essentials of teamwork and efficiency in hospital work.

(Demonstration). Trip through the hospital. Student to write this up briefly and to draw a simple chart of the hospital organization showing the main departments and their relationships.

II. Care of the Patient's Room

(Class and Demonstration). Effect of surroundings on sick people. Special problems to be met in hospitals. Essentials in air space, ventilation, lighting and heating, floors and floor coverings, walls and wall finishes, use of color and decoration. Special types of furniture required, hangings, pictures and other furnishings. Arrangement of private room from standpoint of convenience, attractiveness, ventilation, etc. Daily care and cleaning of room. Improvised methods of ventilation.

(Laboratory). Practice in sweeping, dusting and daily care of student's own room or private room. Care of flowers. Draw plans of different types of sick rooms, showing best arrangement of furniture and best plan for ventilation, privacy and convenience.

III. Preparation of a Room for a New Patient

(Class and Demonstration). Importance of thorough housecleaning of room between cases. Sunlight and cleanliness as disinfectants. Materials to be cleaned, woods, paints, metals, glass, fabrics, marble, etc. Appliances, brooms, brushes, mops, etc. Their choice, cost and care. Methods of cleaning demonstrated.

(Laboratory). Thorough cleaning of one bedroom by each group of four to eight students and preparation for new patient.

IV. Care of the Ward and Its Equipment

(Class and Demonstration). How to make the ward clean, comfortable, attractive, and safe for patients. Standard ward furnishings and arrangement. Heating, lighting and ventilation of ward. Daily cleaning and order. Weekly care including high dusting, cleaning of lighting fixtures, etc. Telephone and electric bell system. Precautions against fire, fire escapes, use of fire extinguishers and fire drill.

(Laboratory). Cleaning of ward. Practice fire drill. Make a plan of

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hospital ward. Students on the wards may keep temperature chart of ward, observe ventilation, dust and keep ward tidy, assist in making weekly or monthly inventory, etc.

V. Utility Rooms, Bathrooms and Lavatories

(Class and Demonstration). Discuss plan of ward unit and relation of attached rooms to the general work of the ward and welfare of patients. Equipment and arrangement of such rooms. Methods of cleaning and care of utensil sterilizers and other appliances. Systems of plumbing, pipes, traps, etc., and their care. Disposal of hospital waste. Care of dressing pails.

(Laboratory). Cleaning of sinks, bath tubs, bathroom utensils and other equipment. Listing of special articles with prices. Visit to incinerator (if there is one).

VI. The Ward Kitchen

(Class and Demonstration). Special importance of the kitchen in relation to spread of disease and general welfare of patients. Equipment of ward kitchen. Plan for daily and weekly cleaning. Care of plumbing, dish sterilizers, dish washers, etc. Care and cleaning of refrigerator. Precautions against vermin and methods of extermination of ants, cockroaches, rats and mice. Protection and care of food. Prevention of food waste. Care of cooking utensils and diet dishes. Ordering and costs of kitchen supplies. Garbage disposal.

(Laboratory). Clean refrigerator. Assist with weekly dish count. Inspect garbage pails and report on waste. Make requisition for kitchen supplies.

VII. Linen Room and Linen Cupboard

(Class and Demonstration). Purpose and plan of central linen room and sewing room. Arrangement, inventory, marking, mending, folding, etc. Systems of replacement and exchange. Arrangement, cleaning and care of ward linen closet. Care of blankets and ward clothing.

(Laboratory). Cleaning and arrangement of linen closets. Looking over linen for mending, folding and stacking linen, making linen requisitions. Visit to central linen room.

VIII. The Laundry

(Class and Demonstration). Purpose and plan of the laundry. Precautions in handling of hospital linen. Processes—sorting, washing, bleaching, rinsing, mangling, etc. Equipment and materials used. Removal of stains. Methods of washing blankets and woolens.

(Laboratory). Visit to laundry. Help in sorting ward linen and removing stains. Make list of linen supplies with costs.

IX, X. Surgical and General Ward Supplies

(Class and Demonstration). Purpose of the surgical supply room. Types of supplies to be prepared,—bandages, sponges, pads, etc. Materials used and their cost. Methods of preparing and sterilizing. Mending and care of rubber gloves.

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(Laboratory). Prepare all ordinary types of dressing materials and surgical supplies. Estimate costs. Wash and mend rubber gloves. Visit supply rooms and find out methods of ordering common supplies.

ADMISSION AND GENERAL NURSING CARE OF THE PATIENT

Unit B—20 Hours

I, II. Getting a Bed Ready for a Patient

(Class and Demonstration). Kind of bed and bedding needed in hospitals for comfort, safety, economy, sanitation, etc. Possible types of patient to be provided for. Cleaning, disinfection and care of beds and bedding. How to make ordinary hospital bed and child's cot. Modification of bed for emergency patient and for balcony. Special care of air and water beds.

(Laboratory). Making beds of different types. Cleaning and disinfecting beds. Airing and caring for bedding.

III, IV. Admission of Patient to the Hospital

(Class and Demonstration). Types of patients and how they come to the hospital. What can be done to make them feel at home and save them from fear and worry. Routine in admitting room, office and ward (omitting details temperature, pulse and respiration till later lesson). Clothing to be provided for ambulant patient. Helping with undressing, tub bath, and dressing for patient not acutely ill. Listing and caring for clothing and valuables. Precautions regarding vermin. Treatment for pediculi. Provision for transfer and discharge. What the social service department does for the patient.

(Laboratory). Go through routine of admission and tub bath for ambulant patient. List clothes and valuables. Visit admitting room and social service department.

V. Lifting, Moving and Carrying Sick and Helpless Patients

(Class and Demonstration). Important points in handling and carrying patients. Conditions to be especially considered. Methods of assisting in walking, moving patient in chair, carrying with and without a stretcher, lifting from floor or chair to bed and from bed to bed. The fireman's lift and other emergency methods.

(Laboratory). Practice in methods of lifting, moving and carrying.

VI, VII. Making the Patient Comfortable in Bed

(Class and Demonstration). Main sources of discomfort and how to alleviate them. Morning and evening toilet with washing of hands, face and back, care of mouth, brushing and combing hair, etc. Hot water bag to feet. Giving bed pan. Making up the bed with patient in it. Changing the bed. Other devices for comfort,—pillows, pads, rings, etc. Various positions, including sitting up with back rest. How to change mattress with patient in bed.

(Laboratory). Practice of all these procedures.

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VIII. Bathing the Patient in Bed

(Class and Demonstration). Purpose of the cleansing bath. Precautions necessary. Temperature of water and materials used. Method of giving full bath for adult or child. Washing the patient's hair in bed.

(Laboratory). Practice of bed bath and shampoo.

IX. Safeguarding the Patient in Bed

(Class and Demonstration). Danger of bed sores, symptoms, locations, and methods of prevention and treatment. Precautions against falling or injury in case of children, delirious or irresponsible patients. Use of sideboards, jackets, elbow splints, sheets and other modes of restraint. Precautions against burning, exposure, and other possible dangers.

(Laboratory). Practice of procedures in this lesson and any left over from previous lessons.

X. Feeding the Patient

(Class and Demonstration). Importance of food and water in restoring health. Getting patients ready for meals. Means of making food attractive. Various ways of assisting helpless patients in eating and drinking. Observation of appetite and amounts of food and water taken.

(Laboratory). Review of procedures in this unit. (Students might organize a project covering the first day in the hospital for a chronic or mild accident case.)

Observation and Recording of Patient's Condition

Unit C—10 Hours

I. Observation—Its Meaning and Value. Use of Records

(Class and Demonstration). Importance of nurse's observation in relation to diagnosis and treatment of patient. How to observe. Importance of records. Types of records kept in hospitals. Essentials of a good record or report. Printing or manuscript writing as a means of securing legibility and neatness.

(Laboratory). Practice in printing or manuscript writing. Visit record room and see filing system for patients' records.

II, III. Temperature, Pulse and Respiration

(Class and Demonstration). Significance of the three cardinal symptoms and their relation to one another. Structure and use of the clinical thermometer. Methods of disinfection and care. Methods of taking and charting temperature, pulse, and respiration.

(Laboratory). Practice in taking temperature, pulse and respiration. Making out simpler forms of charts and recording temperature, pulse and respiration.

IV, V. Other Symptoms and Their Charting

(Class and Demonstration). Importance of changes in skin, mental condition, expression, posture, etc. Pain and its significance. Types of pain and

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how to describe. Excretions. Collecting, labelling, and care of specimens. Significance of laboratory reports in the nursing care of the patient.

(Laboratory). Practice in charting. A good method is to give students a number of unorganized facts, relevant and irrelevant, about a patient and ask them to select, organize and express in proper form the facts which need to be recorded on the charts. Then have class criticize results. Visit to laboratory to see what is done with specimens.

Elementary Bandaging

Unit D—8 Hours

I. Binders, Slings and Miscellaneous Bandages

(Class, Demonstration and Laboratory). Purpose of bandages and binders. Material and common applications of triangular, cravat, four-tailed and scultetus bandages, slings, abdominal and breast binders, knots and fastenings. Practice in applying these binders and bandages to different parts of the body.

II, III. The Roller Bandage

(Class, Demonstration and Laboratory). Materials, widths, lengths, etc., and special uses. How to handle and roll. Application of circular and spiral bandage to wrist, arm, finger, etc. Figure of eight of arm, leg and foot. Spica of foot and groin. Spiral reverse of arm, leg and foot. Practice in applying.

IV. Special Bandages

(Class, Demonstration and Laboratory). Figure of eight of head and chest. Suspensory of breast (single and double). Recurrent head bandage. Oblique of jaw. Barton's and eye bandage. Practice in applying.

Elementary Nursing Treatments

Unit E—20 Hours

I. Local Application of Cold

(Class and Demonstration). Some of commoner conditions in which cold is used, including congestive and inflammatory conditions. Action of cold. Methods of applying moist and dry cold in form of compresses, ice bags, ice coils and improvised substitutes for these.

(Laboratory). Practice in preparing and applying these remedies to different parts of the body and for different conditions and recording results.

II. Local Application of Heat

(Class and Demonstration). Some of the commoner conditions in which local heat is used. Action of heat. Application of dry and moist heat in form of fomentations, poultices, hot water bag, electric pad, and improvised substitutes.

(Laboratory). Practice in preparing and applying these remedies for different conditions on different parts of the body and recording results.

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III, IV. Local Application of Heat and Chemical Counterirritants

(Class and Demonstration). Use of chemicals to increase counterirritant action. Mustard plaster and poultice, mustard leaves, spice poultice, and common liniments. Turpentine stupes. The foot bath with and without mustard. Sitz bath.

(Laboratory). Practice of these procedures and recording results.

V, VI. Elementary Nursing Treatments in Throat and Respiratory Conditions

(Class and Demonstration). Some of commoner conditions requiring treatment,—colds, coughs, sore throats, etc. Precautions against infection. Irrigations and inhalations. How to prepare a croup tent. Care of excreta, dishes, linen, etc., after an infectious case in general ward.

(Laboratory). Practice in giving treatments and carrying out preventive and disinfectant measures.

VII. Elementary Nursing Treatments in Eye, and Skin Conditions

(Class and Demonstration). Commoner conditions requiring treatment. Eye bathing, drops and compresses. Removal of foreign bodies in eye. Application of ointments and lotions for skin conditions. Eczema masks. Care of infectious skin conditions.

(Laboratory). Practice in these treatments.

VIII. Elementary Nursing Treatments in Disturbances of Gastro-intestinal Tract

(Class and Demonstration). Commoner conditions requiring treatment,—nausea, vomiting, colic, flatulence, etc. Use of ordinary measures to produce or control vomiting. Use of rectal tube, rectal suppository, soap suds, oil or saline enema. Charting of results. Disinfection of stools and utensils in infectious cases. Care of incontinent patients.

(Laboratory). Practice method of giving enema and other treatments, outlined; first in the demonstration room with hospital doll, and later with ward patients.

IX. Elementary Nursing Treatments in Conditions of Genito-urinary Tract

(Class and Demonstration). Commoner conditions to be treated. Precautions against vaginitis and other infectious conditions. Purpose of vaginal douche. Solutions and temperatures used. Method of administration. Charting of results.

(Laboratory). Practice method of giving douche (as with enema). Review some of procedures previously studied.

X. Care of Dying

(Class and Demonstration). Symptoms of approaching death. Measures for the care and relief of the patient. Notifications necessary. Consideration of friends. Care of the body after death. Disposal of clothing, valuables, etc.

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(Laboratory). Review method with hospital doll and make out necessary records and blanks.

RUBBING AND EXERCISES THAT MAY BE USED IN ELEMENTARY NURSING CARE

Unit F—6 Hours

I. Ordinary Stroking and Kneading Movements and Friction

(Class and Demonstration). Some uses of rubbing in general daily care of bed patients as sedative, for exercise, in applying liniments, inunctions, etc. Kneading and stroking movements that are used in rubbing of the back, legs, arms, forehead and neck.

(Laboratory). Practice in simple kneading and stroking movements.

II. Special Manipulations of Joints

(Class and Demonstration). Purpose of and precaution in such manipulations after union of fracture, in exercise of stiff joints, etc. How the patient may help.

(Laboratory). Practice in such movements.

III. Exercises

(Class and Demonstration). Brief consideration of purpose of various setting-up exercises that may be ordered for convalescents. Active and passive movements used for this purpose.

(Laboratory). Practice in these movements.

SIMPLE DIVERSIONS AND OCCUPATIONS FOR PATIENTS

Unit G—6 Hours

I, II. General Purposes, Needs and Methods

(Class and Demonstration). Mental and physical effects of occupation, and some possible dangers. Resources available in the hospital such as the library, games, puzzles, music, etc. Sedentary and active work in the ward adapted to ordinary cases. Ways in which the student can help the patient use these resources.

(Laboratory). Visit to library and explanation by librarian of best use of books and magazines for patients. Demonstration (by occupational therapist, if possible) of simple games, puzzles and occupations suited to the need, with some practice by students in demonstration room. Students might prepare an exhibit or demonstration of occupations and diversions they themselves know about and show how they could be used for different types of cases.

III. Diversions for Children

(Class and Demonstration). Games, puzzles, paper work, cut-outs, etc., especially adapted to use of convalescent children.

(Laboratory). Demonstration and practice by students.

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Methods of Teaching

1. These lessons should follow closely and apply the sciences which the students are studying in their introductory course. To teach nursing procedures properly, involves a considerable knowledge of the principles of chemistry, physics, anatomy, physiology, bacteriology, etc., and their application in nursing treatments. The purpose of each treatment, the conditions in which it is used, the effect to be looked for, and the precautions required should be fully discussed with the students in each lesson, and the demonstration should accompany this discussion or follow immediately after. A typed or mimeographed sheet, outlining the procedure, may then be given to the student for guidance in her practice and to save her time in copying. From the beginning, students should be encouraged to judge the procedures by certain standards (such as those in paragraph 4 following) and to make suggestions. As soon as some skill has been gained in the procedure taught, the student should be stimulated to suggest modifications suitable in applying the procedure to the needs of different patients.

2. For practice work, the class should be divided into sections of from eight to twelve pupils, depending on the amount of equipment available. For all the commoner procedures each student should have an individual set of appliances as in the diet kitchen, but if this is not possible, students can work in groups of two or three. The teacher supervises the practice work, quizzing students and explaining where necessary. Students may be asked to criticize each others' work, and sometimes to demonstrate for the group. Frequent reviews are desirable, and a final demonstration before the superintendent and head nurses is often found to stimulate careful and finished work.

3. If the students are regularly assigned to ward duty, much of the ward practice or drill can be carried on in the wards under the general supervision of the instructor. If the student is not on ward duty, extra hours will have to be allowed for practice work in the demonstration room until skill and confidence are developed. Students should not be allowed to perform any duties in the wards until the method has been thoroughly taught in the demonstration room. This method should be the one in use throughout the hospital.

4. To secure uniformity in method, it is well to have a type-written or printed book of standardized procedures for reference in each ward. These methods should be carefully worked out to secure the greatest safety, comfort and best therapeutic results for the patient, and the greatest economy in time, effort and materials for the staff and the hospital. Neatness and simplicity of procedure are also of primary importance. Photographs of cupboards, utensil racks, made-up beds, etc., are useful means of securing uniformity of methods.

5. It is desirable that the nursing procedures taught in the probationary period should include only the simpler and less technical treatments, those which do not demand fine skill or much experience and understanding of disease, and those which would not be likely to be misused if the pupil is not retained in the hospital.

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Equipment and Illustrative Material

1. A special demonstration room or laboratory should be fitted up for the teaching of practical nursing. This should be large enough to allow eight to twelve students to work freely at one time. It should have ample cupboard and drawer space for supplies, and several good-sized tables, as well as blackboards, chairs, etc. There should be running water and gas plates in the nursing laboratory, also adequate sinks and hoppers for eight to twelve students.

2. The demonstration room should contain a complete equipment of the materials needed for class work,—beds, linen, enamel and glassware, drugs and supplies. For all the commoner procedures, each student or pair of students should have an individual set if possible. Expensive or cumbersome articles can be borrowed from the wards, when needed. Sometimes it is possible to use an empty ward or a good-sized private room as a practice room and then ward supplies and equipment may be used.

3. Demonstration dolls or manikins can be used for many demonstrations, though the living subject is better if one can be secured. Students can be used as subjects in many procedures. A home-made life-size doll can be made quite inexpensively, covered with single-faced rubber, so that it can be bathed and tubbed if desirable.

4. Anatomical charts and models, the skeleton, and other illustrative material will be needed. For hospital housekeeping samples of materials, of flooring, charts of colors, catalogues, pictures, etc., will be helpful.

Text and Reference Books

Group I

Bridge, Manual of Practical Nursing
Brown, The Junior Nurse
Davis, Principles and Practice of Bandaging
Dunton, Occupational Therapy
Eliason, Practical Bandaging
Hall and Buck, The Work of Our Hands
Harmer, Textbook of Principles and Practice of Nursing
Hopkins, The Roller Bandage
Kelly, Textbook of Nursing Technique
McCrae, Procedures in Nursing, Parts I and II
McIsaac, Primary Nursing Technique
Maxwell and Pope, Practical Nursing
Mennell, Massage, Its Principles and Practice. (Second Edition).
Mitchell and Gulick, Massage and Exercise in Vol. VII of Cohen's System of Physiologic Therapeutics
Nightingale, Notes on Nursing
Pope, Manual of Nursing Procedures
Robb, Nursing: Principles and Practice
Sanders, Modern Methods in Nursing
Tracy, Invalid Occupation

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Group II

Cyriax, Kellgren's Manual Treatment
Despard, Textbook of Massage and Remedial Gymnastics
Graham, Massage
Harmer, Methods and Principles of Teaching the Principles and Practice of Nursing
McKenzie, Exercise in Education and Medicine
Palmer, Lessons on Massage
Wharton, Minor Surgery Including Bandaging

Manuals of various schools of nursing which have been typed or printed and are available, as that of Philadelphia General Hospital, Bellevue Hospital, etc.

See also books on Anatomy and Physiology, Bacteriology, Chemistry, Physics, Hygiene, Pathology, Medical and Surgical Nursing.

PRINCIPLES AND PRACTICE OF NURSING (ADVANCED)

(This course is to be given immediately after the course in Elementary Nursing is completed and after the student has been accepted in the school. The order of the classes can be changed to meet the more immediate needs of the student who will now be on regular duty and will be advancing gradually to more responsible duties in the care of medical and surgical cases.)

Time: 30 hours in periods of two hours each to be divided between class and laboratory work in the demonstration room.

Teacher: Instructor of Practical Nursing.

Objects of Course

The general aims are similar to those outlined under elementary nursing, but the work is more responsible and requires more knowledge, experience and skill than the student can acquire in the first few months of her training.

The procedures included in this course are those commonly used in all departments of the hospital. Some of them will have to be modified and adapted to meet the needs of special types of disease and special services. These adaptations and the treatments peculiar to special diseases will be taken up under those various subjects. (See Medical Nursing, Pediatric Nursing, etc.)

Outline of Course

I. Assistance in Examination of Patients

(Class and Demonstration). Purpose of examination and common requirements in a general physical examination, in pelvic, rectal, chest, examination of abdomen, back and extremities. Various positions. Assistance with rounds. Taking orders.

(Laboratory). Assembling equipment and supervised practice in ward.

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II. Assistance with Various Types of Tests, Punctures, etc.

(Class and Demonstration). Purposes of various tests as Dick, Schick, Wassermann, Von Pirquet, coagulation test, Widal, taking of blood for chemical examination, basal metabolism. Nurses' duties in preparation for them. Purpose of and assistance with lumbar puncture, paracentesis of cavities—abdomen, chest, etc.

(Laboratory). Setting up trays in demonstration room. Supervised practice in ward.

III. Nursing Measures Which Are Used in Giving of Drugs, Sera, Vaccines, etc.

(Class and Demonstration). The hypodermic injection, hypodermoclysis, intravenous infusion, as used in giving drugs, sera, vaccines, blood transfusion, grouping of blood, tests for anaphylaxis, etc. Purpose, principles and methods of administration or assistance.

(Laboratory). Setting up of trays and such practice as can be given in the demonstration room, to be followed as soon as possible by supervised practice in ward.

IV. Isolation Technic in Ward

(Class and Demonstration). Reasons for isolation unit. Method of setting up and caring for isolation unit in ward, care of gown, student's hands, bed linen, excreta, dishes, etc.

(Laboratory). Setting up an isolation unit in demonstration room and supervised practice in the ward.

V, VI, VII. Nursing Procedures in Which Heat, Cold and Water Are Used, Also Counterirritants

(Class and Demonstration). Applications of heat and cold in baths, packs, sponges. The electric pad and blanket, electric light bath. Purpose and methods of use. Counterirritants of all types including cupping, use of leeches, purpose. Methods of surgical arm and leg baths. Purpose and methods of use.

(Laboratory). Supervised practice of these procedures in the ward.

VIII, IX. Procedures Used in Care of Conditions of Alimentary Tract

(Class and Demonstration). Preparation for gastric lavage, gavage and nasal feeding. Test meals of various types. Purpose and methods of giving and assistance. Various types of enemata—nutritive, carminative, drip, medicinal, etc. Purpose and methods of giving rectal irrigations. High colonic flushing.

(Laboratory). Setting up trays and practice in demonstration room. Supervised practice in ward.

X. Preparation for and Care after Operation

(Class and Demonstration). Preparation for operations on various regions of the body as abdomen, chest, etc. Duties required of a nurse in taking a

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patient to operating room. How to receive a patient from the operating room. Care of and conditions to be noted during the first few hours after operation. Making of surgical bed.

(Laboratory). Practice in demonstration room and supervised practice in the ward.

XI. Surgical Dressings

(Class and Demonstration). Preparation and other materials to be sterilized. Assist dressing carriage. How to put up solutions and other materials to be sterilized. Assisting with dressings. Clearing up. Care of supplies, wastes, instruments, etc. Application of sterile compresses. Care of drainage bottles and tubing. Changing of P. R. N. dressings.

(Laboratory). Supervised practice in demonstration room and ward,

XII, XIII. Nursing Procedures Used in Care of Genito-urinary Conditions

(Class and Demonstration). Catheterization, bladder irrigation, instillation, preparation for cystoscopic examination, perineal dressings, etc. Purpose and method of giving. Various types of vaginal douches, including preparation for an intra-uterine douche.

(Laboratory). Setting up of trays in demonstration room. Supervised practice in ward.

XIV. Procedures Used in Nursing Care of Eye, Ear, Nose and Throat Conditions

(Class and Demonstration). Purpose and method of eye and ear irrigation, hot and cold eye compresses, assistance with paracentesis of ear. General nursing care following operations on the eye, ear, nose and throat.

(Laboratory). Setting up of trays and practice in demonstration room. Supervised practice in ward.

XV. Examination

Methods of Teaching

The method of teaching is much the same as that of the course in elementary nursing, but the student will be more dependent upon the ward for the necessary practice. Supervised practice should be given until the student is conversant with the various steps of the procedure and has enough skill and knowledge to perform the procedures with good results.

Illustrative Material

Same as under Elementary Nursing. More expensive and complicated equipment would be borrowed from the ward, or students would be taken to the ward for the demonstration. Whenever an exceptional treatment is to be given, a group of students should have the opportunity to observe.

Text and Reference Books

As in Elementary Nursing.

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THE CASE STUDY METHOD (APPLIED TO NURSING)

Time: 15 hours: lectures, discussions, case studies and conferences.

Teacher: Preferably a nurse who understands case work method and is able to apply its principles to nursing situations. Or the course may be divided and given by several specialists, as a physician, psychologist, social service or case worker and a dietitian or nutrition worker.

Objects of the Course

1. To give the student a scientific method of study or approach to a problem in whatever field she may be working.
2. To improve the actual nursing care of patients by helping students to understand them as individual personalities.
3. To help the students consciously to plan a program of nursing care adapted to the individual needs of the patients.
4. To develop an attitude of mind toward the patient which makes him the centre or unit of thought, placing procedures and routines in their proper relationship as means rather than ends in themselves.
5. To stimulate the student to meet her problems by critical and reflective thinking, relating facts or events given in other courses to specific conditions and situations found in the wards.
6. To help relate the art and science of nursing and provide a means of building up a specific body of knowledge or content in nursing.
7. To promote a better relationship between the various groups cooperating in the care of the patients.

Outline of Classes

I, II. General Introduction to the Course

What is case study? Definition. Illustrate by examples from several fields: law, medicine, social work and nursing. Methods common to its application in each field such as, gathering data, critical evaluation, interpretation of data, analysis and comparison of results. Case work as distinct from case study requires in addition the formulation of a plan, treatment, supervision and records.

III. The Application of this Method of Work to the Field of Nursing

Discussion of the value of this method in helping the student to understand thoroughly her patient in order that she may render the highest type of nursing service. The adaptation of general nursing measures to meet the special needs of the patient. The importance of a systematic plan for nursing care to be worked out on the basis of facts studied and treatment prescribed. Typical case studies presented enphasizing nursing care.

IV, V. Personality in Relation to Health

The consideration of personal habits of living including habits of personal hygiene such as eating, sleeping, bathing, rest, play, as fundamental to health. The consideration of the patient's temperament, his habits of thought, his emotional needs, his attitude toward himself and his personal and environ-

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mental problems, his outlook on life and ability to meet his handicaps and adapt himself to his present situation. The importance of considering the patient in all his relationships, physical, mental and social; that is, his physical assets and limitations, his intellectual capacities and emotional problems, as determined by his family experience and personal history. The part the nurse must take in effecting a general adjustment in the life of the patient, considering the related influences which combine to make up the whole program of care and noting the differences which may arise between his personal desires and his specific needs.

VI. Social Background in Relation to Health

The importance of considering racial and religious differences, traditions, customs and prejudices. Age, climate, housing, home environment, conditions of work, economic status and standards of living.

VII, VIII. Preventive and Educational Measures Follow Up or After Care

The importance of a preventive and educational program in relation to the present condition and treatment and to the future protection of the patient and family. The necessity of working in close cooperation with physicians, the social service department the outpatients' department, the Visiting Nurse Association and other agencies concerned with the health and social adjustment of the patient in his daily life. A discussion of the function of the nurse in this preventive health program in relation to other workers.

IX, X. Building Up a Case Study

Principles and methods of gathering data. Difference between clues, facts and impressions—personal attitude in making an approach. Difference in approach to the sick patient in bed. How to obtain data without disturbing patient during one's daily relationships and other contacts. Professional and ethical relation in the use of information obtained.

Medical history. Social history. Contact with members of family and friends. The importance of understanding how to evaluate data obtained and the selection of pertinent factors and their organization and sequence in a systematic record. Assignment of an individual case to each student for detailed study.

XI, XII. Form and Content of a Case Study

What a case study should contain: Preliminary statement or a statement of the problem. Source or by whom referred. Background. Diagnosis. Patient's attitude to his problem. Family attitude to the problem. Home situations. Family relationships and responsibilities. Work history and present occupation. Present problem and plan for nursing care, observation of medical treatment, progress and results. Attitude of patient to himself and to his treatment. Cooperative measures with other workers, progress and results. Doctors' interpretation of disability and progress. Post hospital problems and plans.

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XIII, XIV. Review and Comparison of Case Studies

A discussion and comparison of likenesses and differences in nursing care as shown by typical case studies made in the various services, medical, surgical, pediatric, obstetrical, mental, communicable disease, nutrition and outpatients' departments.

XV. Examination

(A conference on the completed case reports might be substituted if desired.)

Methods of Teaching

1. The conference method is advised for this course, the students taking an active part in all discussions.
2. It is assumed that as soon as the students have obtained a general idea of the method of making case studies they will use them for the study and care of their patients. This practice should be continued in the various services, as it adds greatly to the educational value of the practical work.
3. The active cooperation of head nurses and supervisors will be needed in the selection of suitable cases and their study. It is helpful to have the head nurses and supervisors share in class instruction as far as possible and to conduct individual conferences with the students regarding the studies. Social workers and others interested in the care of the patients can contribute much to the building of worthwhile studies.

Equipment and Illustrative Material

Little is needed except the human material to be studied. Examples of well worked out case records are helpful.

Text and Reference Books

Group I

Bardwell, Adventures of Old Age
Cabot, Social Work
Cannon, Social Work in Hospitals
De Schweinitz, The Art of Helping People out of Trouble
Ellwood, Sociology and Modern Social Problems
Ford, Social Problems and Social Policy
Healy and Bronner, Case Studies
Townsend, Social Work—A Family Builder

Group II

Addams, Twenty Years in Hull House
Breckinridge, New Homes for Old
Hughes, Mothers in Industry
Parsons, Introduction to Modern Social Problems
Richmond, Social Diagnosis
Richmond, What Is Social Case Work

See also references under Psychology, Pathology, Nursing and Clinical Subjects, etc.

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NURSING IN GENERAL MEDICAL DISEASES

(This outline covers the diseases usually found in the general medical wards of a hospital, including a number of communicable diseases.)

Time: 30 hours.

Teacher: Lectures by physicians. Classes and discussions by nurse instructor. Clinics may be given by either the physician or the nurse depending on whether the medical or the nursing aspect is to be emphasized.

Objects of the Course

1. To give the student a practical understanding of the causes, symptoms, prevention and treatment of the commoner medical diseases, so that she may intelligently care for her patients, and give skilled assistance to the physician.
2. To increase her ability to observe and report the symptoms of disease and the effects of treatment.

Outline of Lectures and Classes

I. Specific Infectious Diseases. Typhoid Fever

(Lecture). Etiology. Methods of transmission. Symptoms. Pathology. Widal Test. Complications. Sequellae. Prevention. Paratyphoid.

II. Nursing Care

(Class). Review of medical asepsis to be observed. Isolation. Disinfection. Gown technique. Care of the mouth and skin. Diet. Various forms of hydrotherapy and their effect. Turpentine stupes. Charting. Case reports.

III. Specific Infectious Diseases. Pneumonia. Influenza

(Lecture). Etiology. Symptoms. Pathology. Medical treatment. Complications.

IV. Nursing Care

(Class). Medical asepsis. Diet. Intake. Output. Elimination. Ways of conserving energy. Symptoms to be observed. Danger signs. Review of cold chest pack. Counter-irritation. Administration of oxygen. Preparation for thoracentesis. Assisting with administration of intravenous medication. Restraint of delirious patients. Care during crisis. Case reports.

V. Focal Infections

(Lecture). Tonsillitis—acute follicular, suppurative, chronic. Teeth. Arthritis—acute and chronic.

VI. Nursing Care

(Class). Special care of joint affections. Mechanical means of relieving pain. Prevention of deformities. Case reports.

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VII. Diseases of the Heart

(Lecture and Clinic). Congenital heart defects. Mechanism of heart diseases. Infections. Endocarditis and pericarditis. Lesions produced by them.

VIII. Nursing Care

(Class). Symptoms to be observed with discussion of causes, cyanosis, pulse characteristics, ascites, hydrothorax, edema. Importance of rest and comfortable position, means of attaining. Diet. Preparation of patient for electrocardiogram. Case reports.

IX. Diseases of Heart

(Lecture and Clinic). Myocarditis. Degenerative processes. Compensation and decompensation. Acute heart failures. Angina pectoris. Minor heart affections.

X. Nursing Care

(Class). In badly decompensated cases, mildly decompensated cases, care of patients with no breaks in compensation. Prevention of heart disease. Case reports.

XI. Diseases of Blood and Blood Vessels

(Lecture and Clinic). The anemias—primary and secondary. The leukemias. Disturbances of coagulation. Hemophilia. Purpura. Arteriosclerosis. Embolism, thrombosis. Aneurism.

XII. Nursing Care

(Class). Observation of patients. General nursing measures required in above conditions. Blood pressure. Methods of handling patient with femoral thrombosis. Case reports.

XIII. Diseases of Respiratory System

(Lecture). Coryza. Laryngitis. Pharyngitis. Edema of larynx. Bronchiectasis. Emphysema. Bronchitis, acute and chronic.

XIV. Nursing Care

(Class). Nursing care in above conditions. Review of inhalations. Treatment of acute attacks of asthma, hay fever. Case reports.

XV. Diseases of Esophagus and Stomach

(Lecture). Esophagus stricture. Gastritis, acute and chronic. Gastric dilatation, acute and chronic. Gastric ulcer. Neuroses of the stomach.

XVI. Nursing Care

(Class). Preparation of patient for X-ray examination. Test meals and their removal by complete and fractional method. Special dietary measures in gastric and intestinal diseases. Case reports.

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XVII. Diseases of the Intestine

(Lecture). The Diarrheas. Ulcers of the Intestine. Constipation. Colitis. Peritonitis. Rectal fissure. Hemorrhoids. Carcinoma.

XVIII. Nursing Care

(Class). Dietary treatment. Habit formation. Personal hygiene. Duodenal drainage. Oil enema. Case reports.

XIX. Diseases of the Liver, Ducts, Gall Bladder, Pancreas

(Lecture and Clinic). Jaundice. Cholangitis. Cholecystitis. Cholelithiasis. Abscess. Cirrhosis and carcinoma of liver. Pancreatic insufficiency. Hemorrhage. Pancreatitis.

XX. Nursing Care

(Class). Examination of stools for stones. Emergency treatment of gall bladder colic. Gall bladder drainage. Hot fomentations. Case reports.

XXI and XXIII. Diseases of Urinary System

(Lectures and Clinics). Malformation of kidneys. Hydronephrosis. Pyelitis. Nephrolithiasis. Tuberculosis. Nephritis, acute and chronic. Uremia. Cystitis. Carcinoma.

XXII and XXIV. Nursing Care

(Class). Special care of the nephritic patient. Diet, warmth, regulation of intake and output. Review of hot packs and colonic irrigation. Care of the skin. Special care of uremic patient, of patient in convulsion and coma. Functional tests. Case reports.

XXV. Diseases of Endocrine Glands

(Lecture and Clinic). The adrenals, Addison's disease. Pituitary and pineal. Parathyroid. Disturbances of thyroid, myxedema, cretinism. Goitres, hyperthyroidism, exophthalmic goitre.

XXVI. Nursing Care

(Class). Preparation of patient for basal metabolism test. Glandular therapy. Case reports.

XXVII. Diseases of Metabolism and Deficiency Diseases

(Lecture). Diabetes mellitus. Cause. Symptoms. Complications. Diabetes insipidus.

XXVIII. Nursing Care

(Class). Glucose tolerance tests. Special dietary treatment. Use of insulin in diabetes mellitus. Care of patient with insulin shock. Case reports.

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XXIX. Diseases of Metabolism and Deficiency Diseases

(Lecture). Gout. Rachitis. Beriberi. Scurvy. Pellagra. Xerophthalmia.

XXX. Examination

Methods of Teaching

1. The clinical method of teaching medical diseases is to be preferred wherever it is possible. Lectures and classes should be illustrated constantly by reference to patients in the wards and nurses quizzed on the cases from their own wards. Case reports on interesting cases may be read in class by pupils and discussed.

2. The anatomy and physiology of each system should be assigned for review before taking up the diseases of each system. This course should be correlated with previous work in bacteriology, hygiene, materia medica, dietetics, etc., as frequently as possible, and frequent quizzes should be given on the medical lectures.

3. In the short time allowed, it will not be possible for nurses to practice the nursing procedures in the classroom. However, each nurse should be given an opportunity as soon as possible to carry out each procedure on the ward.

4. Charting should be emphasized in connection with every lesson and typical charts studied in connection with the different diseases.

Equipment and Illustrative Material

Medical patients on the wards. Laboratory specimens showing diseased organs, fresh animal specimens, charts and diagrams. X-ray plates, lantern slides. Demonstration room equipment.

Text and Reference Books

Group I

Emerson, Essentials of Medicine
Harmer, Principles and Practice of Nursing
Maxwell and Pope, Practical Nursing
Rosenau, Preventive Medicine and Hygiene

Group II

Baruch, Principles and Practice of Hydrotherapy
Brunton, Lectures on the Action of Medicines
Hare, Practical Therapeutics
Hinsdale, Hydrotherapy
Hughes, Practice of Medicine
Osler, Principles and Practice of Medicine
Stevens, A Manual of the Practice of Medicine
Stevens, Practice of Medicine

See also reference books on Pathology, Materia Medica, Dietetics, etc.

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NURSING IN MEDICAL SPECIALTIES

(With emphasis on communicable and skin diseases)

Time: 30 hours.

Course: To consist of lectures and classes supplemented by clinics whenever possible.

Teacher: Lectures by physicians and classes by nursing instructor.

Objects of Course

1. To teach the principles underlying prevention and control of communicable diseases.
2. Through a study of causes and symptoms, a nurse may help in securing an early diagnosis of these cases.
3. To relate more closely the methods of asepsis to general nursing care.
4. To teach the method of handling communicable disease in the home and community.
5. To show the need of education of the public in preventive hygiene.

Outline of Lectures and Classes

Unit A—Acute Communicable Diseases

I. Introduction to Communicable Diseases

(Lecture). Classification, prevalence by age groups, susceptibility of individual, modes of transmission. History of communicable disease control and prevention. Public control demonstrated through work of boards of health, state, national, etc.

II. General Principles of Medical Asepsis

(Class). Practical applications in the hospital and community, isolation of patient, care of discharges, methods of disinfection and sterilization.

III. Common Colds and Sore Throat

(Lecture). Review general structure of the body with special attention to mucous membrane of respiratory and alimentary tract, protective function of skin, etc. Prevalence of colds and sore throats and their relation to other diseases. Importance of early recognition of symptoms and isolation of individuals, showing these in the prevention and control of communicable diseases.

IV. Diphtheria

(Lecture). History—relation to other diseases, etiology, source of infection, mode of transmission, incubation period, period of communicability, laboratory diagnosis, symptoms, prognosis, complications, sequellae, treatment, the diphtheria carrier, Shick test, immunization with toxin antitoxin.

V. Excursion

Excursion to a clinic or dispensary where immunization is being done.

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VI. Nursing Care of Diphtheria

(Class). Cultures, preparation for administration of antitoxin, intramuscular, intravenous, care of laryngeal diphtheria and nasal paralysis, preventive methods, quarantine regulations.

VII. Scarlet Fever

(Lecture). Etiology, source of infection, methods of transmission, incubation period, period of communicability, laboratory diagnosis, symptoms, prognosis, complications, sequellae, treatment. The Dick test, dose of convalescent serum.

VIII. Nursing Care of Scarlet Fever

(Class). Special emphasis on care of mouth, nose throats, ears—rest in bed, elimination, warmth, bathing, diet, nursing in complications, ear conditions, nephritis, arthritis, etc. Preventive methods, and isolation, sterilization and disinfection, Board of Health regulations.

IX. Measles and German Measles

(Lecture). Etiology, period of incubation and communicability, importance of early recognition of symptoms, differential diagnosis, complications, sequellae, treatment, use of convalescent serum. Nursing care with special emphasis on skin, eyes, mouth, danger from exposure, isolation, care of discharges, disinfection, quarantine.

X. Variola and Varicella

(Lecture). History, etiology, source of infection, mode of transmission, incubation period, period of communicability, differential diagnosis, complications, treatment, symptoms, prognosis, methods of control and prophylaxis, vaccination, quarantine regulations, nursing care, isolation, disinfection.

XI. Parotitis and Pertussis

(Lecture). History, etiology, source of infection, method of transmission, period of incubation, period of communicability, symptoms, prognosis, complications, sequellae, treatment, nursing care, special emphasis on complications of parotitis, and personal hygiene and diet of pertussis.

XII. Anterior Poliomyelitis, Cerebrospinal Meningitis, Encephalitis

(Lecture). History, etiology, source of infection, method of transmission, incubation period, period of communicability, laboratory diagnosis, symptoms, prognosis and treatment, isolation, infection.

XIII. Nursing Care of Above Diseases

(Class). Importance of rest and quiet, hygienic measures, special emphasis on position, support, massage, preparation for the giving of serums, lumbar puncture for diagnosis and treatment, isolation, disinfection.

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XIV. Tetanus, Anthrax, Rabies, Glanders

(Lecture). History, etiology, source of infection, mode of transmission, period of incubation, symptoms, prognosis, treatment, Pasteur treatment, antirabic serum, nursing care, isolation. Community responsibility for prevention. Board of Health regulations.

XV. Trachoma, Leprosy, Malaria, Hookworm, Other Tropical Diseases

(Lecture). History, etiology, source of infection, mode of transmission, communicability, symptoms, prognosis, treatments, nursing care. Special emphasis on personal hygiene and public sanitation. Methods of control and prevention.

XVI. Examination

Unit B—Tuberculosis, 5 Hours

I. Tuberculosis

(Lecture). History, etiology, sources of infection, mode of transmission, incubation, theories of invasion, resistance, immunity, predisposing factors, importance of early diagnosis

II. Tuberculosis

(Class). Nursing care of tuberculosis patient—observation of symptoms as an aid to diagnosis, records of temperature and weight, special attention to rest, diet, type of exercise, living conditions, mental attitude, occupational therapy. Care of discharges, importance of developing a hygienic conscience.

III, IV. Tuberculosis

(Lecture). Types—laboratory diagnosis, Von Pirquet reaction, symptoms, prognosis, complications, treatment. Provisions for control and prevention. Reporting of cases.

V. Tuberculosis

(Class). Nursing care, preparation for special treatments,—spontaneous and artificial pneumothorax, thoracentesis, care in hemorrhage, heliotherapy. Conditions which would determine whether home care or institutional, instruction of patient and family in prophylactic measures.

Unit C—Venereal Diseases, 6 Hours

I, II. Syphilis

(Lecture). History, etiology, source of infection, mode of transmission, clinical and laboratory, methods of diagnosis, prognosis.

Acquired syphilis—stages: primary, secondary, tertiary, characteristics of each. Importance of early diagnosis, methods of treatment in various stages, hereditary syphilis, evidences of in child and adult, infective and non-infective lesions.

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III. Syphilis

(Class). History, nursing care in acute cases, preparation for Wassermann, Salvarsan—intravenous, intraspinous. Mercury injections and inunctions, isolation, disinfection.

IV, V. Gonorrhea

(Lecture). History, etiology, source of infection, mode of transmission, symptoms of acute gonorrhea in male and female, including vaginitis in children and ophthalmia neonatorum. Chronic gonorrhea, prognosis, complications.

VI. Gonorrhea

(Class). Nursing care, isolation, care of discharges, linen, dishes, utensils, etc. Importance of personal hygiene, public health prophylactic measures.

Unit D—Skin Diseases, 2 Hours

I. Erysipelas, Impetigo Contagiosa, Pemphigus, etc.

(Lecture). Infectious and non-infectious skin diseases, etiology, mode of transmission, sites of infection, symptoms, characteristic eruption of each of above diseases, toxaemia, complications, treatments, nursing care, isolation and disinfection, prophylaxis, toilet articles, wash bowl, bath tubs, public bath houses, barber shops, etc.

II. Erythema, Urticaria, Psoriasis, Eczema, Acne

(Lecture). Causes, symptoms, differential diagnosis, emphasis on personal hygiene, bathing, choice of soaps, danger from use of antisudorifics, depilatories, hair dyes, etc.

Examination—1 Hour

Methods of Teaching

The clinical and case study method of teaching should be used whenever possible.

Lectures and classes should be supplemented by illustrations, references to particular cases, excursions to clinics, health centers, communicable disease hospitals, and board of health laboratories.

There should be at least one excursion to a dispensary or a clinic where these cases are admitted and one family visit to give a picture of home conditions.

Practical experience in communicable diseases should be given in the senior year. In any case it is preferably given after operating room service.

Illustrative Material

Charts and case records, colored plates, slides, preserved specimens, publicity literature, vaccines, serums, antitoxin, etc.

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Text and Reference Books

Group I

Broadhurst, Bacteria in Relation to Man
Chapin, The Sources and Modes of Infection
Rosenau, Preventive Medicine and Hygiene

Group II

Broadhurst, How We Resist Disease
Brown, Rules for Recovery from Pulmonary Tuberculosis
Crowell, Tuberculosis Dispensary Method and Procedure
Dock, Hygiene and Morality
Harvard Health Talks
Jacobs, The Tuberculosis Worker
Ker, The Treatment of Infectious Diseases
Krause, Environment and Resistance in Tuberculosis
Krause, Rest and Other Things
LaMotte, The Tuberculosis Nurse
McLaughlin, Communicable Diseases
Morrow, Social Diseases and Marriage
Newsholme, The Prevention of Tuberculosis
Otis, Pulmonary Tuberculosis
Pusey, Principles and Practice of Dermatology
Pusey, Syphilis as a Modern Problem
Sedgwick, Sanitary Science and Public Health
Solomon, Syphilis of the Innocent
Stelwagon and Gaskill, Diseases of the Skin
Trudeau, Autobiography
Vallery-Radot, Life of Pasteur
Vaughn, Epidemiology and Public Health
Vedder, Syphilis and Public Health
Walters, Domiciliary Treatment of Tuberculosis
Webb and Ryder, Overcoming Tuberculosis: An Almanac of Recovery
White, Care of the Skin

Pamphlets and Journals

Publications of the American Social Hygiene Association and Departments of Health—State and City.
Archives of Pediatrics
Journal of Bacteriology
Journal of Infectious Diseases
Journal of Outdoor Life

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NURSING IN GENERAL SURGICAL DISEASES

Time: 30 hours

Teacher: Lectures by surgeon, 16 one-hour periods; classes by nurse, clinics by surgeon or nurse, 13 one-hour periods; examination, 1 hour.

Objects of Course

1. To give the student a good general knowledge of the principal surgical diseases, their etiology, symptoms, preoperative, operative and postoperative treatment, so that she may care for surgical patients intelligently and skilfully, and be of the greatest possible assistance to the surgeon in promoting the patient's recovery after operation.
2. That she may be able to teach people with whom she comes in contact the necessary principles in the prevention of surgical diseases.

Outline of Lectures and Classes

I. Introduction

(Lecture). Brief history of surgery. Bacteriology and its relation to surgery reviewed. Antiseptic and aseptic surgery. General principles of modern surgery.

II. Wounds and Wound Infections

(Lecture). Wounds—accidental and operative, clean and infected. The healing process. Pathological conditions reviewed,—inflammation, suppuration, necrosis, gangrene, septicemia, pyemia, erysipelas, tetanus.

III. Preoperative Treatment of the Patient

(Lecture). Preparation for operation, general and local. Anesthesia,—types, methods of use.

IV. Postoperative Treatment of the Patient

(Lecture). General considerations. Pain,—cause, symptomatic treatment. Complications,—nausea, vomiting, hiccoughs, gastric dilation, tympanites, intestinal obstruction, embolism, thrombosis, hemophilia, acidosis, retention and suppression of urine, shock, hemorrhage, wound infection, dehydration, treatment of complications. Feeding of postoperative cases.

V. The Preoperative and Postoperative Nursing of the Patient

(Class). Accuracy in observation and reporting, thoroughness in technic. Nurse's influence on patient's attitude toward operation. Postoperative care,—position, thirst, restlessness, elimination, diet, drugs, dressings, observation of temperature, pulse and respiration. Prevention of complications. Convalescent care.

VI. Diseases of the Alimentary Tract

(Lecture). Malignancy of the lip, jaw, tongue. The esophagus,—diverticuli, stricture, carcinoma, foreign body. Stomach,—ulcer, carcinoma. Causes, importance of early diagnosis and treatment. Common operations.

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VII. Clinic on Diseases of the Stomach, and Esophagus if possible

VIII. Diseases of the Alimentary Tract (Continued)

(Lecture). Appendicitis, intussusception, peritonitis, perforation. Operations.

IX. Nursing Measures Used in above Conditions

(Class). Hygiene in mouth cases. Diet and excreta in gastric conditions. Tympanites. Case reports.

X. Diseases of the Alimentary Tract (Continued)

(Lecture). Hernia, intestinal obstruction, carcinoma, fistula, hemorrhoids. Operations.

XI. Clinic on Diseases of the Intestine

Care of colostomy wound.

XII. Diseases of the Gall Bladder, Pancreas, Liver and Spleen

(Lecture). Cholelithiasis, chronic cholecystitis. Pancreatitis, injury to pancreas. Liver,—abscess, cirrhosis, injury. Carcinoma. Operations. Spleen,—removal in anemia, injury.

XIII. Class on Nursing Measures in above Conditions

XIV. Diseases of the Respiratory System

(Lecture). The larynx,—malignancy, foreign body, tracheotomy. Empyema. Subdiaphragmatic abscess, lung abscess, foreign body. Operations. Artificial pneumothorax. Bronchoscopy.

XV. Nursing Measures Used in Empyema, Tracheotomy, etc.

(Class). Prevention of shock, pneumonia.

XVI. Diseases of the Breast

(Lecture). Importance of correct early diagnosis of breast tumor. Hypertrophy, acute mastitis and abscess, benign tumors, carcinoma, sarcoma. Operations.

XVII. Clinic on Diseases of the Breast and of Respiratory System

XVIII. Diseases of the Thyroid Gland

(Lecture). Goitre, cause, types. Prevention of goitre. Treatment. Operation.

XIX. Nursing Measures in Surgery of the Thyroid Gland

(Class). Basal metabolism. Toxic cases. Anoci-association.

XX. Diseases of the Lymphatic Glands

(Lecture). Lymphadenitis—acute and tuberculous. Lymphosarcoma. Hodgkin's Disease.

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XXI. Clinic on Diseases of Thyroid and Lymphatic Glands

XXII. Surgical Conditions and Surgery of Nervous System

(Lecture). Congenital malformations,—spina bifida, hydrocephalus. Trauma—fractured skull, brain injury, fractured spine, spinal cord injury, brain abscess.

XXIII. Nursing Measures in Neurosurgery

(Class). Pulse, respiration, blood pressure. Paralysis and sensory impairment. Delirium. Restraint. Spinal puncture. Case reports.

XXIV. Surgical Conditions and Surgery of Nervous System (Continued)

(Lecture). Brain tumors, spinal cord tumors, types, symptoms, localization, treatment. Tic douloureux.

XXV. Clinic on Neurosurgical Conditions

XXVI. Fractures, Dislocations, Sprains

(Lecture). Treatment of dislocations, sprains. Types of fractures. Reduction and immobilization of fractures. Types of bony union. Splints and appliances. Suspension and traction.

XXVII. Clinic on Fractures, Dislocations, Sprains

XXVIII. Plastic Surgery

(Lecture). Harelip. Cleft palate. Burns. Skin grafts. War surgery.

XXIX. Nursing Measures in Plastic Surgery and Burns

(Class). Feeding, mouth hygiene, restraint, etc.

XXX. Examination

METHODS OF TEACHING

As in teaching Nursing in General Medical Diseases.

EQUIPMENT AND ILLUSTRATIVE MATERIAL

Surgical patients on hospital wards. Laboratory specimens showing diseased organs. Skeleton. Anatomical charts. X-ray films, fluoroscopic clinics.

TEXT AND REFERENCE BOOKS

Group I

Colp and Keller, Textbook of Surgical Nursing
Harmer, Principles and Practice of Nursing
MacDonald, Essentials of Surgery
Parker and Breckenridge, Surgical and Gynecological Nursing
Woolf, Principles of Surgery for Nurses

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Group II

DaCosta, Modern Surgery—General and Operative
Rose and Carless, Manual of Surgery
Saleeby, Surgery and Society
White, Textbook of Surgical Handicraft

NURSING IN SURGICAL SPECIALTIES

(Covering orthopedics, gynecology, urology, and operating room technic)

Time: 30 hours.

Teacher: Lectures by surgeon, clinics by surgeon or nurse, lectures on anesthetics by anesthetist and classes by nurse.

Objects of the Course

Same as in General Surgical Nursing.

Outline of Lectures and Classes

Unit A—Orthopedic Nursing—10 Hours

I. Introduction

(Lecture). Definition of orthopedics. Brief history of orthopedic surgery showing the marked progress of the last few years. Need for trained orthopedic workers. Physiology and pathology of joints, normal motions and methods of examination for abnormalities. Classification of deformities—congenital and acquired.

II. Tuberculosis and Other Infections of Bones

(Lecture). General symptoms and principles of treatment with special reference to the joints most frequently affected,—hip and spine.

III. Nursing Care of Tuberculosis of Bones

(Class). Hygiene; prevention of tuberculosis. Special nursing care for specific joints. Making and application of moleskin, or adhesive extensions. Covering and padding of frames and shells.

IV. Rickets

(Lecture). Relation to orthopedics. Deformities due to rickets and their prevention in the acute stage. Treatment of scoliosis, bow legs and knock knees.

V. Clinic on Tuberculosis of the Bones and Rickets

VI. Anterior Poliomyelitis

(Lecture). Prevention of deformities in acute stage. Prevention and correction of deformities after acute stage. Physiotherapy—massage, baking, and muscle training. Corrective apparatus. Operations.

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VII. Nursing Care of Patients Wearing Apparatus or Plaster

(Class). Classification and purposes of apparatus—(1) to maintain position—(2) to prevent weight bearing—(3) to exert traction—(4) to immobilize. Care of patient in plaster. Application and care of apparatus—traction splints, Thomas splints, caliper splints and braces. Making of special appliances, as for head traction in torticollis cases. Prevention of pressure sores.

VIII. Congenital Deformities and Dislocations

(Lecture). Club feet, congenital dislocation of the hips, web fingers, absence of bones, exostoses, obstetrical and spastic paralysis.

IX. Arthritis

(Lecture). Type I, Rheumatoid—proliferative and ankylosing, occurring generally from infancy up to 40 years. Type II, Hypertrophic, degenerative and non-ankylosing, occurring generally after 40 years. Causes, symptoms, treatment. Bodily mechanics or posture—the study of weight bearing under the influence of gravity; front and long arches of feet; hips and knees; position of pelvis, back and shoulders.

X. Clinic on Orthopedic Deformities and Corrective Measures

Unit B—Gynecological Nursing—6 Hours

I. Introduction

(Lecture). Brief history of gynecology. Anatomy and physiology of reproductive organs. Biology of reproduction. Menstruation. Puberty and the menopause. Menstrual hygiene. Functional disturbances,—dysmenorrhoea, amenorrhea, etc. Operations.

II. Gynecological Conditions and Surgery

(Lecture). Subinvolution, ectopic pregnancy, cystocele, rectocele' hydrocele, polypi, trauma.

III. Gynecological Conditions and Surgery

(Lecture). Tumors of ovaries and uterus, benign and malignant,—cysts, fibroids, carcinoma. Use of radium.

IV. Clinic on Gynecological Conditions

V. Infections and Inflammations of the Reproductive Tract

(Lecture). Special reference to syphilis and gonorrhea. Causes of sterility.

VI. Nursing Care of Gynecological Conditions

(Class). Positions, protection of patient. Nursing care in different operations. Case reports. Nurse's relation to educational and ethical problems arising in gynecological nursing.

Unit C—Urological Nursing—5 Hours

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I. Diseases of the Kidney

(Lecture). Movable kidney, infection of the kidney, perinephritic abscess, hydronephrosis, renal calculus, renal tuberculosis, tumors. Operations.

II. Diseases of the Bladder

(Lecture). Cystitis, calculus, tumors. Cystoscopy. Operations.

III. Diseases of the Prostate

(Lecture). Prostatitis, hypertrophy, malignancy. Operations. Post-operative care. Connell suction.

IV. Class on Nursing Care in Urological Conditions

V. Clinic

Unit D—Operating Room Technic—8 Hours

I. Introduction

(Class). Operating room work,—requirements, possibilities, rewards. Technic. The operating suite,—its relation to the other departments. Ideal features—construction, light, heat, ventilation, fixtures, furnishings. Care and cleaning. Administration of operating room in its daily routine.

II, III. Operation and Care of Apparatus and Supplies

(Class and Demonstration). Autoclaves—construction, operation and care. Diack's tubes. Water sterilizers,—construction, operation and care. Solutions used,—their preparation and use.

Making and sterilization of dressings—linen supplies, sutures, needles. Sterilization of pitchers, utensils, basins, gloves. Care and use of cautery.

IV. Instruments

(Class and Demonstration). Use, care and cleaning, cost. General classes. Names and use of common instruments. Typewritten lists of instruments for common operations.

V. The Operation

(Class and Demonstration). Personnel of operating team; positions, and duties of each member. Technic. Setting up room and tables; "scrubbing up" routine; smock, glove, basin and pitcher technic. Preparation of patient on table, positions, support, preparation of field, draping technic; operative steps; duties of members of team; sponge count; emergency measures; removing patient to the ward; care of specimens; cleaning up and cleaning room; care of supplies.

VI. The Emergency Operating Room

(Class). Equipment of the emergency operating room. Emergency technic. Minimum requirements. Typical emergencies as a result of mine disasters, train wrecks, etc., and their handling, with and without standard equipment. Night operations. Arrangements of light and other special adjustments.

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VII, VIII. Anesthetics

(Lecture). History of anesthesia. Types of anesthetics, local, spinal and general, and their uses. Types of inhalers. The equipment of the anesthetic room. The anesthetic table and stimulant tray. Oxygen apparatus. Nurse's care of the patient before, during and after the anesthetic. Principles to be observed in the administration of the commoner anesthetics. The preliminary steps. Unfavorable symptoms. Accidents. After effects. Mental influences in relation to anesthesia.

IX. Examination on Units A, B, C, and D

METHODS OF TEACHING

Same as General Surgical Nursing.

ILLUSTRATIVE MATERIAL

Same as General Surgical Nursing.

TEXT AND REFERENCE BOOKS

Group I

Berry, Orthopedic Surgery for Nurses
Colp and Keller, Textbook of Surgical Nursing
Crossen, Diseases of Women
Falk, Operating Room Procedure for Nurses and Internes
Harmer, Principles and Practice of Nursing
Hirsh, Compend of Genito-urinary Diseases and Syphilis
Hirst, Manual of Gynecology
McDonald, Essentials of Surgery
MacFarlane, Reference Handbook of Gynecology for Nurses
Parker and Breckenridge, Surgical and Gynecological Nursing
Seifert, Gynecology for Nurses
Sever, Principles of Orthopedic Surgery for Nurses
Woolf, Principles of Surgery for Nurses

Group II

Da Costa, Modern Surgery, General and Operative
Fulkerson, Gynecologic Urology
Jones and Lovett, Orthopedic Surgery
Pybus, Surgical Diseases of Children
Rose and Carless, Manual of Surgery
Sever, Textbook of Orthopedic Surgery for Students of Medicine
Smith, The Operating Room
Steindler, Operative Orthopedics
White, Textbook of Surgical Handicraft

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PEDIATRIC NURSING

Time: 30 hours, divided as follows: 15 hours for lectures and clinics on medical aspects, 14 hours for nursing classes, quizzes, demonstrations, and excursions, and 1 hour for examination.

Teacher: Lectures and clinics to be given by a pediatrician; excursions, classes and demonstrations in nursing procedures adapted to child care, conducted by instructor or supervisor of pediatric department.

Objects of Course

1. To help nurses to understand something of the physical and mental development of normal children, and acquire a knowledge of child psychology and the essential principles of child hygiene and management, so that they can intelligently care for normal children and teach others to care for them properly.
2. To teach them the principles involved in the care of sick or well children, the nursing procedures peculiar to the care of children, the usual manifestations of disease and the means of prevention of disease.
3. To make the nurse realize the importance of maternal feeding, to make her skillful and exact in milk modifications and diet regulation of both sick and well children, and to emphasize the importance of proper feeding as a therapeutic measure in the diseases of infancy.
4. To give a sound basis for later work in connection with public health and child welfare.
5. To give nurses some appreciation of the causes and social aspects of infant mortality and thus secure their interest and cooperation in the conservation of child life.

Outline of Lectures and Classes

I. Physical Development of the Normal Child from Birth to Adolescence

(Lecture). Normal baby, appearance, weight, length, processes of growth, comparison with adults. Normal excretion. Dentition. Special senses.

II. Physical Care of the Normal Child

(Class). Review of care of new-born. Instruction in hygiene of infancy and childhood, bathing, clothing, bed, general management at various ages.

III. Psychology of Childhood

(Lecture, preferably by psychologist). Mental development. Characteristic sex differences. Management at different ages. Habit formation. Play.

IV. Excursion

Kindergarten, day nursery, or nursery school.

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V. Feeding the Normal Child

(Lecture). Maternal nursing. Importance of nutrition. Relation of food to growth. Caloric requirement. Advantages of breast feeding to mother and child, and contraindications. Composition of breast milk. Routine, supplementary and complementary feedings.

VI. Care of Nursing Mother and Premature Infants

(Class). Review of care of nursing mother: diet, exercise, care of nipples, position in nursing, expression of breast milk. Feeding and care of premature and feeble infants with special emphasis on clothing, protective beds, atmospheric conditions. Methods of feeding including Breck feeder, dropper, etc.

VII. Substitutes for Mothers' Milk

(Lecture). Meaning of certified and pasteurized milk. Laws regulating quality and sale. Care of milk in the home.

Artificial feeding of infants. Conditions under which necessary. Comparison of cow's milk with breast milk. Milk modifications. Proprietary foods.

VIII, IX. Computing Formulae and Technic

(Class). Drill in computing formulae. Percentage method. Caloric values. Intervals of feeding.

Methods of separating layers in quart bottle of milk. Putting up formulae. Improvised methods of pasteurization. Improvised ice box. Schedules of feeding at different ages, one to five years. Technic of feeding, including rate of feeding, temperature of food, holding of bottle, etc.

X. The Diet for Childhood

(Lecture by dietitian or nurse). Diet, first year. Foods other than milk. Fruit juices, cereals, prunes, beef juice.

Diet, one to five years. Strained vegetables, junkets, custards, etc. Preparation of food and arrangement of tray for convalescent child. Assisting child with meals. Psychological aspects of feeding.

XI. Observations and Signs of Disease

(Lecture and Clinic). Significance of position assumed, color, condition of skin (rashes, dehydration, etc.) temperature, pulse, respiration, state of nutrition. Indications of tonsils and adenoids, snuffles, pediculosis, seborrhea. Discharges. Inflamed and discharging eyes. Adjustment of child to hospital surroundings.

XII. Nursing Technic for Above Conditions

(Class). Isolation technic and nursing care. Holding baby for ear examination, irrigation of eye, ear, nose and throat, drops in eye, compresses

XIII. Disturbances of Nutrition and Metabolism in Infancy and Childhood

(Lecture). Malnutrition, athrepsia, eczema, diabetes, acidosis, rickets, scurvy, tetany.

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XIV. Nursing Measures

(Class). Observation of symptoms of diseases described in preceding lecture. Methods of restraint. Making of eczema masks. Metabolism bed. Administration of medicine to children.

XV. Diseases of Digestive Tract

(Lecture and Clinic). Causes of vomiting. Pyloric spasm. Pyloric stenosis. Acute and chronic gastric and intestinal indigestion. Dietary treatment.

XVI. Diseases of Digestive Tract

(Lecture and Clinic). Abnormal stools. Causes of constipation. Diarrhoea; mechanical, fermentative, infectious. Intestinal parasites. Dietary treatment.

XVII. Nursing Care of Patients with Gastro-intestinal Disorders

(Class). Lavage. Gavage. Colonic irrigations. Care of excoriated buttocks. Examination of stools.

XVIII. Diseases of Respiratory System

(Lecture). Coryza. Bronchitis. Pneumonia. Pleurisy. Empyema. Croup, true and false. Foreign bodies in trachea.

XIX, XX. Medication and Treatment in Respiratory Diseases

(Class). Croup tent. Poultices. Plasters. Aspiration. Mustard bath. Temperature sponge. Outdoor treatment. Heliotherapy. Administration of oxygen. Blow Bottle for empyema.

XXI. Diseases of Urological System

(Lecture). Nephritis. Pyelitis. Cystitis, etc. Enuresis.

XXII. Nursing Treatments for Above Conditions

(Class). Method of giving hot pack, hot tub bath, etc. Prevention of bed sores. Collection of specimens.

XXIII. Diseases of Circulatory System

(Lecture). Endocarditis. Pericarditis. Myocarditis. Anemia. Leukemia, etc.

XXIV. Preparation for Saline Infusion, etc.

(Class). Preparation for giving saline infusion. Transfusion. Lumbar puncture. Preparation and technic of all treatments involving insertion of needle. Daily cardiac régime.

XXV. Disturbances of Nervous System

(Lecture). The neurotic child. Pernicious habits. Chorea. Meningitis. Tics. Epilepsy. Hydrocephalus. Cretinism. Idiocy. Imbecility. Morons, etc.

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XXVI. Management of Nervous Child

(Class). Application of child psychology (see lessons 3 and 4) to nursing care. Nervous disturbances. Treatments. Continuous bath. Cold and warm packs. Importance of all hygienic measures. Methods of restraint and caution used.

XXVII. Surgical Conditions

(Lecture and Clinic). Burns. Cleft palate. Hare lip. Spina bifida. Esophageal stricture. Pyloric stenosis. Tonsils and adenoids.

XXVIII. Surgical Conditions

(Lecture and Clinic). Intussusception. Hernia—umbilical and inguinal. Imperforate anus. Phimosis. Extrophy of bladder. Hypospadias. Epispadias, etc.

XXIX. General Principles of Nursing Care in Surgical Diseases

(Class). Supervision. Restraint. Cleanliness. Warmth. Feeding. Prevention of dehydration. Prevention of infection. Electric light treatment for burns. Wool trusses for hernia. Strapping for umbilical hernia.

XXX. Examination

Note: The division of the course into class or lecture periods is not arbitrary. It must depend upon the lecturers, teachers, clinical material, and text books available as to which method of instruction shall be used for the presentation of each subject in the outline.

Wherever possible, lectures should be combined with or followed by clinics.

Methods of Teaching

1. Lectures and clinics. A part of each nursing class should be spent on a quiz covering the previous lecture.
2. Demonstrations in wards, recitations and classrooms.
3. There should be close correlation with courses in general medicine and surgery, dietetics, orthopedics, etc.
4. Practical experience with individual instruction in the milk laboratory.
5. Excursions to children's clinics, food or milk laboratories, playgrounds, kindergartens, etc.
6. Case studies of typical and of unusual cases should be assigned to students for special reports. Special topics may also be given for individual study and for written papers.

Equipment and Illustrative Material

Charts, models, pictures, utensils and materials for infant feeding, food charts, pamphlets, Chase baby doll, etc.

Real children should be used for demonstration as well as practice whenever possible.

Exhibits: Examples—wardrobe for well baby, bathing equipment for home use, model meals for normal child of various ages, etc.

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Text and Reference Books

Group I

Cutler, Pediatric Nursing
Hess, Feeding and the Nutritional Disorders in Infancy and Childhood
Hess, Scurvy, Past and Present
Hill, Infant Feeding
Holt and Howland, Diseases of Infancy and Childhood
Lucas, Children's Diseases for Nurses
McCombs, Diseases of Children for Nurses
Morse and Talbot, Diseases of Nutrition and Infant Feeding
Read, Mothercraft Manual
Smith and Greene, The Baby's First Two Years

Group II

Children's Foundation, The Child—His Nature and His Needs
Emerson, Nutrition and Growth in Children
Griffith, Care of the Baby
Griffith, Diseases of Infants and Children
Holt, Care and Feeding of Children
Kerley, Practice of Pediatrics
Kerley, Short Talks with Young Mothers
Morse, Care and Feeding of Children
Ramsey, Care and Feeding of Infants and Children
Rose, Feeding the Family
Sellew, Pediatric Nursing Including the Care of the Well Infant and Child

Journals and Pamphlets

American Journal of Diseases of Children
Pamphlets from Children's Bureau, Washington
Pamphlets from Posture League

OBSTETRICAL NURSING

Time: 30 hours.

Teacher: Lectures by obstetrician, 10 hours; classes by nurse (head nurse of obstetrical department, assisted by public health nurse, if desired), 20 hours.

Objects of the Course

1. To help the student develop an appreciation of the urgency and value to the individual family and to the race, of adequate medical and nursing care of maternity patients from the beginning of pregnancy through the puerperium.
2. To help the student acquire the knowledge and skill which will enable her to recognize her opportunities and fully meet her responsibilities in giving this nursing care and in teaching the community its need and value.
3. To inspire in the student such an attitude toward maternity that she will have a sympathetic understanding of any mental or physical stress which her patient may experience.

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Outline of Lectures and Classes

I. History and Scope of Obstetrics. Basic Factors in Anatomy

(Lecture). Brief history of obstetrics. Place of obstetrics in medicine. Review of significant points in anatomy of female pelvis and generative organs. Pelvimetry—varieties of pelves and their significance in delivery.

II. Introduction—Essentials for Obstetrical Nursing

(Class). Purpose of care of maternity patient. Results of good care. Need for and value of accurate records. Present national situation: probable reasons for and significance of. Essential preparation for maternity nursing: (a) understanding of patient as human being, not "a case"; (b) knowledge of general nursing; (c) knowledge of obstetrics as intelligent background for understanding *reasons* for care and treatment. Essential qualifications of maternity nurse: (a) cleanliness, (b) watchfulness, (c) adaptability, (d) sympathy. Reasons for each. Interpretation of maternity patient to student nurse. Quiz, using pelvis, pelvimeters, manikin of baby with placenta attached and anatomical charts.

III. Embryology

(Lecture). Development of ovum, maturation, fertilization and implantation, embryo, fetus, placenta, cord and membranes. Growth and physiology of fetus.

IV. Reproduction

(Class). Reproduction in general, beginning with one-celled animals and covering cell differentiation, unisexual and bisexual animals, fish, chick, cat. In man, instinct and the element of conscious choice. Relation of sex to pregnancy. Other aspects of sex.

V. Physiology and Hygiene of Normal Pregnancy, Signs and Symptoms

(Lecture). Duration of pregnancy; physiological changes in maternal organism and their relation to hygiene of pregnancy, including reproductive organs, breasts, cardiovalvular system, respiratory tract, digestive tract, ductless glands, skeleton, nervous system, general metabolism of pregnancy.

VI, VII. Supervision and Care of Patient during Pregnancy

(Class). Why necessary. What it includes and why. Early examination of patient and study of environment. Correction of defects. Continuous observation to detect earliest symptoms of complications. Instruction in personal hygiene applied to each expectant mother in her own home and family, as well as preparation for labor and preparation for care of baby.

VIII. Prenatal Nursing

(Class). What it comprises and how it is given in private nursing; public health nursing and institutional clinics. Adequate prenatal care includes application of four basic principles already mentioned, no matter where patient lives, her circumstances, or who is attending her. Division of labor between doctor and nurse differs with individuals and circumstances.

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IX. Complications and Accidents of Pregnancy, Exclusive of Toxaemia

(Lecture). Causes. Symptoms. Treatment. Premature terminations. Antepartum haemorrhage. Placenta praevia. Premature separation. Syphilis. Heart lesions. Pulmonary tuberculosis. Thyroidism. Pyelitis. Gonorrhea.

X. Nursing in the Complications of Pregnancy

(Class). Preventive nursing measures. "Danger Signals." Nursing care.

XI. Toxaemias of Pregnancy

(Lecture). Theory as to causes. Symptoms. Prevention. Treatment.

XII. Toxaemias of Pregnancy

(Class). Preventive nursing measures. "Danger Signals." Watchfulness. Nursing care.

XIII. Review

(Class).

XIV. Normal Labor

(Lecture). Presentations and positions of fetus. Mechanism of labor. Demonstrate palpation on waiting patient, if possible.

XV. Preparation for Delivery

(Class). Preparation from standpoint of needs of: (a) patient—drapes, comfort, cleanliness; (b) doctor—hands, instruments, dressings, general assistance; (c) baby—warmth, resuscitation, cord dressings, bath, clothing; (d) anaesthetist—drugs, mask, no gas or lamp near.

Demonstrate in delivery room, emphasizing fundamentals and illustrating how they may be improvised.

XVI. Nurses' Duties during Labor

(Class). Quiz on mechanism of labor, using pelvis and manikin. Nurse's duties in first stage, second stage, third stage. Immediate after care, purpose. Fundus, perineum, general condition, comfort.

XVII. Obstetrical Operations and Complicated Labors

(Lecture). Conditions indicating operative delivery. Reasons for choice. Procedure in each case.

XVIII. Nurse's Duties in Operative Deliveries

(Class). Presented from standpoint of adaptation, of preparation for and duties during normal labor.

XIX. Normal Puerperium

(Lecture). Physiology. Involution. After-pains. Lochia. Loss of weight. Menstruation. Lactation. Prevention of engorgement. Abdominal wall. Digestive Tract. Temperature, pulse, skin, urine.

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XX. Nursing in Normal Puerperium

(Class). Early nursing care of the patient. How different from care of postoperative surgical patient. Care of perineum. Binders and exercise. Establishment of breast feeding. Care of breasts—lactation—prevention of engorgement—stripping. Diet: its relation to mother's welfare and baby's health. Charting.

XXI. Complications of the Puerperium

(Lecture). Postpartum hemorrhage. Puerperal infection. Phlebitis. Varicosities. Mastitis. Causes. Prevention. Symptoms. Treatment. The problem of accompanying diseases and mania.

XXII, XXIII. Nursing in Complications of Puerperium

(Class). Nursing in hemorrhage, infection, phlebitis, mastitis. Watchfulness for early symptoms of these or other diseases or mania.

XXIV. The Normal Baby

(Lecture). Growth, development and general behavior.

XXV. The Care of the Normal Baby

(Class). Early care: eyes; cord; protection from chilling; examination for abnormalities; cleansing; bathing; sleep; feeding; clothes; bowels; regularity. Demonstrate in nursery if possible. Charting for the new born.

XXVI. The New Baby in the Family

(Class). Mother's needs. Peace of mind. Regularity of habits. Rest. Exercise. Diet. Elimination. Diversion and amusement. Father's part in securing these. Baby's needs. A happy mother. Regular schedule. Rest and exercise. Training for good habits. Important to meet mother's and baby's needs without disrupting the home.

XXVII. Abnormalities and Disorders of the New Born

(Lecture). Operative injuries and abnormalities of new born, disturbances of respiratory, digestive and eliminatory organs, infections of eyes, umbilicus etc. Skin eruptions, convulsions, haemorrhages and operative procedures.

XXVIII. Nursing Care of the Premature Baby

(Class). Care and feeding largely a nursing problem. Oiling and protecting body. Preserving even temperature and moist atmosphere. Artificial feeding. Treatments. Preparation for operative procedures.

XXIX. Care of the Obstetrical Patient in the Home

(Class and Demonstration). The advantages and disadvantages of home as compared with hospital delivery and after care. Resources to be found in poorer homes and in those of moderate means. Minimum essentials in supplies and equipment. Methods of adapting home materials and equipment

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for delivery and postpartum care. Demonstration of a room in a private house prepared for delivery, with review of main steps in procedure adapted to home conditions.

XXX. Examination

METHODS OF TEACHING

The nature of this subject makes it practically impossible to demonstrate upon patients in the classroom, and only in a few instances is it practicable to take students into the wards. It is therefore peculiarly necessary to correlate the students' experiences with their classroom instruction. This can best be done when the head nurse in the maternity ward or department does both classroom and clinical teaching.

The lectures and classes should be illustrated by frequent reference to patients in the hospital. Case reports from the students' ward and clinic experiences should be read and discussed.

When possible, a nurse who has done private duty nursing and one who has done public health nursing, will be helpful in describing to the students the many ways of adapting hospital teaching to home situations, as part of classes X, XVII, XVIII, XXV and in class XXIX.

The training and instruction will be greatly enriched by a month in the outdoor maternity service or with a maternity center association.

It is understood that the course in obstetrical nursing is preceded by courses in anatomy, physiology, dietetics, bacteriology, materia medica, general medical and surgical nursing, including operating room training.

EQUIPMENT AND ILLUSTRATIVE MATERIAL

Skeleton, separate pelvis, manikin of baby and placenta. Lantern slides, charts. Laboratory specimens of fetus at various stages of development. Model layette, toilet tray for mother and baby, bed for delivery, improvised baby's bed and when possible a complete outfit of suitable clothes for mother.

TEXT AND REFERENCE BOOKS

Group I

Arey, Developmental Anatomy
Bigelow, Applied Biology
Cooke, A Nurse's Handbook of Obstetrics
De Lee, Obstetrics for Nurses
Edgar, Practice of Obstetrics (For Students and Practitioners of Medicine)
Plass, Obstetrics for Nurses
Van Blarcom, Obstetrical Nursing

Group II

Brown, The Normal Child
Gruenberg, Parents and Sex Education
McCollum, The Newer Knowledge of Nutrition
March, Towards Racial Health

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Slemons, The Prospective Mother
Van Blarcom, Getting Ready To Be a Mother
Williams, Obstetrics (Textbook for Medical Students)

PAMPHLETS

Maternity Center Association; Routines and Briefs for Mothers' Club Talks.

Department of Health, Ottawa, Canada, MacMurchy, Canadian Mother's Book.

Federal Children's Bureau, Pamphlets on Maternity and Infant Welfare.

PSYCHIATRIC NURSING

Time: 30 hours divided into lectures and clinics by psychiatrist, classes and demonstrations by nurse instructor, lectures or classes by special workers (mental hygiene, psychiatric social workers, occupational and hydrotherapy workers).

Teacher: Should have special preparation in psychiatric work.

OBJECTS OF THE COURSE

1. To teach the student nurse that changes occur in the mental condition of physically ill patients and to explain the relation existing between physical and mental life and physical and mental illness.

2. To teach the student nurse to look upon behavior as a symptom and to observe and differentiate abnormal behavior in the same way that she is taught to observe abnormal physical signs.

3. To teach the underlying physical, functional, and social causes of mental disease with special emphasis on their prevention; to familiarize the student with the modern methods of nursing and medical, social and educational treatment available both in the hospital and in the community.

4. To teach the importance of recognizing that the foundation for the majority of cases of nervous and mental disability is laid during childhood and is not necessarily inherited; to illustrate the relationship between certain uncorrected, undesirable habits, tendencies and personalities during childhood and various forms of nervous and mental disorders in adult life.

5. To give the student nurse an elementary but authentic knowledge of the mental mechanisms which are now known to motivate conduct; to direct attention towards a concept of mind expressed in individual behavior and adaptation to life experience, with a view to increasing the student's own mental stability and to develop a keener interest in and a more sympathetic understanding of human nature.

OUTLINE OF THE COURSE

I–II. Introduction

(Lectures). A general discussion of the present day psychiatric conception of mental disease emphasizing the impossibility of separating the human individual into two parts, a body and a mind, and the importance of studying

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the patient as a whole human being. A discussion of the differences between a purely institutional and a social psychiatry. The relation of heredity and environment to human behavior and mental disorders.

III–IV. The Mental Hygiene Movement

(Lectures). Its origin, growth and development. The development and importance of psychiatric dispensaries and child guidance clinics. The development and relation of pyschopathic hospitals to general hospitals. The need for community education. Scope and value of psychiatric medical court and probation work. Qualifications and preparation of workers; opportunities in these fields for nurses.

V. The History and Development of Mental Nursing

(Class) Contrast former with present day nursing care. The nurse's attitude to patients and mental illness. Discuss problems and policies in answering questions. The personal relation of the nurse to her patient under varied circumstances. Illustrate by problems and case studies.

VI. Anatomy and Physiology of Nervous System

(Lecture). Biological introduction including the endocrine system; discuss different points of view as to function.

VII. Physiology of Nervous System with Disturbed Function

(Class and Quiz). Discuss and evolve a content of nursing care with particular applications to specific cases.

VIII–IX. Mental States Associated with Organic Disorders (Loss of Tissue)

(Lecture and Clinic). General paresis. Traumatic disorders. Senile disorders. Arteriosclerotic psychosis, etc. Etiology. Laboratory aids to diagnoses; prevention; treatment; prognoses.

X. Mental States Associated with Other Organic Disorders

(Lecture). Brain tumor. Brain syphilis. Brain abscess. Multiple sclerosis. Huntington's chorea, convulsions, paralysis, etc. Causes, treatment.

XI. The Application of Nursing Procedures to the Care of Patients with Organic Disorders (with and without Deterioration)

(Class). Observation of symptoms, physical and mental. Attention to personal hygiene. Prevention of bed sores. Nutrition. Tube feeding. Value of physiotherapy and mechanotherapy, indications and contraindications, protective and preventive measures.

XII. Defective States. Constitutional Inferiority. Idiocy and Feeblemindedness (Arrested Development)

(Lecture and Clinic). Causes (congenital or injury at birth). Grades and types. Methods of diagnoses: mental measurements and testing. Care: home

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protection; ungraded schools; institutions and farm or industrial colonies. Legal protective measures and state responsibilities.

XIII. Mental States Associated with Chemical or Toxic Injury

(Lecture). Alcoholic and drug psychoses: delirium tremens, hallucinosis, habitual alcoholism, periodic alcoholism, delusional states, Korsakoff's psychosis, drug addiction, types of drugs, conditions resulting from drug poisoning and food poisoning. Protective laws, government control, social legislation and home adjustments. Treatment.

XIV. Hydrotherapy in Psychiatric Nursing

(Class and Demonstration). Packs, tubs, their special value in toxic psychoses. Use, value and methods of administering drugs. Nursing procedures and protective measures.

XV. Toxic Infective Exhaustive States

(Lecture and Clinic). Associated with physical conditions, fevers, infections, diabetes, anaemia, pregnancy, etc., and strain, fatigue, starvation, exposure. Manifestations, treatment.

XVI. Nursing Care in Toxic Infective Exhaustive States

(Class). Methods of recording observations of actual happenings. Terms used in describing states and behavior; their meaning, use and significance. Demonstrations of nursing records. Observation and interpretation of mental states in physical disorders.

XVII–XIX. The Adaptive Facts of Childhood

(Lectures). Heredity and pre-natal influences. Infancy; pre-school period; school period; adolescence. Influences of sex education, neurotic manifestations in children, convulsions. Environmental influences. Mental development. The rôle of the nurse in making early observations.

XX. Affective Disorders

(Lecture and Clinic). Manic depressive disorders, simple depressions, depressions and elations with delusional ideas. Types of cases found in general hospitals. Etiology, symptomatology, treatment.

XXI. Nursing in Depressive and Excitement States

(Class and Demonstration). Nursing care of depressed, resistive, destructive and excited patients. Precautionary measures against injury to patients and others. The equipment of rooms for excited patients. Personal hygiene, hydrotherapy and physiotherapy in nursing care of mood disorders. Contrast opposite types of care with corresponding sequences.

XXII. Dementia praecox or Schizophrenia

(Lecture and Clinic). Modern conception. Types and treatment.

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XXIII. Nursing Care of Schizophrenic Patients

(Class). The observation of habits in children. Individual child training, differentiation in educational methods, environmental factors and association, value of early advice and medical care. The nurse as a factor in preventive work.

XXIV. Major Psychoneurosis

(Lecture and Clinic). Neurasthenia, psychasthenia, hysteria and anxiety states. Types of cases found in general hospital. Etiology, symptomatology, treatment and preventive measures. Illustrate by case studies or clinics.

XXV. Psychotherapeutics

(Lecture). Including suggestion and psychoanalysis as methods of treatment with emphasis on their specific value and how, where and by whom they should be used.

XXVI. Occupational and Diversional Therapy

(Lecture or Class). History, value and uses, forms of recreation, types of work and their selection for particular cases. Demonstration of work illustrating the progress of patients.

XXVII. Mental Mechanisms and How They Motivate Conduct

(Lecture). Mental conflicts, inferiority feelings, defense mechanisms, influence of other personalities, adjustment. Illustrate by case histories and the working out of problems.

XXVIII. Social and Legal Aspects of Mental Disease

(Lecture by Social Worker). Economic and social conditions conducive to mental diseases: poverty, overwork, social vices, drugs and alcohol. Mental disorders and defects in relation to family, occupation, education, truancy, prostitution and crime. Cost to community for the mentally ill and defective. Legal procedures for commitment. Social measures for prevention and control.

XXIX. Case Records and Case Histories

(Lecture or Class). Scheme of case record. Methods of obtaining and recording data. Methods of observing and reporting mental states. Value of case records and case histories in nursing. Illustrate by case records and histories.

XXX. Examination

Methods of Teaching

1. The course can best be given in a pyschopathic hospital or clinic where direct correlation can be made between theory and the care of patients. As in teaching other medical subjects the clinical method should be used wherever possible.

2. The order in which the course is given is less important than the oppor-

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tunity to see types of cases at varying stages of illness or recovery and every case available for observation should be used to illustrate the variations and types of behavior found desirable to study.

3. Where it is not possible to make an affiliation with a state or mental hospital for clinical experience, excursions or visits should be planned to those institutions in the vicinity for the care or education of patients who present behavior problems or who are suffering from mental disorders.

4. Every general hospital offers a variety of experience in personality studies and all patients have mental reactions differing in degree, from the accepted normal to wide ranges of deviation from that norm. If each patient is studied as a whole and the personality of the individual is considered rather than the specific disease apart from the individual, valuable material for teaching mental nursing will be found in the general hospital. In addition to the average case, specific mental conditions are usually found in varying numbers in any hospital and include the deleria associated with lung, kidney and cardiac infections; the toxaemias of pregnancy, drug and alcoholism; disturbances through organic brain lesions or injuries; the minor psychoses and so-called border line cases; neurological conditions of varying types, medical and surgical; and senile deterioration.

5. The children's wards and the out-patient's departments provide fertile fields for observation and experience and should be used to their fullest resources.

6. The case study method of teaching supplemented by clinics and demonstrations should be developed to a high degree in teaching mental nursing.

7. The complete care of a limited number of patients is a desirable method of assignment and gives the student an opportunity to study as a whole and to note individual differences in reactions and behavior.

8. Emphasis should be placed on the various factors in the life of the patient which enter into his individuality and make up his total personality.

Text and Reference Books

(In addition to those mentioned under Psychology)

Group I

Bailey, Nursing Mental Diseases
Beers, A Mind that Found Itself
Bigelow, Sex Education
Burr, Practical Psychology and Psychiatry
Campbell, Present Day Conception of Mental Disorders
Dewey, Human Nature and Conduct
Dunton, Occupation Therapy, A Manual for Nurses
Hart, The Psychology of Insanity
Healy, Mental Conflicts and Misconduct
MacDonald, Mental Hygiene and the Public Health Nurse
May, Mental Diseases, a Public Health Problem
Paton, Signs of Sanity and the Principles of Mental Hygiene
Pratt, Your Mind and You
Southard and Jarrett, The Kingdom of Evils

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Strecker and Ebaugh, Practical Clinical Psychiatry for Students and Practioners
White, Outlines of Psychiatry
White, The Principles of Mental Hygiene
White, The Mental Hygiene of Childhood

Group II

Cabot, Medical Social Service
Franz, Nervous and Mental Reëducation
Frazer, The Golden Bough
Freud, Introduction to Psychoanalysis
Gesell, Pre-school Child from the Standpoint of Public Hygiene and Education
Hadfield, Psychology and Morals
Hall, Life and Confessions of a Psychologist
Judge Baker Foundation, Case Studies
McDougall, Introduction to Social Psychology
McDougall, Psychology, the Study of Behavior
Myerson, The Foundations of Personality
Patri, Child Training
Patri, School and Home
Robinson, The Mind in the Making
Smith and Guthrie, General Psychology in Terms of Behavior
Tansley, The New Psychology and Its Relation to Life
Trotter, Instincts of the Herd in Peace and War
Watson, Psychology from the Standpoint of a Behaviorist
Wells, Pleasure and Behavior
Wile, Challenge of Childhood
Williams, Social Aspects of Mental Hygiene

JOURNALS AND PAMPHLETS

American Journal of Psychiatry
Archives of Neurology and Psychiatry
Mental Hygiene
Pamphlets, National Committee for Mental Hygiene
Pamphlets, United States Department of Labor, Childrens Bureau

NURSING IN DISEASES OF THE EYE, EAR, NOSE AND THROAT

Time: 15 hours.

Teacher: Medical lectures and clinics given by specialists, 10 hours; nursing classes and demonstrations given by nurse specially qualified in eye, ear, nose and throat work, 4 hours; examination, 1 hour.

OBJECTS OF COURSE

1. To give nurses an understanding of the care and treatment of the eye, ear, nose and throat in normal and abnormal conditions.
2. To enable them to efficiently care for patients with diseases of these organs.

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3. To arouse an interest in this branch of nursing which will lead nurses into this field equipped with a basis for further specialization, and for preventive and educational work.

Outline of Lectures and Classes

I. The Eye

(Lecture). Review of the anatomy and physiology of the eye. Essential factors of vision. Accommodation. Color vision. Factors essential to binocular vision. Squint. Errors of refraction. Eye strain—prevention and effects.

II, III. Diseases of the Eye

(Lecture and Clinic). Causes, effects, symptoms and treatment. External diseases. Intraocular diseases. Usual operative procedures in these conditions.

IV. Nursing Care in Diseases of the Eye

(Class). Quiz on lectures. Assisting with examinations of the eye. Solutions used in treatment—preparation, effects, idiosyncracies. Demonstrations of hot and cold eye applications, irrigation, technic for installation of solutions, the preparations for dressings, bandaging. Use of dark room and dark glasses. Preparation of patient for operation and after care. Nurse's duties in cases of injuries or foreign bodies. Precautions in care of patient suffering from communicable disease.

V. Oral Cavity

(Lecture and Clinic). Anatomy and orthodontia. Tooth germ in embryo. Stages of development of teeth. Period of development of deciduous teeth and coincident development of alveolar process. Complete deciduous dentition. Interval between complete deciduous and appearance of first permanent teeth. Development of jaw, etc. Too early extraction. Too late extraction. Importance of first molars. Malocclusion—inherited tendencies, habits, underfunctioning, overfunctioning. Orthodontia.

VI. Diseases of the Teeth and Gums

(Lecture). Bacteriological and pathological conditions of oral cavity. Causes, effects, symptoms and treatment of common diseases. Gingivitis, pyorrhea, abscesses, etc. Oral sepsis and diseased teeth in relation to systemic diseases. Treatment and operative procedures. Tongue ulcerations, abscesses. Malformations—hare lip, cleft palate. Treatment.

VII. Diseases of the Tonsils, Nasopharynx, Larynx

(Lecture). Tonsils—anatomy, character of tissue, function, relationship Tonsillitis, Vincent's angina, diphtheria, syphilis, tuberculosis, etc. (Very briefly).

Nasopharynx anatomy relations, important structures. Pharyngitis, adenoiditis.

Larynx anatomy relation. Laryngitis, syphilis, tuberculosis, foreign bodies, cancer, paralysis. Operative procedures.

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VIII. Oral Hygiene

(Class). Quiz on lectures. History of oral hygiene. Oral hygiene in United States. Methods of hygienic procedure in daily care of mouth. Assisting with examination of mouth, pharynx, and larynx. Applying medication. Gargles, irrigations, inhallations, etc., reviewed. Preparation of patient for operation and after care in case of tonsillectomy, laryngectomy, tracheotomy, etc. Control of hemorrhage.

IX. Diseases of the Nose and Accessory Sinuses

(Lecture). Review of anatomy and physiology. Diseases of the nasal tract, including acute and chronic rhinitis and deflections of the septum—their causes, symptoms and effect on general health. Methods of examination and treatment, operative and non-operative. Infections of the sinuses. Mechanism of infections—their causes, symptoms and effect on health. Methods of examination and treatment.

X. Nursing Care in Diseases of the Nose and Accessory Sinuses

(Class). Quiz on lecture. Assisting with examination of nose and sinuses. Demonstration of nasal irrigation and nasal spray. Control of nasal hemorrhages. Care of patient after nasal operations. The preparation of patient and apparatus for opening and irrigating the sinuses.

XI, XII. Diseases of the Ear

(Lecture). Review of anatomy and physiology of the ear. Examination of ear. Deafness—its cause and prevention. Common tests of hearing. Diseases of the auricle and external ear. Diseases of the middle ear. Complications, causes, symptoms and treatment, operative and non-operative.

XIII. Nursing Care in Diseases of the Ear

(Class). Quiz on lecture. Advice nurses may give concerning foreign bodies, chronic discharging ears, etc. Demonstration of hot and cold applications. The ear irrigation. Preparation for myringotomy and incision of furuncle. Preparation of patient for mastoid operation and postoperative care. Dressings, instruments and supplies used. Symptoms and signs of complications. Nursing care of patients with cerebral abscess, meningitis, thrombosis, etc.

XIV. The Observation of Early Symptoms and Marked Abnormalities

(Clinic). How to recognize early signs of eye, ear, nose and throat trouble. Simple routine tests of vision and hearing such as those given by school nurses. Examination of the mouth for adenoids, enlarged tonsils and defective teeth. Assistance in dispensary treatment. (This lesson should be held in the dispensary or children's clinic and students should have an opportunity to observe cases, themselves, and try to identify the commoner abnormal conditions).

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XV. Examination

Methods of Teaching

The clinical method should be used as much as possible. A term of service in the out-patient department will usually provide good experience in this line of work. The general operating room training should precede the course.

Equipment and Illustrative Material

Skeleton and separate head. Models of eye and ear. Charts, slides. X-ray plates. Casts. All materials needed for practical demonstrations.

Text and Reference Books

Group I

Bacon and Saunders, Manual of Otology
Blair, Surgery and Diseases of the Mouth and Jaws
Coakley, Diseases of the Nose and Throat
Davis and Douglas, Nursing in Eye, Ear, Nose and Throat Diseases
De Schweinitz, Diseases of the Eye
Duke, Oral Sepsis in Its Relation to Systemic Diseases
Emerson, Essentials of Medicine
Fones, Mouth Hygiene
Fuch, Textbook of Ophthalmology
Gleason, Manual of Diseases of Nose, Throat and Ear
Lewis, The Ophthalmic Nurse
Manhattan Eye, Ear and Throat Hospital, Nursing in Diseases of the Eye, Ear, Nose and Throat.
Marshall, Mouth Hygiene
May, Diseases of the Eye
Packard, Diseases of Nose, Throat and Ear
Pickerill, The Prevention of Dental Caries and Oral Sepsis
Posey, Hygiene of the Eye
Ryan and Bowers, Teeth and Health

Group II

Black, Descriptive Anatomy of the Human Teeth
Burchard, Dental Pathology
Endelman and Wagner, General and Dental Pathology with Special Reference to Etiology and Pathologic Anatomy
Noyes, Textbook of Dental Histology and Embryology Including Laboratory Directions
Pickerill, Stomatology in General Practice
Pamphlets published by the New York State Committee for the Prevention of Blindness.
See also under Anatomy and Physiology, Bacteriology and Modern Social and Health Movements

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EMERGENCY NURSING AND FIRST AID

Time: 15 hours, divided into seven two-hour periods with one hour for examination.

Teacher: Classes and demonstrations directed by the nurse instructor, or by a physician and nurse who are especially competent to handle this subject.

Objects of Course

1. This course is intended to help the nurse to adapt her hospital methods more readily to the emergency situations which she will meet while on night duty, in charge of ward, in Army work, in accidents of various kinds, and in pioneer service where equipment and facilities are limited.

2. Such a course will also serve as a review of practical nursing principles and procedures and for the adaptation of these to home conditions. Quick thinking, adaptability, resourcefulness, economy and speed, should be emphasized as well as careful technic.

3. The demand for classes in elementary nursing and first aid, to be given to clubs and groups of various types, is increasing so rapidly that nurses should be prepared to assist in such teaching and should thus be in touch with the latest and most approved methods in emergency work.

Outline of Classes

I. Introduction

(Class). General principles and scope of first aid work. Personal and ethical conduct during nursing crisis. Personal hygiene: bathing, diet, clothing. Attitude toward duties of a non-professional character. Personal relation to household members, community authorities, clergy and press. Laws involved in emergency work, as closure of places of public assembly, quarantine, fumigation, death, wills, giving of legal evidence, etc. Signs and symptoms indicating fear, hysteria, serious condition, death. Procedure in cases of death; suicide. Reports and records. Newspaper reports.

(Suggested Projects)

Exhibit of Red Cross supplies and emergency kits. Improvised equipment. Emergency splints and bandages. Methods of sterilization of supplies in an emergency. Use of newspapers, old linen, etc.

II. Organization of Service in Times of Public Disaster

(Class). Sources of nursing and medical service in cases of epidemics, fires, floods, and other public disasters. Army, Navy and Red Cross nursing organizations: qualifications, applications, equipment, personnel of units and duties. Federal, state and city jurisdiction; regulations to be observed; care of property,—government and personal. Cooperative agencies: contact with local lodges, relief societies and welfare organizations. Sources of supplies and expenditure of money. Disposal of waste. Sanitation of premises. Water supply. Food and drug supplies.

(Suggested Projects)

Use of public buildings as emergency hospitals. Equipment of field hospital. How duties of the personnel differ from duties in a civilian hospital.

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Distribution of relief supplies. Nursing procedures in an emergency hospital. Methods to secure safe drinking water during emergency. Mess management, rations, etc.

III. Transportation of the Injured

(Class). Situations requiring special methods of transportation. General principles underlying emergency methods of transportation by ambulance, train, ship, airplane, motorcycles, litters, etc. Emergency methods in case of fires.

(Suggested Projects)

Improvisation of litters. Carrying of patients in chair, hammock, blanket, sling, etc. The two-, three- and four-handed lift. Fireman's lift. Ambulance and stretcher drills.

IV–V. Emergencies in the Home, School and Camp

(Class). Treatment of wounds, minor fractures, sprains, bruises, burns, frost bite, insect, snake and animal bites, fainting, hysteria, apoplexy, hemorrhage. Methods of resuscitation after drowning, and during gas asphyxiation. Common emergencies due to food and other poisoning, as poison ivy, mushrooms, etc. Drug poisoning such as bichloride, iodine, wood alcohol, dyes, etc.

(Suggested Projects)

Isolation of infectious cases in home, school, on train or ship; isolation during epidemic. Preparation for an emergency operation. Preparation of kitchen of an apartment as emergency operating room. Treatment of hemorrhage and shock. Procedure during convulsions of childhood. How to put out flaming clothing. Method of giving a hot pack in a country home. Arrangement of an improvised croup tent. Preparation of home first aid kits and home medicine cupboards. Posters.

VI. Industrial Emergencies and Traffic Accidents

(Class). Treatment of wounds, fractures, etc., under factory conditions or in case of highway accidents. Removal of foreign bodies from eye, ear, nose, throat, oesophagus. Removal of steel and wood splinters. Sun stroke and heat exhaustion, lightning stroke, electric shock. Attempted suicide. Alcoholism. Poisoning from monoxide gas.

(Suggested Projects)

Removal of worker from contact with electric current. Safety first posters. Automobile and railway accidents of various kinds.

VII. Examination

Methods of Teaching

1. The main part of the course may be worked out on the basis of projects by students. Since most of the principles covered in the course should be familiar to advanced student nurses, the main effort will be to have them work out the applications as a test of their understanding and resourcefulness. Projects should be adapted to the needs of the school. Suggested ones are listed in the outline.

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2. It is suggested that the demonstration of projects be made before the school, and the pupils rated on the points most essential in first aid work.

Equipment and Illustrative Material

1. Beds, bedding, utensils, furnishings and surgical materials as for other nursing classes, with a variety of common household and outdoor materials to be used for improvising equipment.
2. First aid outfits for use in factories, mine accidents, schools and households, Army kit, Red Cross kit, outfit for automobile trips, etc.
3. First aid charts (Red Cross and other kinds).

Text and Reference Books

Group I

Doty, Prompt Aid to the Injured
Eliason, First Aid in Emergencies
History of American Red Cross Nursing (Official)
Lynch, American Red Cross Textbook on First Aid and Relief Columns
Mason, Complete Handbook for the Sanitary Troops of the U. S. Army and National Guard and Naval Militia
Morrow, Immediate Care of the Injured
Wharton, Minor Surgery and Bandaging

Group II

Delano, Home Hygiene and Care of the Sick
Hospital Corps Handbook for the U. S. Navy
See Also Textbooks in Nursing, Medicine and Surgery
Manuals for Girl Scout and Boy Scout Organizations

PSYCHOLOGY

Time: 30 hours. Lectures, experiments, class discussions and quizzes. To be given in the latter part of the first year after the course in anatomy and physiology is completed.

Teacher: Classes conducted preferably by a nurse who has had special preparation in elementary and educational psychology and principles of teaching. Lacking a properly equipped nurse, a teacher may be secured from a normal school or college.

Objects of the Course

1. To attempt to present the fundamental principles underlying human conduct.
2. To give the student practice in observing and interpreting human reactions.
3. To develop an impersonal sympathy and understanding of the sick.
4. To introduce the student to the most economical methods of learning.
5. To apply the laws and principles of learning to such teaching as the nurse is likely to do in her work.

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6. To help the student to make personal adjustments and to acquire self-mastery and poise.

OUTLINE OF COURSE

I. The Nature, Scope and Methods of Psychology

(Lecture and Experiments). Psychology the science of behavior. Fundamental laws and working hypotheses of psychology. Various "Schools" of psychology. Reasons why nurse needs psychology.

II. Reaction Psychology

(Lecture, Discussion and Experiment). The "functional unit" of the behavior mechanism. Physiological vs. psychological stimulus and response. The Stimulus-Response Unit, or S-R bond. To what extent is it possible to predict human behavior?

III. The Behavior Mechanism—Receiving Organs

(Lecture, Discussion and Experiments). Rôle of sense organs as receiving mechanisms. Review of structure and functioning of sense organs. Effect upon behavior of defective sense organs. Sense organs of patients, of the nurse.

IV. The Behavior Mechanism—Response Organs

(Lecture, Discussion and Experiments). The rôle of the motor, glandular and cortical response organs. Review of structure and functioning of muscles and glands. Effects of muscular and glandular disorders upon behavior. Facts about "Endocrin personalities."

V. The Behavior Mechanism—Cortical Response Organs

(Lecture, Discussion and Experiment). Cortical responses. "Consciousness." Experiments to reveal the psychological meaning of attention, sensation, images, feelings, etc.; also percepts, impulses and emotions. Discussion of memory, imagination, reasoning and judgment. Out of class experiments to test ability to detect facial and postural evidences of emotion.

VI. The Behavior Mechanism—Cortical Responses (Continued)

(Lecture). Emotions vs. Sensations. Native emotions. The James-Lange theory. The Emergency theory. Acquired emotions—"Emotional Conditioning." Combined emotions. Effects of emotions upon efficiency, upon strength, reasoning, health, etc. Rôle of emotions in sick room. Out of class observations of emotional reactions.

VII. The Behavior Mechanism—the Connecting Organs

(Review Quiz, Lecture and Demonstration). The evolution, structure, and functioning of the central and autonomic nervous systems. The important rôle of the autonomic system, its effect upon behavior, efficiency, health and disposition.

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VIII. Native Behavior—Unlearned S-R Bonds

(Lecture and Discussion). Evidences of native traits. Discussion of things man does without learning. Criteria, source, development, classification and modifiability of native traits. Discussion of specific "instincts" and "urges." Applications to nursing situations.

IX. Thwarted Tendencies and "Mental Conflicts"

(Lecture). Factors which tend to thwart native tendencies; conflicting native tendencies, social inhibitions, forces of circumstances and organic inferiority. Mental conflicts and emotional conditioning. Thwarting of acquired tendencies. Sources of thwarting in sick room. Out of class observations of thwarted tendencies.

X. Mental Adjustments

(Lecture and Discussion). Commoner type of adjustment; substitution, "sublimation," introversion, capitalization, rationalization, repression, "Pollyanna" and "sour-grapes" mechanisms and logic tight compartments. Dissociation, compare with a well integrated personality. Case reports to illustrate each type of mental adjustment. Prevention and treatment of maladjustments.

XI. Individual Differences

(Lecture and Discussion). Individual likeness vs. individual difference. Causes: heredity and environment. Experimental evidence concerning possible factors influencing individual variations: age, sex, remote ancestry (race), immediate ancestry (family), "classic temperaments," personality types, lifelong moods. Variations in "general emotionality." Importance to the nurse of study of individual differences.

XII. Measurement of Individual Differences

(Lecture and Demonstration). Methods of measuring single traits: physical, special abilities (drawing, musical, mechanical, etc.). Mental measurements: tests and scales. Criteria of "good test." Standardized tests. Type of mental tests: individual, group, non-language. Demonstration of representative tests in general use. Possibilities of tests of professional aptitude. Out of class experiment to show "curve of chance."

XIII. Distribution of Human Variations

(Lecture). Extent and distribution of individual differences in traits which can be measured. Significance of position of individual within the group. Plotting curve to show results of assigned experiment of previous lesson. "Normal distribution," significance in prognosis. Application to problems of teacher and nurse.

XIV. Mid-Term Examination

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XV, XVI. Intelligence

(Lecture). Theories of "general intelligence." Experimental evidence of growth, and range of intelligence. Measures of intelligence: mental age, I. Q., etc. Correlation of traits with special abilities. Problems of the mental deviate (inferior, superior). Implications for parents, teachers and nurses of study of "general intelligence."

XVII, XVIII, XIX. Acquired Reactions,—Learned S-R Bonds

(Lecture and Experiments). Rôle of native responses in learning. Experiments (in and out of class) to study trial and error learning, rote memory, limits of learning, rate of forgetting, value of whole and part learning, length and distribution of practice periods, degree of over learning necessary. Practice in plotting learning curves and curves of forgetting. Formulation by class from experiments made of Laws of Learning. Limits of Laws of Use and Disuse. Applications of Law of Associative Shifting.

XX. Economical Learning

(Lecture and Discussion). Principles of economical learning based upon (1) nature of human behavior mechanism, (2) type of inherited reactions, and (3) facts discovered in learning experiments. The rôle of fatigue in economical learning. Hygienic rules to increase mental efficiency. Old and new views of transfer of training. Applications of principles of economical learning to study and teaching, informal as well as formal teaching.

XXI, XXII. Motor Habits and Skills

(Discussion and Experiments). Methods of testing variations in reaction time, motor control and coordination. Steps in teaching habits and skills with special applications of laws of learning to nursing practice and to training of patients.

XXIII, XXIV. Logical Reasoning—Reflective Thinking

(Lecture and Discussion). Hereditary individual differences in reasoning ability. Reasoning primarily dependent upon experience and ability to recall the experience when required. Reasoning a trial and error reaction. The scientific method of reasoning. Age differences in ability to reason. Tests which will demonstrate reasoning ability. Need of nurse for habit of scientific thinking. Discussion of judgments, convictions and prejudices.

XXV. Psychology of Childhood

(Lecture and Discussion). Significant instincts and impulses of childhood. Specific age differences in attention, memory, imagination, suggestibility, logical reasoning. Psychology of infancy, early childhood, and adolescence with special reference to the sick child. Mental hygiene of childhood.

XXVI. Psychology of Teaching

(Lecture and Discussion). "Teaching" not limited to classroom. Principles of good teaching. Methods of teaching for specific purposes, e.g., health habits, appreciation, attitudes and to create public opinion.

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XXVII, XXVIII. Nervous and Mental Instability

(Lecture and Discussion). The "neurotic constitution," general emotional sensitivity and instability. Problems presented by this group: in home, schoolroom and sick room. Solutions offered by psychology. Recognition of "neurotic syndrome." Case studies and discussion of case records. Suggested treatments for maladjustments. Hysteria vs. neurasthenia.

XXIX. Mental Hygiene

(Lecture and Discussion). Mental hygiene like physical hygiene concerned first with preservation of mental health and the prevention of maladjustments. Function to build mind, personality and character. A well integrated, socially efficient, personality is the goal. Differentiate from psychiatry. "Nursing the Mind" as distinguished from mental nursing.

XXX. Final Examination

Methods of Teaching

Class discussion based upon a simple textbook. Numerous experiments. Lectures to introduce and summarize the discussion periods and to supplement the text. Case studies. Written and oral reports of observations and experiences. Practice in plotting curves and graphs.

Equipment and Illustrative Material

Charts and models for reviews of nervous system. Pictures and cards for tests of observation, etc. Numerous large graphs and distribution curves. Stop watch.

Text and Reference Books

Group I

Gates, Psychology for Students of Education
Higgins, The Psychology of Nursing
Kitson, How to Use Your Mind
Laird, Applied Psychology for Nurses
Morgan, Psychology of the Unadjusted School Child
Muse, A Textbook of Psychology for Nurses
Wells, Mental Adjustments
White, Principles of Mental Hygiene
Whipple, How to Study Effectually
Woodworth, Psychology a Study of Mental Life

Group II

Bigelow, Adolescence, Educational and Hygienic Problems
Burnham, The Normal Mind
Children's Foundation, The Child: His Nature and His Needs
Dewey, How to Think
Groves, Personality and Social Adjustment
James, Talks to Teachers on Psychology
McMurry, How to Study and Teaching How to Study

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Norsworthy and Whitley, Psychology of Childhood
Pinter, Intelligence Testing
Pyle, The Psychology of Learning
Starch, Education Psychology
Terman, The Measure of Intelligence
Thorndike, Educational Psychology, Vol. 3

HISTORY AND ETHICS OF NURSING

Time: 30 hours, divided about equally between the history and ethics of nursing. The course to be given in the first year as early as possible. Either unit may be taught first or the two units may run parallel.

Teacher: Superintendent of nurses or instructor.

Objects of Course

1. To arouse interest and enthusiasm in nursing as an occupation, by introducing the student nurse 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 nurse in carrying out the purposes of the hospital harmoniously and effectively.
4. To discuss the principles of behavior, their origin, meaning and practical bearings on the common experiences and problems of life.
5. To try to lead the student to formulate more clearly and definitely her philosophy of life, to stimulate her in the formation of the right kind of personal habits, to help her in building up a strong and attractive personality, and to give her a vision of what a full, happy, useful, and well ordered life may be.
6. 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, and also to interpret the code of ethics of the American Nurses' Association in terms of the problems that arise daily in the life of the nurse.

THE HISTORY OF NURSING

Outline of Classes

I. The Origin and Meaning of Nursing

Brief discussion of the present demands in hospital work, and the ideals which students bring to their new task. Reasons for the study of nursing history. Original meaning of nursing. The roots of nursing impulse in human nature. Nursing and mutual aid among animals. Rudiments of nursing care among primitive peoples. The mother as the earliest nurse. Influences of religious beliefs and ceremonials on the care of the sick. Early rites of hospitality. Origin of institutions for the care of sick strangers.

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II. Care of the Sick among Ancient Civilizations

Brief summary of outstanding contributions of Egypt, Palestine, Greece and Rome to the better care of the sick, emphasizing the rising standards of humanity and justice, beginning of public relief for sick and unfortunate, general standards of hygiene, sanitation, therapeutics, nursing and medical science. Moses, the great sanitarian and law giver, and Hippocrates, the "Father" of medicine, as outstanding leaders of this period. Development of ethical standards seen in the Ten Commandments, the Hippocratic Oath and the Hindoo writings.

III. Influence of Christianity on Nursing. The Ascetic or Saintly Ideal

Influence of Christian ideals of brotherhood, pity, charity and self-sacrificing service seen in the work of the deacons and deaconesses of the early church—first organized nursing service. Relief of sick and unfortunate gradually taken over by the church. Hospitals established as religious and charitable institutions and nursing advocated as a form of religious discipline and service. Paula, Marcella and Fabiola—types of nursing leaders of this period. Growth of monastic institutions and emphasis on ascetic practices. Monasteries as centers of relief and hospitality. Nursing and medical work of monks and nuns. Influence of belief in magic and miracle on the care of the sick. Radegunde and Hildegarde, types of monastic women.

IV. Aristocratic and Military Influences. The Romantic or Knightly Ideal

Rise of the institution of chivalry with new ideal of the Christian knight, defender of the weak and helpless and redresser of human wrongs. Life of struggle, adventure and romance opposed to the repressed, sheltered, contemplative life of the cloister. Virtues of the warrior knight, courage, hardihood, honor, courtesy, loyalty, leadership, etc. Combination of chivalric and monastic ideals in military nursing orders developed during the Crusades. Hospital expansion under the knightly orders. Introduction of aristocratic and military features in hospital organization and management. Knights and ladies of St. John as types of Hospitallers.

V. Democratic and Secular Tendencies in Mediaeval Nursing

Rise of the mendicant order under Saint Francis of Assisi as a reaction against extreme forms of monasticism and aristocratic tendencies of military orders. Founding of secular and semi-secular orders for nursing and relief. The Tertiaries of St. Francis, and the Beguines, types of voluntary secular orders organized on a religious basis. Cities and communities beginning to undertake some responsibility for relief and care of sick and unfortunate and prevention of poverty and distress. St. Francis, St. Clare, St. Elizabeth and St. Catharine as types of nursing saints of later mediaeval period.

VI. Advancement in Medicine and Surgery and Decline in Nursing

Effect of the revival of learning and founding of mediaeval universities in awakening of medicine. Long struggle of the barber surgeons and advance-

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ments in surgery. Pioneer leaders and "truth seekers" in anatomy, physiology, chemistry, etc., and their relation to the development of medicine. Bacon, Vesalius, Harvey, Paracelsus, Paré and Sydenham as types of the newer group of physicians, surgeons and scientists. Decline in the religious orders and suppression of many. General deterioration in hospital and nursing work. Hospitals gradually taken over by the civil authorities. Servant nurses generally employed for the care of the sick both in religious and civil hospitals. "Sairey Gamp,"—type of the ignorant, secular, servant nurse or "monthly nurse," the negative of religious, chivalrous and scientific ideals. Amateur "Lady Bountiful" type of nursing and charitable work in parish and country districts.

VII. Humanitarian Movements of the Early Modern Period

Beginning of organized charity in France (17th Century) under leadership of St. Vincent de Paul and Mlle. Le Gras. Work of Sisters of Charity. Reforms in care of prisoners, insane and sick in hospitals, stimulated by work of John Howard, Elizabeth Fry, William Tuke, Philippe Pinel and other humanitarian leaders. Revival of deaconesses by the Fliedners. Humanitarian and religious ideals combined in these newer nursing organizations, with beginnings of definite standards of nursing work and training.

VIII, IX. Founding of Modern Nursing and Contemporary Movements

Story of Florence Nightingale's early life and her work in the Crimea. Her new conception of nursing as an economically independent secular vocation or art demanding intelligence, knowledge, and skill, as well as devotion and moral purpose. The necessity of long and careful training emphasized and the first schools of nursing established. Ideals of nursing as shown by Florence Nightingale's example and teaching. Influence on nursing of the growing freedom and independence of women, educational advancements, social and philanthropic movements, and scientific advances of the 19th Century in medicine, surgery, sanitation, anaesthetics, etc., Pasteur, Lister, Morton, Holmes, Semmelweis and other leaders of this period.

X, XI. Development of Nursing in America

Conditions in the early pioneer period and influence of different European groups on care of the sick. Early hospitals in French Canada. Jeanne Mance as a type of pioneer nurse and citizen. Development of early hospitals in New York, Philadelphia, etc. Dorothea Dix and the movement for better care of the insane. Nursing during the Civil War and contribution of Clara Barton and other war nurses of this period. Adoption of the Nightingale system in America and founding of first nursing schools. Early leaders in nursing education, Linda Richards, Mrs. Robb and others. Beginning of nursing organizations and publications (very briefly).

XII. Scope of Modern Nursing

Brief survey of the various types of service which are open to the graduate nurse, emphasizing the importance of sound basic training and the development of necessary qualifications and wide interests during the period of

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preparation. Study of one or two outstanding leaders in each of the main fields of nursing.

XIII. Nursing in Other Countries

Brief survey of outstanding countries working under different systems of nursing. Study of a few representative leaders and introduction to some of the nursing journals from other countries.

XIV. Development of Nursing Traditions and Ideals Reviewed

Meaning and value of traditions. Gradual evolution of nursing traditions and influence of all the groups that have shared in nursing work in the past. Meaning of professional status. Necessity of evaluating traditions and ideals in light of present day knowledge and standards. Responsibility for advancing and enriching inheritance of past. Summary of outstanding traditions in relation to hospital life.

XV. Examination

NURSING ETHICS

Outline of Classes

I. Introduction

Meaning and derivation of ethics, morals, customs. Distinguished from etiquette, manners, religion. Different levels of conduct. Personal or reflective morality as compared with group or customary morality. Evolving standards of conduct. Essentials in ethical conduct,—right feeling, right thinking, right doing. Relationship between conduct and character.

II. The Social Basis of Ethics

The old problem of individual vs. society. Group welfare not incompatible with individual welfare and development. Mutual responsibility of individual and group. The social ideal expressed in principles of democracy. Social welfare requires efficient service from each member of the group, working toward the ideal of social progress. Extremes of individualism or socialism both undesirable. Examples of extremes of self-effacement and self-sacrifice in individuals and groups in the past. Some tendencies toward extremes of self-expression in present.

III. The Nurses' Contribution to Society

Value of the nurse's service in hospital, home and community. Primary responsibility in the safeguarding of human life. Duties of citizenship apart from professional service. Some outstanding women citizens of the community or country and what they have contributed. What some outstanding nurses have done for health and social welfare. Public spiritedness expressed in common tasks as well as heroic deeds.

IV. What the Individual Nurse Should Expect from Society

Fundamental rights of life, liberty and the pursuit of happiness. Protection of health and property, opportunity for work, education, etc. Satisfaction

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and happiness desired by all human beings. Different levels and types of satisfactions, some antisocial in character. Problem is one of developing a larger self which will not desire satisfactions that interfere with the common good. Conflict between egoism and altruism. How to secure self-expression by right direction of natural tendencies rather than by complete repression.

V. The Nurse in Relation to the Hospital and Nursing School

Responsibility of the hospital to patients and community. Responsibility of the school to both patients and students. Students' responsibility to school and hospital and to their representatives. Purpose of rules and regulations. Importance of loyalty, courtesy and team work in all relationships.

VI. Student Government

Its meaning, principles and obligations. One of the purposes of student government to train the student in the practice of such habits of conduct that she will be able by independent exercise of judgment and initiative to meet the responsibilities placed upon her.

VII. The Nurse in Relation to Her Work

Work as a means of happiness, growth and self-realization. Standards of good workmanship. The spirit of the craftsman or artist. The spirit of the professional worker. The scientific spirit. "Business like" qualities. All required in hospital and nursing work. Importance of economy, accuracy, system, etc. Meaning of honesty in relation to use of hospital supplies and property.

VIII, IX. The Nurse in Relation to Her Patients and Their Friends

The older ideal of nursing service centering on individual compared with the modern ideal which considers the family as a unit and the community health and welfare as well. The patient's three selves, physical, mental, and spiritual. The foreground and background of the patient. The responsibilities of the nurse in cases of danger, accident, death, etc. Ethical responsibility for patient more fundamental than legal responsibility.

X. Relations with Fellow Students and Staff

The question of class organization and class distinctions. Seniority a "fetich" or a courtesy. Respect for personality, for individual honor, for property, etc.

XI. Relations with Coworkers in Other Groups

Modern tendencies toward specialization in the care of the sick and development of various kinds of experts. Recognition of the expert essential to good team work and to welfare of the patient. Professional etiquette in relation to physicians, social workers, etc. Attitude towards domestic staff of hospital and other workers.

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XII. Health, Recreation and Amusements

Relation of health and ethics. Emphasis on positive health. Questions in relation to diet, infections, overstrain, etc. Habits that tend to undermine health. Responsibility of nurse in case of illness. Importance of cultivating outside interests, hobbies, etc. Friendships between women,—between men and women.

XIII. Dress and Deportment

Importance in relation to the individual herself and the groups she represents. Economic and aesthetic aspects of dress. Extremes of dress. The correst use of the uniform. Dress for social occasions. Voice and deportment as indications of good breeding.

XIV. Provision for Growth and Character Building

Sources of stimulation and growth—education, life experience, religion, etc. Value of the nurse's training as a means of ethical development. The lowered threshold of "night duty" as a test of character and an opportunity for professional and moral growth.

XV. Examination

Methods of Teaching

1. In such a short course it is impossible and unnecessary to take up many detailed historical facts. If the students get a good general picture of the progress of nursing and the interesting personalities and events which have helped to mold it, if they catch the spirit of the great leaders, and if their interest is aroused in the literature of nursing, the greatest result will have been achieved. The class and discussion method is to be preferred to the lecture for most of this course.

2. It is essential that some view of the general historical background should be given before taking up the nursing history. A rough tabulated chart of the chief historical epochs and events of European history according to centuries will help to place the general scheme before the pupil's mind and will enable her to correlate her nursing and general history better.

3. The practice of ethics is a matter of attitude, spirit, and will, more than knowledge. Teaching will never be effective in changing behavior unless it is backed up by the example and personality of the teacher and by the atmosphere and influences which surround the pupil every day. Every subject taught in the training school should be a medium for teaching ethics, and every problem which the student meets in her daily work, should be an opportunity for practice in ethics. The social life of the student nurse is a particularly strong influence in shaping her ideals and developing her powers. Emphasis should be laid on the formation of habits of positive service and helpfulness rather than merely the correction of faults and the observation of rules and regulations; on the strengthening of character through complete development rather than the repression and elimination of the more undesirable traits. If the principles of student government are in force in the nurses' home, it

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will give a much better opportunity for exercising the qualities of self-direction and self-control in regard to the students' personal life.

4. In teaching ethics, concrete examples should be given to illustrate every point, or to lead up to the discussion. These examples will be found in history and standard literature, poetry, current fiction, newspaper items or personal experiences. It is better to give as broad a point of view as possible. Students should be asked to bring in examples and to contribute to the discussions in every possible way.

5. If possible, personal conferences might supplement such a course. The teacher could thus get into closer touch with the students and could help them better in working out their individual problems.

6. Every means should be taken to make the events and the personalities vivid and concrete. A collection of historical books and slides, adds greatly to the interest.

Illustrative Material

Photographs of pictures illustrating care of the sick in ancient and modern times, nursing saints, medical and nursing leaders, historic institutions, etc. See illustrated books such as Richer—L'Art et la Medicine, Lacroix—Military and Religious Life in the Middle Ages, Mullerheim—Die Wochenstube in der Kunst, etc., also lantern slides prepared by the National League of Nursing Education.

Text and Reference Books for History of Nursing

Group I

Cook, Life of Florence Nightingale, 2 vols.
Cook, A Short Life of Florence Nightingale, 1 vol.
Dock and Stewart, Short History of Nursing
Goodnow, Outlines of Nursing History
History of American Red Cross Nursing (Official)
Nutting and Dock, History of Nursing, 4 vols.

Group II

Berdoe, Origin and Growth of the Healing Art
Boardman, Under the Red Cross Flag
Dickens, Martin Chuzzlewit
Epler, Life of Clara Barton
Myers, History as Past Ethics
Richards, Reminiscences of Linda Richards
Robinson and Breasted, Outlines of European History
Saleeby, Surgery and Society
Tiffany, Life of Dorothea Dix
Tooley, History of Nursing in the British Empire
Withington, Medical History from the Earliest Times
See also Encyclopedia Britannica under Medicine, Monasticism, Chivalry, Church History, Mendicant Orders, St. Francis, etc.

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Magazines

American Journal of Nursing
Hospital Progress
Modern Hospital
Pacific Coast Journal of Nursing
Public Health Nurse
The I. C. N.

Text and Reference Books for Ethics of Nursing

Group I

Addams, Democracy and Social Ethics
Cabot, What Men Live By
Dewey and Tufts, Ethics
Emerson, Essays
McDougal, Social Psychology
Mackenzie, Manual of Ethics
Nightingale, Notes on Nursing
Nightingale, Talks to Pupil Nurses
Parsons, Nursing Problems and Obligations
Robb, Ethics of Nursing

Group II

Adler, Reconstruction of Spiritual Ideals
Cabot, Every Day Ethics
Cabot, Social Service and the Art of Healing
Colvin and Bagley, Human Behavior
Devine, The Normal Life
Dewey, Democracy and Education
Drake, Problems of Conduct
Goldmark, Fatigue and Efficiency
James, Psychology: Briefer Course
Maeterlinck, Life of the Bee (Spirit of the Hive)
MacCunn, Making of Character
Neuman, Education for Moral Growth
Osler, Counsels and Ideals
Overstreet, Influencing Human Behavior
Royce, Philosophy of Loyalty
Talley, Ethics for Nurses
Tawney, The Aquisitive Society
Tyler, Growth and Education
See also references under Survey of the Nursing Field and Professional Problems

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MODERN SOCIAL AND HEALTH MOVEMENTS

Time: 30 hours divided as follows: 26 hours, lectures by qualified health and social workers; 2 hours, reports and discussions on assigned topics; 2 hours, examination.

Teacher: This course should be the responsibility of a qualified public health or medical social worker. To insure continuity it is essential that one person plan the course as a whole, arrange the assignments and meet the students in conference and discussion groups, even though she may not be prepared to give all of the lectures herself. It will probably be found desirable to obtain the services of other qualified public health and social workers to give some of the lectures. A very few well selected lecturers usually prove more effective than a larger number chosen chiefly because they are engaged in some special field of work.

Objects of Course

1. To give a historical background for the appreciation of modern public health and social work. It is not the purpose of this course to teach any specific technique or methods. Definite methods relating to social, educational, preventive problems in nursing work should be taught in connection with practical experience and case studies in the hospital, dispensary and, when experience is available, in connection with community nursing work.
2. To define the most outstanding problems in public health work with its related social aspects, instances of which will be met in the individual cases studied; to outline the programs which 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.
4. To stimulate the students' interest in the larger aspects of social health work and to help them to know where they may obtain further information along these lines.
5. To serve as a preparation for the course Survey of Nursing Field in which the various aspects of public health nursing as such are discussed.

Outline of Classes

I–III. Introduction

I. Effect of Health Conditions upon Social Progress, historical aspects and present situation. Efforts in behalf of the public health before the age of science and humanitarianism. Physical, economic, sociological and educational factors directly related to health conditions.

II. The era of sanitation; the development of bacteriology; conquests of science due to sanitation and bacteriology. Meaning and importance of morbidity and mortality data; methods of computing rates.

III. "Unconquered enemies" and "Enemies not yet attacked"; comparative morbidity and mortality rates; economic and social costs of disease. The philosophy of modern social and health workers, prevention better than cure; rehabilitation rather than amelioration.

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IV–IX. Economic and Social Conditions and Problems

IV–VII. Historical Development of Modern Economic and Social Conditions. Accepted standards in normal family and social life; changes from urban to rural life; effect upon family and community life; industrialism; wages; standards of living; general social problems which are results of changing economic and social conditions. Unemployment; strife of labor versus capital. Social organizations; programs. Legislation. Scientific basis of social endeavor.

VIII. Housing. Importance in relation to health and social conditions; problems in urban and rural communities. Organizations and programs.

IX. Immigration. Relation to social and health conditions. Statistics of immigration and population. Present laws. Organizations and programs.

X–XXVI. The Outstanding Medical and Social Problems and Movements, in Relation to Special Age and Disease Groups

X–XI. In Relation to Infancy and Maternity. The problem stated in terms of comparative mortality rates; economic and social costs; causes of infant and maternal mortality, educational, social, medical. Movements for infant and maternal welfare; history of; modern campaigns, medical, social, educational aspects of. Agencies at work, programs. Relation of nurse to this work.

XII. Social Aspects of Maternity and Infancy. The normal home and its relation to the mother and infant; the unmarried mother; dependency and the "illegitimate" child; extent of problem; causes; agencies at work; programs of prevention and rehabilitation; mothers' pensions.

XIII. In Relation to the Preschool Child. Problems stated in terms of morbidity and mortality rates; dangers of communicable diseases; movement for welfare of the preschool child; habit training, nutrition; prevention of communicable disease. Agencies at work; programs. Relation of nurse.

XIV. Social and Educational Aspects of Preschool Child. The dependent child or neglected child; day nurseries; nursery school; orphanages; foster homes. Extent of problems. Agencies at work, programs.

XV–XVII. In Relation to Children of School Age. The problem stated in terms of morbidity rates, communicable disease, physical defects—eye, ear, nose and throat, orthopedic, nutritional. The need for education in health, habit training, attitudes, scientific knowledge. The hygiene of school buildings, urban and rural.

Health education in schools and the health of the school child. History of movement; modern campaign; medical inspection and follow-up; nutrition work; modern ideals in education which include the aim of health; extra-school activities, athletics; Boy and Girl Scout movements, etc. Agencies at work; program; nurse's part.

Problem child of school age. Subnormal, abnormal, precocious; medical-social aspects of; causes; agencies at work; programs.

XVIII. Social Aspects of School Age Child. Child labor, extent of; types of; causes; results of; suggested remedies. Agencies at work. Dependency, extent of; causes; educational social programs; continuation schools.

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XIX. In Relation to the Health of Industrial Workers. Problems stated in terms of morbidity and mortality rates; accident rates; relation to fatigue and monotony; industrial hazards; special diseases; women in industry. Industrial hygiene. Historical development; modern campaign; working men's compensation; insurance; medical measures.

XX–XXII. In Relation to Tuberculosis. Problems stated in terms of comparative morbidity and mortality rates; economic and social costs; causes; medical, social, educational aspects. Movements in prevention, history of; modern campaign, medical, social, educational aspects. Agencies at work; programs. Nurse's relation to.

XXIII. In Relation to Heredity. Biological basis of inheritance of physical and mental characteristics; Mendel's law in relation to certain health problems. The eugenics program—history of, aims and program.

XXIV–XXV. In Relation to the Venereal Diseases. Problem stated in terms of estimated morbidity and mortality rates; educational, economic, sociological, moral factors as causes. The social hygiene movement, history of, international significance, modern campaign, medical, educational, social, moral aspects. Agencies at work.

XXVI. In Relation to Mental Illnesses. Problem stated in terms of morbidity rates; acute illness and slight deviations, economic and social costs; questions of adequate care and social understanding. The mental hygiene movement, history of development; aims, medical, educational, social aspects. Agencies at work.

***XXVII–XXVIII. Reports and Discussions on Assigned Topics**

XXIX–XXX. Examination

METHODS OF TEACHING

1. The lecture method can be used to present much of the material of this course. Definite assignments should be made covering the different subjects, supplemented by reading, especially in the various standard periodicals, on subjects assigned for reports and conferences.

In several places students from three or four schools in a locality are being brought together for a course of this type. If a very large class is to be handled successfully, it is important to obtain an adequate and well ventilated classroom with satisfactory lighting and acoustic properties.

2. Following lecture (II) problems can be assigned which will illustrate the methods of computing mortality and morbidity rates.

3. In the two hours which have been allotted to "Discussion and Reports," the class should be divided into small sections, 15 to 30, which will permit free and general discussion.

4. Mimeographed outlines containing the outstanding facts and statistical data which are presented in the lectures with definite bibliography on the subject discussed are often helpful to the students.

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* The two hours for reports and discussions on assigned topics and one of the examination hours need not follow XXVI, but may be introduced at other times in the course if the teacher so desires.

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5. It may be desirable to include some other topics in this course, depending upon the developments of the fields of public health and social work and upon the resources of the community. For instance, the subject of heart disease and its prevention; goiter and its prevention; the problem of narcotic and drug addiction might well be given time if qualified lecturers are available. The social aspects of health problems could well be given much more consideration and time.

6. From certain aspects there is an advantage in giving all of the material outlined in this course as a unit representing the movements for the prevention of disease as a whole, even though there may be some repetition of subject matter.

It is possible, however, to incorporate some of the material outlined under The Outstanding Medical and Social Problems and Movements in Relation to Special Age and Disease Groups in other courses. For instance, the social and public health problems related to maternity and infancy and to the preschool child might well be included in the courses in obstetrics and pediatrics.

However, under such topics as Children of School Age and The Health of Industrial Workers, much of the material would not fit logically into any other course in the curriculum.

Equipment and Illustrative Material

Statistical mortality and morbidity charts reproduced from books, bulletins, etc., and other illustrative material can be used to great advantage in this course.

Text and Reference Books

Group I

Baker, Child Hygiene
Bigelow, The Established Points in Social Hygiene Education
Cannon, Social Work in Hospitals
Ellwood, Sociology and Social Problems
Gardner, Public Health Nursing
Moore, Public Health in the United States (Contains excellent and complete bibliography).
National Health Series
Parsons, An Introduction to Modern Social Problems
Ravenel, A Half Century of Public Health
Richmond, The Good Neighbor in the Modern City
Winslow, The Evolution and Significance of the Modern Public Health Campaign

Group II

Addams, A New Conscience and an Ancient Evil
Addams, Twenty Years at Hull House
Beers, The Mind that Found Itself
Binder, Health and Social Progress
Chapin, A Historical Introduction to Social Economy

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Chenery, Industry and Human Welfare
Davis, Immigrant Health and the Community
DeSchweinitz, The Art of Helping People Out of Trouble
Devine, Misery and Its Causes
East, Mankind at the Crossroads
Galpin, Rural Social Problems
Gesell, The Preschool Child From the Standpoint of Public Hygiene and Education
Goddard, The Kallikak Family
Guyer, Being Well Born
Johnsen (compiled by), Selected Articles on Child Labor
Kropotkin, Mutual Aid, a Factor in Evolution
Royden, Sex and Common Sense
Ruhl, Rockefeller Inc., Internationalists
Safford, Immigration Problems
Tiffany, Life of Dorothy Linde Dix
Trudeau, An Autobiography
Vallery-Radot, Life of Pasteur
Wald, The House on Henry Street
Welch, Public Health in Theory and Practice
Wile, The Challenge of Childhood

SURVEY OF NURSING FIELD AND RELATED PROFESSIONAL PROBLEMS

Time: 30 hours. Lectures, classes and conferences.

Teacher: The course is conducted by the director of nurses and special lecturers representing different fields. Given in the third year.

Objects of the Course

1. To introduce the student nurse to all the varied branches of nursing work, so that she may be better able to choose the field in which she is likely to find the greatest interest and success.
2. To show students what is being done in all these important fields, what the main problems are, and what their responsibilities are in connection with them.
3. To anticipate some of the problems which will confront the students when they graduate, and to help them to meet their difficulties in a rational, high-minded and effective way.
4. To awaken their interest in professional organizations, and to secure their enthusiastic cooperation in advancing the mutual interests of the public and their profession, by means of a full understanding of their own citizenship and professional relationships.

Outline of Classes

I. Introduction

Brief survey of the historical development of nursing work, showing division into three main branches: the hospital, public health and private nursing.

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Core of common knowledge essential to all three branches. Later subdivisions of each of these main branches into many distinct fields. Reasons why nurses should choose future work with care. Points to be considered in choice of vocation. Need of further training for special branches or positions of leadership. Kinds of training available.

II. Nursing Education

Educational status of nursing as compared with other professions. Economic difficulties in establishing a sound basis for nurses' education. Need of independent endowment for nursing schools, better applicants, higher standards of education, suppression of commercial and inferior schools. What constitutes a good school of nursing. Points to be considered in regard to postgraduate training. Development of university schools, university affiliations, and postgraduate nursing courses in universities. Nurse's responsibility for her own efficiency and for increasing the general fund of professional knowledge.

III. The Social and Civic Status of Nurses

Claims of nurses to professional status based largely on service rendered to the public and on controlling ethical and educational principles. Responsibility of individual nurse in maintaining professional and social status. Qualities of conduct which make one acceptable in good society. The nurse as a citizen and public servant. What the community has a right to expect of her. Duties in times of crises, war, epidemics, etc. Responsibility for community health and welfare. Relationship to civic, philanthropic, religious, educational and public health agencies and activities. Relations to women's clubs and organizations which aim to advance the welfare of women.

IV. Professional Ethics and Etiquette

Origin of the ethical code of medicine. The nurses' code. Accepted forms of professional courtesy. Relation of the nurse to the physician in all the various branches of nursing work. Relations of individual nurses to one another, and to the profession as a whole. The necessity of loyalty, harmony and cooperation. Primary rights of the patient and the patient's family in case of doubt. Possible conflicts between the general good and professional solidarity. Nurses' attitude toward incompetents, irregulars and quacks in both nursing and medical professions. Professional courtesies toward representatives of related professions and occupations.

V. Nursing Economics

The economic status of the nurse as compared with other professional women. The professional as opposed to the commercial spirit. The economic independence of the modern professional nurse compared with the comparative dependence of the religious orders. Provision for sickness and retirement. Business principles as applied to bills, banking, investments, insurance, etc. The nurse's budget. Proportion of yearly income spent in rent, board, clothing, etc. Principles of economy. Loan and relief funds for nurses. The sliding scale of charges. Provision for maintenance of health and working

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capacity. Regulation of conditions of work in all branches of nursing, hours, vacations, living conditions, rest, sleep, food, etc. The social life of nurses. Provision for recreation and self-improvement. Nurses' clubs and hostels. Nurses' registries. Professional versus commercial bureaus. The central registry, how it should be maintained and managed.

VI. Legal Problems (Given by a Lawyer)

Laws which affect the nurse in her relations with patients, physicians, hospitals and the general public. Legal situations in which a nurse may be involved: accidents, sudden death, poisoning, suicide, homicide, insanity, etc. Court procedures, especially those involving testimony by nurses. General advice to nurses in all cases where legal difficulties arise.

VII. Hospital or Institutional Nursing

History of the origin and development of hospital nursing reviewed. Nature and general conditions of work, salaries, qualifications and preparation for executive positions, such as hospital superintendents, assistants, dietitians, social service workers, housekeepers or matrons of nurses' homes, etc. Technical specialties such as operating room work, administration of anaesthetics, occupational therapy, physiotherapy, massage, hydrotherapy, electrotherapy, laboratory and X-ray work; duties, opportunities, qualifications and training demanded. Positions as hospital consultants.

VIII. Educational Work in Hospitals

Origin and development of nursing schools and the work of the school as distinguished from that of the hospital. Types of organization of nursing schools such as university schools, central schools, independent schools, and those connected with hospitals. Support of schools of nursing, budgets, etc. The position and duties of the director of nurses, of the instructor of nurses, assistants, supervisors and head nurses; qualities and training demanded. The scope of educational work in nursing schools. Affiliations. Continuation courses. Postgraduate courses. Growing importance of this field. Inspection of nursing schools.

IX. Hospital Organization

Different types: municipal, state, private, semi-private. Study of general plan of organization in hospital. The ward as a hospital in miniature. Needs of wards as sample of needs of hospital as a whole. Relation of ward to other departments of hospital, kitchen, laundry, linen and supply rooms, pharmacy, social service department, nursing school, admitting department, general office, etc.

X. Ward Planning and Equipment

The planning of wards and accessory rooms; size and arrangement for convenience in work; finish and structural equipment. Standard hospital furnishings. Average allowance of linen, utensils, etc., per patient. Standardization of equipment for different types of work. Consideration of use, cost, special advantages, durability, sanitary features, etc. Economy in use of

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equipment and supplies. Care and renewal of supplies. Methods of exchange. Responsibility for medical and surgical supplies of wards. Methods of purchase, contract, open market.

XI. Ward Personnel and Its Organization

Responsibility of head nurse for ethical atmosphere. Influence of her personality in developing esprit de corps of the ward. The head nurse as a judge of character. Especial responsibility toward the new probationers. Relation of head nurse to visiting staff, house staff and nurses, students and employes. Arrangement of ward services, hours of work for nurses, on duty time, etc. Reasons for the eight hour day and various systems of carrying on ward work on this basis. The night nurse and her special problems. Special nurses, hours of work, relief, etc. Relation of head nurse to maids and orderlies, interest in their hours of work, living conditions, recreation, etc.

XII. The Head Nurse in Her Relation to Her Patients and as an Executive

Purpose of hospital, care and comfort of patients. The rights and obligations of patients in a hospital. Attitude and support of community influenced largely by personal care and consideration of patients and attitude toward their friends and relatives. Some principles of good management, collectiveness and cooperation. Capacity for leadership, how developed. Dangers of arbitrary leadership. Staff and line functions. Relation of head nurse to other hospital departments. Assignment of work. Value of schedules. Delegation of responsibility. Discipline, its meaning and purpose. Test of ability for executive work. Opportunity for individual development. Review of general principles of household economics. Establishment of standards. Inventories. Stock taking. Repairs and renewals. Disposal of garbage and waste. Prevention of pests. The ward unit and its care.

XIII. The Head Nurse as a Teacher

Teaching functions of the head nurse, what they involve. Value of bedside teaching. Supervision and constructive criticism of work done by nurses. Perfection of technic, standardization of work, motion study. Need of keeping in touch with theoretical teaching given to nurses. Cooperation with instructor of nurses. Head nurse as teacher of applied hygiene and sanitation to patients and public. Head nurse as teacher of ward maids and orderlies in methods of housework, care of cleaning utensils, cleaning process and agents, etc.

XIV. Private Nursing and Miscellaneous Branches

Origin and development of private nursing. Scope of the field. Duties and economic status of the private nurse. Prospect for advancement. Newer specialties in private nursing: hourly and group nursing, office nursing, nursing in school and college residences, nursing with travel bureaus, etc. Nursing in home and foreign mission fields. Home nursing and child care. Duties and position of registrars. Nature and conditions of work in all these fields. Salaries, qualifications and preparation demanded.

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XV. Essentials to Success in Private Duty

Considerations which would determine the choice of this branch of work. Demands on health; need of special attention to rest, exercise, food, etc. Requirements as to personality and character. Professional requirements; special kinds of skill, knowledge and social customs and observances which make one at home in good society. Companionship, resourcefulness in providing diversion and entertainment for patients when necessary. Educational functions of the private nurse. Opportunities for teaching and influencing homes and communities.

XVI. Living Conditions and Expenditures

Where to locate. The relative advantages of larger and smaller centers. Special needs of the small town. Importance of joining a good registry. Rules of the registry. The responsibility of the private nurse for the care of sick patients of all types and conditions. The ethics of picking and choosing among cases. General nursing versus specialization in private nursing. How to get in touch with physicians and hospitals. Engagements and charges. Identification with local nursing interests. Relationship with nurses from different schools, practical nurses and attendants.

The private nurse's income; proportion to be devoted to professional and personal expenses. Requirements in clothing. Recommendations as to uniforms, street clothes, clothes for night duty, shoes, etc. Equipment required for general, special, hospital and country cases. Problems of living, budget, saving, seasonal occupation. Choice of a room and provision for meals when off duty. The relative advantage of the nurses' club, cooperative housekeeping, and boarding. Importance of good telephone service. Laundry problems.

XVII. The Nurse in the Home

The position of the nurse in the family. Relationship to the patient, the members of the family, servants and visitors. Looking at things from others' point of view. How to secure the assistance and cooperation of the patient and family. The choice, arrangement and care of the sick room. The ordering and serving of meals. Preparation of special diets in the home. Economy in sick room supplies. How to improvise equipment. Adaptation of treatment with limited equipment. The importance of records. The daily routine in ordinary cases.

XVIII. Special Duty in the Hospital

Conditions of special duty in various types of hospitals. Customary regulations concerning hours, relief, room, board, remuneration, etc. Relation of the special nurse to the officers of the hospital and nursing school, visiting and resident physicians, pupil nurses, ward maids, and orderlies, and other special nurses. Duties of the special nurse on ward or private duty cases. Reports and records. The use of hospital supplies. Night work in the hospital. Cooperation of nurses on the same case. Loyalty to hospital employing.

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XIX. Hotel Life and Traveling

Special difficulties presented by hotel life. Problems of uniform, meals, relief, etc. Relationship of the nurse to hotel management, staff and guests. Preparation for traveling at home and abroad. Requirements and conveniences for both patient and nurse. How to pack a trunk and attend to baggage. Management of the journey. Arrangements for meals, transportation at station, etc. What to do for train sickness and seasickness. Special points in traveling with a baby, a male patient, a bed patient, an insane or nervous patient, etc. (Demonstration of packing a trunk might be given by an expert.)

XX. The Public Health Field

(Care should be taken that the following lectures make use of the material given in the series under Modern Social and Health Movements as a background, so that this material is a progression, not a repetition, from what has already been given.)

Early history. Beginnings seen in work of early religious orders, and later under Deaconesses. Finally, in England, dissociated from the Church, and the foundation laid for modern visiting nursing. Emphasis during this early period on care of sick poor in their own homes; a curative service for the less fortunate in larger cities.

Early development in the United States; increasing emphasis on offering this visiting nursing service to people of moderate means as well as to the poor, on a pay basis for those able to afford payment, but giving the same service free.

Influence of the new public health movement, 20th century.

Emphasis on prevention. Need of an acceptable health educator in the home made the nurse the central figure in each preventive program. Development of specialized instructive nurses going to the home: tuberculosis, infant welfare, school, industrial nurses, the visiting nurse, however, continuing to emphasize bedside care.

More recent development tends to emphasize general fundamental principles and standards for all public health nursing, less hard and fast lines of demarcation, and enlarged objectives in the field of visiting nursing.

XXI. Modern Public Health Nursing Movement

Definition of Term. Fundamental principles; purpose—cure, prevention, health promotion; requirements and qualifications; professional ethics; divorce from politics; non-sectarian; cooperation with all community resources; cost basis (through fees or taxes for those able to pay, and the same service given free to those who cannot pay); community organization, "of the people, for the people, by the people."

Work and influence of the National Organization for Public Health Nursing. Brief survey of present emphasis in various branches of Public Health Nursing.

Visiting Nursing: general family health work, including bedside care. Tuberculosis nursing: through clinics, work in the home and educational work throughout the community; assisting in adequate care of those suffering from tuberculosis; protecting those who are contacts, and promoting health es-

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pecially in children so that they may resist the disease; largely a health teaching service. Infant welfare nursing: from the prenatal period to school age, work through health centers and clinics, with follow up work in the home, teaching mothers how to bring healthy children into the world and how to keep them healthy, largely by instructive service.

XXII. Modern Public Health Nursing Movement (Continued)

School Nursing: medical inspection of school children, correction of physical defects, educational health program within the schools carried on in cooperation with school authorities; instructive service in school and home. Responsibility toward the physically and mentally handicapped children.

Industrial Nursing: protection of the health of the employe while within the industry, and follow up work in the home.

Sanitary inspection. Hospital social service. Effect of the war, influenza epidemic, and Red Cross program on the public health nursing movement. Increasing tendency toward a centralized community service. Contrast field of public health nursing in urban and rural communities. Opportunities and salaries in the field of public health nursing.

XXIII. Federal Nursing Services

The Army Nurse Corps. The Navy Nurse Corps. The United States Public Health Nursing Service. The Veterans' Bureau Nursing Service. The Nursing Service of the Indian Bureau. The Provisions of the Nursing Service of the United States Civil Service Commission under which nurses in the last named three services must qualify. Brief history of each service with special reference to the work during the war. Eligibility requirements and preparation necessary. Nature and possibilities of work in each field for national defense as well as for peace time activities.

XXIV. Red Cross Nursing Service

History. Organization. Professional and other requirements for enrollment. Types of enrollment. Assignment to duty. Relation to Army and Navy Nurse Corps, and other Governmental Services. Utilization of Red Cross nurses in war, disaster, public health field, in Red Cross educational work and other Red Cross activities.

XXV. Nursing Organizations (General and Alumnae)

What organization has done for nurses. Essential elements in any organization. Types of nursing organizations. Aims and activities of the alumnae. Duties of organization and parliamentary procedure for use in nursing organizations.

XXVI, XXVII. National Nursing Organizations and Publications

Development, main activities and general plan of the American Nurses' Association, National League of Nursing Education and National Organization for Public Health Nursing. State and local branches. Publications and reports. The nursing press: American Journal of Nursing, Public Health Nurse, and other publications. Dangers in commercialization of nursing

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publications. The work of secretaries and other positions in connection with organizations.

XXVIII. Nursing Legislation

Registration of nurses through legislative enactments as a valuable means for controlling the practice of nursing and the education of nurses. History of the registration movement in America. Essentials of a good bill, and measures for its enactment. Present status of nursing legislation in different states (briefly).

XXIX. International Relationships

Origin, aims, and activities of the International Council of Nurses. Brief survey of countries represented, noting general hospital and nursing situation, social, educational and economic status of nurses, leading women and publications. Attitude toward nurses of other countries. Means for the promotion of friendly and helpful relationships with other countries. Opportunities for assisting in the development of nursing in backward countries.

XXX. Examination

Methods of Teaching

Although lectures by especially qualified persons should constitute the backbone of this course, ample opportunity should be provided for discussion. It would be very helpful also to have the students organize a Journal Club to run parallel with this and other courses in the senior year.

A suggested plan is to assign a topic to each student, and have her search for important articles on that topic. The project method can be used to advantage, particularly in connection with the lectures on institutional work.

Illustrative Material

Books, pamphlets, journals, pictures, lantern slides, photographs and charts. Special articles illustrating the subjects.

Text and Reference Books

Group I

A List of Schools of Nursing Accredited by the State Boards of Nurse Examiners, American Nurses' Association
Baker, Child Hygiene
Boardman, Under the Red Cross Flag
Digest of Laws of States Requiring Registration for Nurses and Attendants, American Nurses' Association
Dock and Stewart, Short History of Nursing
Emerson, Essays
Gardner, Public Health Nursing
Goldmark, Report of Committtee on Nursing and Nursing Education in the United States
Historical Sketch of the American Nurses' Association (Headquarters)
Historical Sketch of the National League of Nursing Education (Headquarters)

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History of American Red Cross Nursing (official)
Kelly and Bradshaw, Handbook for School Nurses
National League of Nursing Education, Annual Reports
Nutting, A Sound Economic Basis for Nursing Schools and Other Addresses
Nutting, Educational Status of Nursing
Wald, The House on Henry Street

JOURNALS

American Journal of Nursing
Hospital Social Service
Occupational Therapy and Rehabilitation
Pacific Coast Journal of Nursing
Public Health Nurse

Group II

Brainerd, Evolution of Public Health Nursing
Cabot, Everyday Ethics
Cannon, Social Work in Hospitals
Crowell, Tuberculosis Dispensary Methods and Procedure
Davis, Clinics, Hospitals and Health Centers
DeWitt, Private Duty Nursing
Emerson, Twelve Principles of Efficiency
Gulick and Ayres, Medical Inspection of Schools
Meumann, Psychology of Learning
Morley, Women Workers in Seven Professions
Nightingale, Notes on Nursing
Nutting and Dock, History of Nursing, Vol. I to IV
Osler, An Alabama Student and Other Essays
Osler, Aequanimitas and Other Addresses
Paget, Confessio Medici
Palmer, The Teacher
Parsons, Nursing Problems and Obligations
Perkins, Vocations for the Trained Woman
Pickett, The American National Red Cross
Pillsbury, Essentials of Psychology
Robb, Educational Standards
Robb, Ethics of Nursing
Stewart, Opportunities in the Field of Nursing (pamphlet)
Struthers, The School Nurse
Taylor, Shop Management
Waters, Visiting Nursing in the United States

JOURNALS AND OTHER SOURCES OF INFORMATION

British Journal of Nursing
The Canadian Nurse
The Modern Hospital
The Nation's Health
The Survey

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Report of the Committee to Study Visiting Nursing, National Organization for Public Nursing

Municipal Health Department Practice

Circulars of information from Washington headquarters on Federal Nursing Services. (See Directory in The American Journal of Nursing)

Articles on Government Nursing Services (The American Journal of Nursing, April through August, 1925)

Circulars of information concerning the services of the American Red Cross

Metropolitan Life Insurance Company, American Child Health Association, Hospital Library and Service Bureau, Chicago, National Health Library, 370 Seventh Ave., New York

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RECOMMENDED SUPPLEMENTARY SUBJECTS

ELEMENTS OF SANITARY SCIENCE[1]

Time: 15 hours, to be divided as follows: Lectures, class discussion, oral reports, 10 hours; excursions, 5 periods (each excursion to be credited as one hour of class).

Teacher: This course should be given by a physician with board of health experience, or sanitarian, if possible, assisted by a qualified nurse instructor.

Objects of the Course

1. To give the students a knowledge of those problems of sanitation which affect the health of the people in a community and the methods which are being used to solve them so that they may be better able to cooperate with all preventive agencies.
2. To arouse in the students a sense of responsibility for educating the public in matters relating to health.

Outline of Classes

I. Introduction

Aims and content of course. Sanitation and sanitary science defined. Brief survey of historical development. Tests of sanitary progress: lengthened span of life, decreased mortality rate, decreased morbidity from preventable diseases.

II. Sewage

The problems stated in terms of efficient methods of disposal. The composition of sewage. Dangers from sewage. Brief survey of historical aspects of the problem. Consideration of methods of disposal: water carrying systems and non-water carrying systems. Problem in rural communities. The sewer district law and its benefit to rural communities. Local methods of disposal.

III. Garbage and Refuse

The problem stated in terms of securing prompt removal and suitable disposal of general refuse, garbage, and ashes. Consideration of dangers from the accumulation of garbage, ashes, and refuse. Methods of disposal in small and large communities. Consideration and discussion of local methods of disposal.

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[1] Recommended as a supplementary course to round out the elementary classes in Household Sanitation (outlined under Elementary Nursing) and the course in Modern Social and Health Movements. The best place for this course is probably in the third year when the student is more closely in touch with community problems.

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IV. Excursion

Sewage disposal plant.

V. Water and Ice

The problem in terms of securing a safe supply. Dangers from polluted waters, water borne diseases; historical development; early methods of obtaining; great systems of Rome; water purification. Terminology: good, polluted, infected, and potable water. Purification processes. Misconception regarding the efficiency of household filters. Dangers from ice. Control of ice supply. Consideration of local supply.

VI. Excursion

Water purification plant.

VII. Milk and Other Foods

The problem stated in terms of securing an adequate and safe milk supply. Clean and non-infected food. Consideration of special dangers from milk, the source of these dangers, and methods of control. Community standards: physical, chemical, bacteriological, and sanitary standards. Grading of milk. Consideration of local milk supply. Consideration of dangers of unclean and infected food supplies, sources of these dangers, and methods of control. Meat inspection. Inspection of those who handle food. Adulteration and preservation of foods. Pure food legislation.

VIII. Excursion

Milk pasteurizing plant or a certified milk farm or a dairy which is supplying milk to the community.

IX. Excursion

City market or canning factory.

X. Schools and Public Buildings

The problem stated in terms of general construction of building and provision for health education. Relation to community health. Essentials of school sanitation as to construction, ventilation, lighting, seats, water supply, toilet facilities, etc. Medical inspection and school nursing in relation to health education. Rural school problems. Sanitation of other public buildings.

XI. Industrial Plants

The problem as it relates to the health of workers as seen in general construction of buildings, hours of work, type of work, personnel, etc. Brief survey of historical development of hygiene in industry. Economic and social aspects. Health hazards in industry; methods of prevention. Effects of monotony, fatigue, and overwork; relation to efficiency. Compensation and insurance. Women and children in industry. Medical service and other welfare work in industrial plants.

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XII. Excursion

Industrial factory.

XIII. Vital Statistics

Term defined. Value of vital statistics in public health work. The registration area for births and deaths. Important points in compiling statistics. Interpretation of statistical data. Methods of computing morbidity, mortality, and infant mortality rates.

XIV. Health Administration

National, state, county, city boards of health: organization, powers of each. Necessity for organizing around a definitely formed health program. Function of various bureaus. Consideration of national agencies and means of promoting health education.

XV. Examination

Methods of Teaching

I. Lecture and Class. If the lecture method is employed, the lectures should be followed up by class discussion and oral reports to be arranged for by the nurse instructor. Slides are valuable aid in presenting some of this material.

II. Class. The Problem Method of presentation is especially well adapted to this subject since it encourages thinking and class participation.

With either method, definite assignments should be made and written reports of all excursions submitted.

Equipment and Illustrative Material

Lantern slides, films, statistical charts, and photographs may be used to good advantage in this course.

Text and Reference Books

Group I

Broadhurst, Home and Community Hygiene
Chapin, Sources and Modes of Infection
Falk, Principles of Vital Statistics
A Health Survey of 86 Cities, American Child Health Association
Hill, The New Public Health
Park (Ed.), Public Health and Hygiene in Contributions of Eminent Authors
Ravenal, A Half Century of Public Health
Rosenau, Preventive Medicine and Hygiene

Journals and Pamphlets

Hygeia
Children's Bureau Publications
Department of Agriculture Publications
Rockefeller Foundation, Annual Reports of the International Health Board
Sanitary Codes

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State and Local Reports from Boards of Health
The Nation's Health
The World's Work
United States Public Health Service Reports

Group II

Boyle, The Ventilation of Public Buildings
Frankel and Fleisher, The Human Factor in Industry
Goldmark, Fatigue and Efficiency
Kinnicut, Winslow, and Pratt, Sewage Disposal
Kober and Hayhurst, The Industrial Health
Mason, Water Supply
Price, The Modern Factory
Sedgwick, Principles of Sanitary Science and Public Health
Wood, Sanitation Practically Applied

JOURNALS

The Public Health Nurse
The Survey

PHYSIOTHERAPY

Time: 15 hours divided into lectures, demonstrations, and laboratory practice.

Teacher: Supervisor of the physiotherapy department assisted by members of the physiotherapy personnel qualified to teach the various units outlined.

OBJECTS OF COURSE

1. To acquaint the student nurse with these particular phases of treatment, with no intention that she shall be able to give any specialized treatment, but rather that she shall have some knowledge of the vast field of physiotherapy.
2. That she may recognize a condition beyond her field, one requiring treatment by an individual who has been specially trained in physiotherapeutic measures, and refer such cases to his attention.

OUTLINE OF CLASSES

I. Introduction

(Class). Meaning of term physiotherapy. Physiotherapy agents and their nomenclature. Classification. Growth of physiotherapy impetus given by World War. Value of physiotherapy in hospitals and industrial accidents. Value of physiotherapy applied in the home by the nurse. General effects on function or structure to be gained from the use of these agents.

II–VII. Massage

(Class and Demonstration, 3 hours). Meaning of term massage. Classification of movements: stroking, friction, vibration, kneading, percussion. Physiological effects of each. Therapeutic effects of each. Some indications for massage. Contraindications for massage.

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(Laboratory, 3 hours). Practice in the five manipulations with special reference to the following: massage to head and neck to relieve insomnia; massage around pressure points for increased circulation to prevent pressure sores; massage following the removal of casts in fractures, especially to reduce oedema; massage to prevent muscle atrophy in bedridden patients, especially lower extremities; massage in lumbago, myalgias, etc.; massage in subacute and chronic stages of arthritis, neuritis, synovitis, etc.

VIII-IX-X. Therapeutic Exercises

(Class and Demonstration). Corrective exercises that may be used in the treatment of orthopedic and medical conditions. The Problem of reeducation.

(Laboratory). Practice in taking and giving exercises for the maintenance of correct posture. Special exercises for the correction of posture, deformities, weak abdominal muscles, back, feet, stretching, relaxing. Practice in adapting exercises to bed patients. Special exercises in constipation.

XI. Hydrotherapy

Value of water as a therapeutic agent. Application. General physiological effects. General therapeutic effects. Local and specific therapeutic effects. Therapeutic indications of hydriatic applications: internal and external procedures for derivative and analgesic effect, tonic and restorative effect, sedative effects, antipyretic effect, elimination effects.

XII-XIII. Laboratory

Demonstration of hydriatic applications. Special reference to methods of applying these measures with simple apparatus available in the home. Contrast bath for feet, hot bath for an extremity, following fracture.

XIV. Thermotherapy

Effect of application of light and heat. Types of equipment. Methods of use. Precautions in their use. After care of patients.

XV. Examination

Note: It will be noted that the outline on the Principles and Practice of Nursing includes a unit of elementary massage and several hours are devoted to hydrotherapy and a lesson in heliotherapy is included in the course in Materia Medica and Therapeutics. The outline given above is intended to supplement these earlier classes.

METHODS OF TEACHING

1. The lectures and class work should be supplemented by demonstrations and individual practice by each student under the supervision of the instructor.
2. An excursion should be made to the physiotherapy department to show the equipment in operation.
3. If possible, practical experience should be given in the physiotherapy department.

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EQUIPMENT AND ILLUSTRATIVE MATERIAL

Pictures. Charts. Individual pieces of equipment.

TEXT AND REFERENCE BOOKS

Group I

Clayton, Physiotherapy in General Practice
Despard, Textbook of Massage and Remedial Gymnastics
Drew, Individual Gymnastics
Kleen, Massage and Medical Gymnastics
Lippett, Manual of Corrective Gymnastics
McMillan, Massage and Exercise
Mennell, Massage, its Principles and Practice
Palmer, Lessons in Massage

Group II

Arvedson, Notes on Disease
Abbott, Hydrotherapy for Nurses
Baruch, Epitome of Hydrotherapy
Bowen and McKenzie, Applied Anatomy and Kinesiology
Kellogg, Rational Hydrotherapy
Sampson, Physiotherapy
Thomas and Goldthwaite, Body Mechanics and Health

OCCUPATIONAL THERAPY AND RECREATION

Time: 30 hours, divided as follows: lectures, 8 hours; instruction in one or more minor crafts,[1] 10 hours; observation and practice with patients in an occupational therapy department, 8 hours; observation and practice with patients in physical exercises and recreation, 4 hours. (This does not include the occupation therapy practice which the student gets in connection with her nursing practice in the wards).

Teacher: Classes conducted by a qualified occupational therapist. Observation and practice with an expert occupational therapist and a qualified director of physical culture and recreation. Lectures by physicians engaged in the several fields of medicine.

OBJECTS OF THE COURSE

(1) To give some idea of the basic principles underlying occupational therapy, not with the idea of training a specialist in this branch but of giving a basis of appreciation and cooperation.

(2) To give some knowledge and skill in the simpler methods and technique employed for ordinary cases.

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[1] The following handicrafts are usually classed as "minor crafts" by occupational therapists: netting, knotting, cordwork, beadwork, hand and rake knitting, stencilling and block printing, needle crafts.

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Outline of Lectures and Classes

I–II. History and Purpose of Occupational Therapy

(Lectures). For content of these two lectures see an Outline of Lectures to Medical Students and Physicians in Vol. IV, August 1925, Occupational Therapy and Rehabilitation.

III. Application of Principles of Occupational Therapy for the Use and Treatment of Surgical Patients

(Lecture and discussion). Motive: restoration of function, mental or physical. Types of surgical cases and forms of occupational therapy applicable to them. Selection of crafts, etc.

IV. Application of Principles of Occupational Therapy for the Use and Treatment of Orthopedic Cases

(Lecture). Importance and extent of field. The many types of bone disease and the forms of occupational therapy applicable to or contraindicated in each.

V. Application of Principles of Occupational Therapy for the Use and Treatment of Mental Cases

(Lecture). Types of mental hospitals, comparative numbers in each and types of occupational therapy used in each hospital and in each of the several types of mental disease in the different institutions as is prescribed by the physician.

VI. Application of Principles of Occupational Therapy for the Use and Treatment of Tuberculosis

(Lecture and discussion). Different stages of the disease and the forms of occupational therapy applicable to or contraindicated in each case in the hospital and after discharge. Value of occupational therapy in occupying attention during spare time, making patients more contented, and adding to their economic value after discharge.

VII. Applications of Principles of Occupational Therapy for the Use and Treatment of Medical Cases: Ward Patients and Out-patients

(Lecture and discussion). Types of medical disease and the forms of occupational therapy applicable to or contraindicated in each case. For further content see An Outline of Lectures to Medical Students and Physicians, in Vol. IV, No. 4, August 1925, Occupational Therapy and Rehabilitation.

VIII. Recreation and Physical Exercises for Hospital Patients

(Lecture). Gymnastics and calisthenics that are given for their value in a patient's physical reeducation, or in habit training in mental hospitals. Recreation and play activities, such as music emphasizing general and social value for the patient.

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Text and Reference Books

Bean, Bookbinding for Beginners
Blanchard, The Basketry Book
Dunton, Occupational Therapy (A Manual for Nurses)
Haas, Occupational Therapy for Mentally and Nervously Ill
Hall and Buck, Handicrafts for the Handicapped
Hall and Buck, The Work of Our Hands
Hooper, Weaving with Small Appliances, Book II Tablet Making
James, Practical Basket Making
Occupational Therapy and Rehabilitation Journal
Perry, Seat Weaving
Sanford, The Art Crafts for Beginners
Shaw, Knots, Useful and Ornamental
Slagle, Annual Reports of Division of Occupational Therapy, New York State Hospital Commission
Tracy, Invalid Occupation
Verrill, Knots, Splices, and Rope Work
Walker, Varied Occupations in String Work
White, How to Make Baskets
Worst, Industrial Work for the Middle Grades

ELEMENTS OF SOCIAL SCIENCE[1]

Time: 15 hours, lectures and classes.

Teacher: If it is possible to secure from a nearby college an instructor of sociology who is able to relate the general principles to health problems, it is desirable. A nurse or social worker if qualified to discuss sociological principles may teach this course.

Objects of the Course

1. To give the student nurse a background of knowledge of the evolution of society and the importance of an appreciation of the different problems which have been overcome in the past in order to reach our present development.
2. To help her understand her relationship to all other altruistic endeavor.
3. To give her a perspective and thus help her to a better evaluation of modern movements.
4. To supplement the history and ethics of nursing.

Outline of Lectures and Classes

I. Present Day Problems

Health. Education. Occupation. Recreation. Spiritual Life.

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[1] This course is recommended as an introduction to the course in Modern Social and Health Movements or as a supplementary course to be given later in connection with community field work.

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II. Social Science

Methods of approach to an understanding of human relationships

III. Human Origins

Eugenics. Heredity. Variation. Mendel's law and its application. The theory of mutual struggle and mutual aid. Euthenics.

IV, V, VI, VII, VIII. Development of Society

Mental and cultural development. Rise of civilization. The family. The State. Property practices. Origin of political groups. Democracy and citizenship. Economic reorganization. Industrial revolution. Collective bargaining. Religion: its relation to civilization.

IX. Habits

Their basis and relation to personality.

X. Personality and Social Attitudes

Development of the individual.

XI. Social Interaction

Relation of individuals to one another. Antagonism. Coöperation. Change and continuity.

XII, XIII, XIV. Social Organization and Progress

Community responsibility. Group thought and action. Contribution of special groups. School legislation.

XV. Examination

TEXT AND REFERENCE BOOKS

Group I

Bosanquet, The Family
Bryce, American Commonwealth
Chapin, Introduction to the Study of Social Evolution
Conklin, Heredity and Environment in the Development of Men
Devine, Normal Life
Dinwiddie, Community Responsibility
Ellwood, Introduction to Social Psychology
Gillin, Poverty and Dependency
Healy and Bronner, Case Studies Series 1 Case 15
Hill, The New Hygiene
Kropotkin, Mutual Aid
Sayles, The Problem Child in School
Steiner, Community Organization
Todd, Scientific Spirit and Social Work

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Group II

Allport, Social Psychology
Babson, Recent Labor Progress
Burch and Patterson, American Social Problems
Chapin, Introduction to the Study of Social Evolution
Cooley, Human Nature and the Social Order
Darwin, Origin of Species
Dewey, Human Nature and Conduct
Goodsell, History of the Family as a Social and Educational Institution
Oppenheimer, The State: Its History and Development Viewed Sociologically
Todd, Theories of Social Progress
Towne, Social Problems

COURSE TO SUPPLEMENT COMMUNITY HEALTH EXPERIENCE

Students who are having field experience in connection with community health associations would be expected to have a course of classes, demonstrations, and conferences to supplement their field experience. This would be provided by the staff of the affiliating organization and would have to be arranged to meet the special conditions and needs of the community and the organization concerned.

It is impossible at this time to outline in any detail the content of such a course, but it is hoped that the committee now at work on the problem will have some suggestions to make later.

Many progressive visiting nursing associations have been conducting such a teaching program for years, both for their affiliating students and for new members of their staffs. Such programs usually include a series of practical demonstrations to show approved home technique for both preventive and bedside care in maternity cases, communicable disease cases, etc.

It is necessary also to explain the regulations of the association, to introduce students to the community agencies with whom they will be dealing, and to discuss the procedures to be followed in typical situations. It is assumed that definite case assignments will be made and that individual and group conferences will be arranged to discuss these. The unit for such case studies will be the family rather than the individual patient.

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EXTRA-CURRICULAR ACTIVITIES

All schools are expected to provide not only for a definite curriculum of theoretical and practical instruction, but also for certain extra curricular activities such as religious services, sports, clubs, concerts, parties, school publications, student government, etc. Although such activities are not usually listed in the course of study they constitute a highly important part of the educational program of the school and are often more effective in the building of social attitudes, ideals, and habits, than the more formal and systematic instruction of the classroom and the ward. If these extra curricular activities are left wholly or mainly to chance, the results may be such as to neutralize or defeat the whole purpose of the school. The school is responsible not only for providing opportunity for these non-academic and social activities, but also for seeing that certain standards are maintained.

No attempt will be made in the present issue to outline the content of a desirable extra curricular program. A subcommittee is now at work on this subject and will report later. It may be well to observe here, however, that such a program is designed for the students' leisure time, and it would be quite futile to expect it to be adopted by a student body which has little or no leisure time to count on. The very essence of a good program of this sort is that it should develop out of the spontaneous interests and needs of the students themselves, that it should embody the play spirit rather than the work spirit, and that it should be organized and carried largely on the initiative of interested student groups. It would, therefore, be unwise and more or less useless to attempt to define what such a program should be for nursing schools at large.

A few suggestions are given to show the scope of extra curricular activities which have been taken up by student groups in nursing schools at various times and in various places, and which have proven stimulating and broadening, as well as enjoyable and satisfying to student nurses. It will be understood, of course, that no one school would probably ever be able to find a place for all these activities, and even though they should all be available, the individual student would have to choose only such activities as she could carry without doing injury to her health and to her regular program of professional study and experience.

Athletics

Games such as basketball, handball, archery, tennis, etc.; general exercises such as swimming, dancing, hiking, etc.

The Arts

Dramatics: pageants, plays, etc.; music: chorus, orchestra, etc.; drawing, painting, photography; visits to museums, concerts, etc. for appreciation of art and music.

Literature and Speech

English literature: plays, poetry, fiction, etc.; writing (for student publications and other amateur journalistic activities); voice training (for con-

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versation and reading aloud); public speaking; parliamentary law; current events; foreign languages (for conversational use).

Social Activities

Parties, receptions, teas, picnics, etc.

Professional Activities

Organizations for student government or for different class groups; journal clubs: reading or discussion clubs for those interested in special subjects such as social problems, psychology, history of nursing, etc.

Religious Activities

Young Women's Christian Association; St. Barnabas Guild; Catholic Nurses' Club, etc.

MAKE-UP WORK IN GENERAL EDUCATION

Even where nursing schools require full high school for admission, a few individuals may be found to be weak in such fundamental subjects as arithmetic, spelling, or English. This will be true particularly in the case of foreign students whose education may have covered a rather different ground and who may have some language handicap. Slight deficiencies of this kind are sometimes removed through tutoring or make-up classes, supplementing the regular program of study. It would be very unwise, however, to attempt to supply any considerable gaps in general education after admission. If they can not be corrected within the first two or three months by a small amount of extra work, the student should be required to postpone her professional training until she has made up her educational deficiencies.

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APPENDIX I

BIBLIOGRAPHY

The following list of books and magazines includes all those mentioned in the preceding pages, with publishers, prices, and dates of publication. The prices given are those in effect at the time of the publication of the Revised Curriculum (1927). It is suggested that this list be used as a basis of selection for the Nursing School Library.

Abbott, G. N.: Elements of Hydrotherapy for Nurses. Review and Herald Publishing Association. 1925. $1.50

Abt, H. E.: The Care, Cure and Education of the Crippled Child. International Society for Crippled Children. 1924. $3.50

Adami, J. G., M.D. and McCrae, John, M.D.: Textbook of Pathology. Lea & Febiger. New (3rd) Edition in Preparation.

Adams, Elizabeth K.: Women Professional Workers. Macmillan. 1921. $2.50

Addams, Jane: A New Conscience and an Ancient Evil. Macmillan. 1912. $1.50

*Addams, Jane: Democracy and Social Ethics. Macmillan. 1902

Addams, Jane: Twenty Years at Hull House. Macmillan. 1923. $2.50

Adler, Felix: Reconstruction of the Spiritual Ideal. Appleton. 1924. $1.50

Allport, Floyd H.: Social Psychology. Houghton Mifflin. 1924. $2.50

Alvarez, W. C.: Mechanics of the Digestive Tract. Hoeber. 1922. $3.50

American Journal of Diseases of Children. American Medical Association. 535 North Dearborn Street, Chicago, Illinois. $4.00

American Child Health Association: Health Survey of 86 Cities. American Child Health Association. 1925. $3.00

American Journal of Nursing. 19 West Main Street, Rochester, New York. $3.00

American Journal of Psychiatry. Johns Hopkins Press, Baltimore, Maryland. $5.00

American Journal of Syphilis. C. V. Mosby Company, 3616 Washington Boulevard, St. Louis, Missouri. $10.00

American Medical Association. New and Non-official Remedies. 1925. $1.50

American Medical Association. Nostrums and Quackery. 1921. $2.00

American Medical Association. Propaganda for Reform. 1922. Vol. I, $1.00, Vol. II, $2.00.

American Medical Association. Useful Drugs. 1925. $.60

American Nurses' Association. Digest of the Laws of States Requiring Registration for Nurses and Attendants. 1926. $.50.

American Nurses' Association. List of Schools of Nursing Accredited by the State Boards of Nurse Examiners. 1926. $1.50

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* Out of print. May be obtained in second-hand copies only.

Digitized by Google

Archives of Dermatology and Syphilology. American Medical Association, 535 North Dearborn Street, Chicago, Illinois. $8.00

Archives of Neurology and Psychiatry. American Medical Association, 535 North Dearborn Street, Chicago, Illinois. $8.00

Archives of Pediatrics. E. B. Treat Company, 45 East 17th Street, New York, New York. $5.00

Arey, Leslie B. Developmental Anatomy. Saunders. 1924. $5.50

Arvedson, Johan Emil: Notes on Diseases Treated by Medical Gymnastics and Massage. Blakiston. 1926. $2.25

Australasian Nurses' Journal, 30–34 Elizabeth Street, Sydney, Australia, 6d per copy

Babson, Roger W.: Recent Labor Progress. Revell. 1924. $2.00

Bachman, George, and Bliss, A. R.: Essentials of Physiology Including Pharmacodynamics of the Important Typical Drugs. Blakiston. 1926. $4.00

Bacon, Gorham, and Saunders, T. L.: Manual of Otology. Lea & Febiger. 1918. $4.00

Bailey, Harriet: Nursing Mental Diseases. Macmillan. 1920. $1.50

Baker, S. J.: Child Hygiene. Harper & Bros. 1925. $3.75

Bardwell, Francis: Adventures of Old Age. Houghton Mifflin. 1926. $2.00

Bartlett, Eleanor H. and Ink, Katherine.: The Principles of Chemistry and Their Application. Macmillan. In Preparation.

Baruch, Simon, M.D.: Epitome of Hydrotherapy. Saunders. 1920. $2.25

*Baruch Simon, M.D.: Principles and Practice of Hydrotherapy. Wood. 1908

Bastedo, W. A., M.D.: Materia Medica, Pharmacology Therapeutics and Prescription Writing. Saunders. 1918. $6.00

Bean, Florence, and Brodhead, J. C.: Bookbinding for Beginners. Davis Press. 1924. $2.50

Beers, Clifford W.: A Mind that Found Itself. Doubleday, Page & Co. 1923. $2.00

Beery, Pauline G.: Chemistry Applied to Problems of Home and Community. Lippincott. 1926. $3.50

Bellevue School of Nursing Procedures. Macmillan. 1923. $1.40

Bellows, Jane: Individual Exercises. Woman's Press. 1923. $1.00

Berdoe, Edward: Origin and Growth of the Healing Art. Swan, Sommenschen & Co. London. 1893

Berry, J. McW., M.D.: Orthopedic Surgery for Nurses. Saunders. 1916. $1.00

Bigelow, Maurice A.: Adolescence, Educational and Hygienic Problems. Funk & Wagnalls. 1924. 20 vol. $6.00; per vol. 30¢

Bigelow, Maurice A.: Applied Biology. Macmillan. 1912. $2.00

Bigelow, Maurice A.: Sex Education. Macmillan. 1916. $1.60

Bigelow, Maurice A.: The Established Points in Social Hygiene Education, 1905–24. Public Health Nurse 1924. Reprinted American Social Hygiene Association. 10¢

Binder, R. M.: Health and Social Progress. Prentice-Hall. 1920. $3.00

Digitized by Google

Black, G. V.: Descriptive Anatomy of the Human Teeth. S. S. White Dental Manufacturing Co. 1902. $2.50

Blair, V. P., M.D.: Surgery and Diseases of the Mouth and Jaws. Mosby. 1917. $7.50

Blanchard, Mary M.: The Basketry Book. Scribner. 1919. $3.00

Blumgarten, A. S., M.D.: Materia Medica for Nurses. Macmillan. 1924. $3.00

Boardman, Mabel: Under the Red Cross Flag. Lippincott. 1917. $2.50

Bogert, L. Jean: Fundamentals of Chemistry. Saunders. 1924. $2.75

Bolduan, C. F. and Grund, Marie: Applied Bacteriology for Nurses. Saunders. 1923. $1.75

Bosanquet, Helen: The Family. Macmillan. 1915. $2.50

Bowen, W. P.: Applied Anatomy and Kinesiology. Lea & Febiger. 1923. $3.75

Boyle, R.: The Ventilation of Public Buildings. R. Boyle, London. 1923. $2.00

Brainard, Annie: Evolution of Public Health Nursing. Saunders. 1922. $3.00

*Breckinridge, S. P.: New Homes for Old. Harper & Bros. 1921

Bridge, H. L.: Manual of Practical Nursing. Mosby. 1916. $1.00

British Journal of Nursing, 431 Oxford Street, London, England. Per copy 7d

Broadhurst, Jean A.: Bacteria in Relation to Man. Lippincott. 1925. $3.00

Broadhurst, Jean A.: Home and Community Hygiene. Lippincott. 1925. $3.00

Broadhurst, Jean A.: How We Resist Disease. Lippincott. 1923. $3.00

Brown, A. G.: The Normal Child. Century Co. 1923. $1.25

*Brown, Charlotte A.: The Junior Nurse. Lea & Febiger. 1919

Brown, Lawrason, M. D.: Rules for Recovery from Pulmonary Tuberculosis, A Layman's Handbook of Treatment. Lea & Febiger. 1923. $1.50

Brownlee, R. B. and Others: Chemistry of Common Things. Allyn & Bacon. 1915. $1.80

Brubaker, A. P., M.D.: Textbook of Human Physiology. Blakiston. 1925. $5.00

*Brunton, T. L.: Lectures on the Action of Medicines. Macmillan. 1903

Bryce, James B.: American Commonwealth. 2 vol. Macmillan. 1922–23. $8.00

Buchanan, Edith D. and Robert E.: Bacteriology for Students in General and Household Science. Macmillan. 1921. $2.60

Bundy, Elizabeth: Anatomy and Physiology for Nurses. Blakiston. 1922. $2.50

Burch, H. R. and Patterson, S. H.: American Social Problems. Macmillan. 1918. $1.68

Burchard, H. H.: Dental Pathology. Lea & Febiger. 1920. New Edition in Preparation

Burnham, Athel C.: The Community Health Problem. Macmillan. 1920. $1.50

Burnham, W. A.: The Normal Mind. Appleton. 1924. $2.75

Digitized by Google

Burr, C. B., M.D.: Practical Psychology and Psychiatry. Davis Co. 1921. $2.00

Burton-Optiz, R.: An Elementary Manual of Physiology. Saunders. 1925. $2.50

Burton-Optiz, R.: Textbook of Physiology. Saunders. 1920. $8.00

Cabot, E. L.: Every Day Ethics. Holt. 1906. $1.48

*Cabot, Richard C., M.D.: Medical Social service. Dodd, Mead & Co. 1912

Cabot, Richard C., M.D.: Social Service and The Art of Healing. Dodd, Mead & Co. 1909. $2.00

Cabot, Richard C., M.D.: Social Work. Houghton Mifflin. 1919. $2.00

Cabot, Richard C., M.D.: What Men Live By. Houghton Mifflin. 1914. $2.50

Campbell, Charles Macfie: Present Day Conception of Mental Disorders. Harvard University Press. 1924. $1.00

Canadian Nurse (Magazine), 609 Boyd Building, Winnipeg, Canada. $2.00

Cannon, Ida M.: Social Work in Hospital. Russell Sage Foundation. 1923. $1.50

Cannon, W. B., M.D.: Bodily Changes in Pain, Hunger, Fear and Rage. Appleton. 1920. $3.00

*Cannon, W. B., M.D.: The Mechanical Factors of Digestion. Longmans Green & Co. 1911

Carey, H. W. M.D.: A Textbook for Nurses in Bacteriology. Davis Co. 1924. $1.25

Carlson, A. J.: Control of Hunger in Health and Disease. University of Chicago Press. 1916. $2.60

*Carpenter, R. C.: Heating and Ventilating Buildings. Wiley. 1915

Carter, H. S., Howe, P. E. and Mason, H. H.: Nutrition and Clinical Dietetics. Lea & Febiger. 1923. $7.50

Chapin, C. V., M.D.: The Sources and Modes of Infection. Wiley. 1912. $3.50

Chapin, F. S.: An Historical Introduction to Social Economy. Century Co. 1917. $3.00

Chapin, F. S.: Introduction to the Study of Social Evolution. Century Co. 1913. $3.00

Charters, W. W.: Curriculum Construction. Macmillan. 1923. $2.00

Chenery, William L.: Industry and Human Welfare. Macmillan. 1922. $1.75

Children's Foundation: The Child, His Nature and His Needs. Children's Foundation. 1924. $1.00

Clayton, Edward B.: Physiotherapy in General Practice. Wood. 1924. $3.50

Coakley, C. G., M.D.: Diseases of Nose and Throat. Lea & Febiger. 1922. $4.25

Colp, Ralph, and Keller, M. W.: Textbook of Surgical Nursing. Macmillan. 1921. $3.00

Colvin, S. S., and Bagley, W. C.: Human Behavior. Macmillan. 1913. $1.60

Digitized by Google

Conklin, Edwin G.: Heredity and Environment in the Development of Men. Princeton University Press. 1923. $2.50
Conn, H. W.: Bacteria, Yeasts and Moulds in the Home. Ginn & Co. 1917. $1.48
*Cook, Sir Edward: Life of Florence Nightingale. 2 vols. Macmillan. 1913
Cook, Sir Edward: A Short Life of Florence Nightingale. Macmillan. 1925. $3.50
Cooke, J. B., M.D.: A Nurse's Handbook of Obstetrics. Lippincott. 1924. $3.00
Cooley, Charles H.: Human Nature and the Social Order. Scribner's Sons. 1922. $2.00
Councilman, W. T., M.D.: Disease and Its Causes. Holt. 1913. $1.00
Crampton, C. Ward: Physical Exercises for Daily Use. Putnam. 1924. $3.50
Crossen, H. S.: Diseases of Women. Mosby. 1922. $11.00
*Crowell, F. Elizabeth: Tuberculosis Dispensary Method and Procedure. National Tuberculosis Association. 1916
Curtis, C. C.: Nature and Development of Plants. Holt. 1914. $3.00
Cutler, Bessie: Pediatric Nursing. Macmillan. 1923. $3.50
*Cyriax, E. F., M.D.: Kellgren's Manual Treatment. Wood. 1904
DaCosta, J. C., M.D.: Modern Surgery, General and Operative. Saunders. 1925. $10.00
Darwin, Charles R.: Origin of the Species. Collier and Sons. 1902. $2.00
Davenport, C. B.: Heredity in Relation to Eugenics. Holt. 1911. $2.75
Davis, A. E., and Douglass, B.: Nursing in Eye, Ear, Nose and Throat Diseases. Davis Co. 1920. $2.50
Davis, G. G., M.D.: Applied Anatomy. Lippincott. 1924. $9.00
Davis, G. G., M.D.: Principles and Practice of Bandaging. Blakiston. 1911. $1.25
Davis, Michael M.: Clinics, Hospitals and Health Centers. Harper. 1926. $5.00
*Davis, Michael M.: Immigrant Health and the Community. Harper. 1921.
Dawson, Percy M., M.D.: Elements of Anatomy and Physiology for Nurses. Macmillan. 1917. $1.75
Delafield, Francis, M.D., and Prudden, T. M., M.D.: Textbook of Pathology. Wood. 1925. $10.00
Delano, Jane: Home Hygiene and Care of Sick. Blakiston. 1922. $1.50
DeLee, J. B., M.D.: Obstetrics for Nurses. Saunders. 1924. $3.00
DeSchweinitz, George E.: Diseases of the Eye. Saunders. 1924. $10.00
DeSchweinitz, Karl: The Art of Helping People out of Trouble. Houghton Mifflin. 1924. $2.00
Despard, L. L.: Textbook of Massage and Remedial Gymnastics. Oxford University Press. 1920. $6.65
Devine, Edward T.: Misery and Its Causes. Macmillan. 1913. $1.75
Devine, Edward T.: Social Work. Macmillan. 1922. $3.00
Devine, Edward T.: The Normal Life. Macmillan. 1921. $1.50
Dewey, John: Democracy and Education. Macmillan. 1920. $2.50
Dewey, John: How We Think. Heath. 1912. $1.60

Digitized by Google

Dewey, John: Human Nature and Conduct. Holt. 1922. $2.25
Dewey, John, and Tufts, J. H.: Ethics. Holt. 1908. $2.50
DeWitt, Katherine: Private Duty Nursing. Lippincott. 1913. $2.00
Dickens, Charles: Martin Chuzzlewit. Oxford University Press. 1912. $3.00
Dinwiddie, Courtenay: Community Responsibility. New York School of Social Work. 1921. $.35
Doane, R. W.: Insects and Disease. Holt. 1910. $2.00
Dock, Lavinia L.: Hygiene and Morality. Putnam. 1910. $1.50
Dock, Lavinia L., and Quimby, J. C.: Textbook of Materia Medica for Nurses. Putnam. 1926. $2.25
Dock, Lavinia L., and Stewart, Isabel M.: Short History of Nursing. Putnam. 1925. $3.00
Doty, Alvah H.: Prompt Aid to the Injured. Appleton. 1914. $2.00
Drake, Durant: Problems of Conduct. Houghton Mifflin. 1921. $2.50
Drew, Lillian C.: Individual Gymnastics. Lea & Febiger. 1926. $2.25
Duke, W. W.: Oral Sepsis in Its Relation to Systemic Disease. Mosby. 1918. $2.75
Dunton, W. R., M.D.: Occupation Therapy, a Manual for Nurses. Saunders. 1917. $1.75
East, Edward M.: Mankind at the Crossroads. Scribners. 1923. $3.50
Edgar, J. Clifton, M.D.: Practice of Obstetrics for Students and Practitioners of Medicine. Blakiston. 1926. $8.00
Eliason, E. L., M.D.: First Aid in Emergencies. Lippincott. 1920. $1.75
Eliason, E. L., M.D.: Practical Bandaging. Lippincott. 1924. $1.75
Ellwood, C. A.: Introduction to Social Psychology. Appleton. 1917. $2.25
Ellwood, C. A.: Sociology and Modern Social Problems. American Book Co. 1924. $1.48
Emerson, C. P., M.D.: Essentials of Medicine. Lippincott. 1925. $3.00
Emerson, Harrington: Twelve Principles of Efficiency. Engineering Magazine Co. 1924. $3.00
Emerson, Ralph Waldo: Essays. Houghton Mifflin. (Cambridge Classics). $1.75
Emerson, W. R. P., M.D.: Nutrition and Growth in Children. Appleton. 1922. $2.50
Encyclopedia Brittanica. Encyclopedia Brittanica Publishing Company. 1926. (13th Edition). $99.20
Endelman, Julio, and Wagner, A. F.: General and Dental Pathology with Special Reference to Etiology and Pathologic Anatomy. Mosby. 1920. $7.00
Epler, Percy H.: Life of Clara Barton. Macmillan. 1917. $2.50
Falk, Henry C.: Operating Room Procedure for Nurses and Internes. Putnam. 1925. $2.50
Falk, I. S.: Principles of Vital Statistics. Saunders. 1923. $2.50
Farmer, F. M.: Foods and Cookery for the Sick and Convalescent. Little, Brown & Co. 1917. $2.50
Fisher, Irving, and Fisk, E. L., M.D.: How to Live. Funk & Wagnalls. 1925. $2.00

Digitized by Google

Fones, A. C.: Mouth Hygiene. Lea & Febiger. 1921. $5.00
Ford, James: Social Problems and Social Policy. Ginn & Co. 1923. $4.00
Fox, Herbert, M.D.: Bacteriology and Protozoology for Nurses. Lea & Febriger. 1919. $2.25
Frankel, L. K., and Fleisher, Alexander: The Human Factor in Industry. Macmillan. 1920. $2.50
Franz, Shepherd I.: Nervous and Mental Re-education. Macmillan. 1923. $2.75
Frazer, J. G.: Leaves from The Golden Bough. Macmillan. 1924. $3.00
French, Herbert: Index of Differential Diagnosis. Wood. 1926. $12.00
Freud, Sigmund: Introductory Lectures on Psychoanalysis. Allen & Unwin. London. 18s
Friedenwald, Julius, and Ruhräh, John: Dietetics for Nurses. Saunders. 1924. $2.25
Fuch, Ernst, M.D.: Opthalmology. Lippincott. 1923. $9.00 (By subscription only).
Fuelkerson, Lynn L.: Gynecologic Urology. Blakiston. 1925. $6.00
Galpin, C. J.: Rural Social Problems. Century Co. 1924. $2.00
Gardner, Mary S.: Public Health Nursing. Macmillan. 1924. $3.00
Gates, Arthur I.: Psychology for Students of Education. Macmillan. 1923. $2.50
*Gerrish, F. R., M.D.: Anatomy. Blakiston. 1902.
Gesell, Arnold L.: Pre-school Child from the Standpoint of Public Hygiene and Education. Houghton Mifflin. 1923. $1.90
Gibson, Anna: Clinical Laboratory Technic for Nurses. M. Barrows & Co. 1924. $2.00
Gillin, J. L.: Poverty and Dependency. Century Co. 1921. $4.00
Gleason, E. B., M.D.: Manual of Diseases of Nose, Throat and Ear. Saunders. 1924. $4.00
Goddard, H. H.: The Kallikak Family. Macmillan. 1912. $2.50
Goldmark, Josephine: Fatigue and Efficiency. Russell Sage Foundation. 1912. $2.00
Goldmark, Josephine: Report of Committee on Nursing and Nursing Education in the United States. Macmillan. 1923. $2.00
Goodnow, Minnie: Outlines of Nursing History. Saunders. 1923. $3.00
Goodsell, Willystine: History of the Family as a Social and Educational Institution. Macmillan. 1915. $3.00
Goostray, Stella: Drugs and Solutions for Nurses. Macmillan. 1924. $1.40
Goostray, Stella, and Karr, W. G., Ph.D: Applied Chemistry for Nurses. Macmillan. 1924. $1.75
Graham, Douglas: Massage. Lippincott. 1913. $6.00
Gray, Henry: Anatomy of the Human Body. (Lewis Edition). Lea & Febiger. 1924. $10.00
Griffith, J. P. C.: Care of the Baby. Saunders. 1923. $2.50
Griffith, J. P. C.: Diseases of Infants and Children. 2 vol. Saunders. 1919. $18.00
Groves, E. R.: Personality and Social Adjustment. Longmans Green. 1923. $1.40

Digitized by Google

Gruenberg, Benjamin C.: Parents and Sex Education. American Social Hygiene Association. 1923. $1.00

Gulick, L. H., and Ayres, L. P.: Medical Inspection of Schools. Russell Sage Foundation. 1913. $1.50

Guyer, M. F.: Being Well Born. Bobbs-Merrill. 1916. $2.00

Haas, Louis J.: Occupational Therapy for the Mentally and Nervously Ill. Bruce Publishing Company. 1925. $6.00

Hadfield, James A.: Psychology and Morals. McBride. 1925. $2.00

Hall, G. Stanley: Life and Confessions of a Psychologist. Appleton. 1923. $5.00

*Hall, H. J. and Buck, M. MacCrea: The Work of Our Hands. Dodd Mead & Co. 1915

*Hall, H. J. and Buck, M. MacCrea: Handicraft for the Handicapped. Dodd Mead & Co. 1917

Halliburton, W. D., M.D.: Handbook of Physiology. Blakiston. 1921. $4.75

Hare, H. A., M.D.: Practical Therapeutics. Lea & Febiger. 1925. $7.00

Harmer, Bertha: Textbook of Methods and Principles of Teaching the Principles and Practice of Nursing. Macmillan. 1926. $2.25

Harmer, Bertha: Textbook of the Principles and Practice of Nursing. Macmillan. 1922. $3.00

Hart, Bernard: The Psychology of Insanity. Macmillan. 1916. $1.00

Harvard Health Talks. Harvard University Press. $1.00

Hawk, Philip B.: Practical Physiological Chemistry. Blakiston. 1923. $6.50

Healy, William: Mental Conflicts and Misconduct. Little Brown & Co. 1917. $3.00

Healy, William, and Bronner, A. F.: Case Studies. Judge Baker Foundation. 1923. $2.50

*Herter, C. A.: Biological Aspects of Human Problems. Macmillan. 1911

Hess, Alfred, M.D.: Scurvy, Past and Present. Lippincott. 1920. $4.00

Hess, Julius H., M.D.: Feeding and the Nutritional Disorders in Infancy and Childhood. Davis Co. 1925. $4.50

Higgins, A. S.: Psychology of Nursing. Putnam. 1921. $1.75

Hill, H. W.: The New Hygiene. Macmillan. 1925. $2.50

Hill, H. W.: The New Public Health. Macmillan. 1920. $1.50

Hill, Lewis W., M.D.: Infant Feeding. Saunders. 1922. $5.00

*Hinsdale, Guy, M.D.: Hydrotherapy. Saunders. 1910

Hirsh, C. S.: Compend of Genito-urinary Diseases and Syphilis. Blakiston. 1925. $2.00

Hirst, John C.: Manual of Gynecology. Saunders. 1925. $3.50

Hiss, P. H., and Zinsser, Hans: A Textbook of Bacteriology. Appleton. 1921. $7.50

Holt, L. Emmett, M.D.: Care and Feeding of Children. Appleton. 1923. $1.25

Holt, L. Emmett, and Howland, John: Diseases of Infancy and Childhood. Appleton. 1922. $7.50

Hooper, Luther: Weaving with Small Appliances, Book II Tablet Weaving. Isaac Pitman. 1922–1925. $2.25

Digitized by Google

Hopkins, W. B., M.D.: The Roller Bandage. Lippincott. 1911. $1.75
Hospital Corps Handbook, United States Navy. Government Printing Office. 1923. $1.00
Hospital Progress (Magazine) Bruce Publishing Co., 129 Michigan Street, Milwaukee, Wis. $3.00
Hospital Social Service (Magazine) Hospital Social Service Association, 9 E. 37th Street, New York, N. Y. $3.00
Hough, Theodore, and Sedgwick, W. T.: Human Mechanism. Ginn & Co. 1918. $2.40
Howell, W. H., M.D.: Textbook of Physiology for Medical Students and Physicians. Saunders. 1921. $6.50
Hughes, D. E., M.D.: Practice of Medicine. Blakiston. 1925. $4.00
Hughes, G. S.: Mothers in Industry. New Republic Inc. 1925. $1.00
Huxley, T. H., and Barcraft, J.: Elementary Physiology. Macmillan. 1915. $2.90
Hygeia (Magazine). American Medical Association. 535 North Dearborn Street, Chicago, Ill. $3.00
I. C. N., The, (Magazine). International Council of Nurses, 1 Place du Lac, Geneva, Switzerland. $1.00
Jacobs, Philip: The Tuberculosis Worker. Williams & Wilkins. 1923. $3.00
James, George Wharton: Practical Basket Making. J. L. Hammett. 1924. $1.75
James, William: Psychology, Briefer Course. Holt. 1923. $2.50
James, William: Talks to Teachers. Holt. 1900. $2.00
Johnsen, Julia E.: (Compend) Selected Articles on Child Labor. H. W. Wilson Co. 1925. $2.40
Jones, F. D. and Hammond, E. K.: Shop Management and Systems. The Industrial Press. 1920. $3.00
Jones, Robert, and Lovett, R. W.: Orthopedic Surgery. Wood. 1923. $9.00
Jordan, E. O.: Textbook of General Bacteriology. Saunders. 1924. $5.00
Journal of the American Medical Association, 535 N. Dearborn St., Chicago, Ill. $5.00
Journal of Bacteriology. Williams & Wilkins, Baltimore, Md. $5.00
Journal of Infectious Diseases. John McCormick Institute for Infectious Diseases, 629 South Wood St., Chicago, Ill. $5.00
Journal of the Outdoor Life. National Tuberculosis Association. 370 Seventh Ave., New York, N. Y. $2.00
Karsner, Howard T., and Ecker, E. E.: The Principles of Immunology. Lippincott. 1921. $5.00
Kellogg, J. H., M.D.: Rational Hydrotherapy. Modern Medicine Publishing Co. 1924. $7.50
Kelly, Helen W., and Bradshaw, Mabel C.: Handbook for School Nurses. Macmillan. 1918. $1.50
Kelly, Irene V.: Textbook of Nursing Technique. Saunders. 1926. $2.50
Ker, Claude B.: Treatment of Infectious Diseases. Oxford University Press. 1920. $13.00
Kerley, C. G., M.D.: Practice of Pediatrics. Saunders. 1924. $9.00

Digitized by Google

Kerley, C. G., M.D.: Short Talks with Young Mothers. Putnam. 1926. $1.50

Kilduffe, Robert, M.D.: Bacteriology and Applied Immunology. Bruce Publishing Co. 1926. $2.00

Kilpatrick, William H.: Foundations of Method. Macmillan. 1925. $2.00

Kimber, Diana C., and Gray, Carolyn E.: Textbook of Anatomy and Physiology. Macmillan. 1923. $3.00

Kinnicut, L. P., Winslow, C.-E. A., and Pratt, R. W.: Sewage Disposal. Wiley. 1919. $5.00

Kitson, H. D.: How to Use Your Mind. Lippincott. 1921. $1.75

*Kleen, E. A. G.: Massage and Medical Gymnastics. Wood. 1921

Kober, G. M., and Hayhurst, E. R.: Industrial Health. Blakiston. 1924. $15.00

Krause, Allen: Environment and Resistance in Tuberculosis. Williams & Wilkins. 1923. $1.50

Krause, Allen: Rest and Other Things. Williams & Wilkins. 1923. $1.50

Kroptkin, P.: Mutual Aid, A Factor in Evolution. Knopf. 1917. $2.50

Lacroix: Military and Religious Life in the Middle Ages. Chapman & Hall, London.

Laird, D. A.: Applied Psychology for Nurses. Lippincott. 1923. $2.50

La Motte, Ellen N: Tuberculosis Nurse. Putnam. 1915. $2.00

Lewis, G. G., M.D.: The Ophthalmic Nurse. Saunders. 1920. $1.50

Lincoln, M. J., and Barrows, A.: Home Science Cook Book. M. Barrows & Co. 1902. $1.25

Lippitt, L. C.: Manual of Corrective Gymnastics. Macmillan. 1923. $1.60

Locy, William A.: Biology and Its Makers. Holt. 1915. $3.00

Lucas, W. P.: Children's Diseases for Nurses. Macmillan. 1923. $3.50

Lusk, G.: Elements of the Science of Nutrition. Saunders. 1917. $6.50

Lynch, Charles: American Red Cross Textbook on First Aid and Relief Columns. Blakiston. 1918. $1.00

McCollum, E. V., and Simmonds, N.: The Newer Knowledge of Nutrition. Macmillan. 1925. $4.25

McCombs, R. S., M.D.: Diseases of Children for Nurses. Saunders. 1925. $2.75

McCrae, Anabelle: Procedures in Nursing. Parts I & II. M. Barrows & Co. 1925. $1.50 each part

McDonald, A. L.: Essentials of Surgery. Lippincott. 1926. $2.50

McDougall, William: Introduction to Social Psychology. Luce & Co. 1926. $2.00

McDougall, William: Psychology, the Study of Behavior. 1912. Holt. $1.00

*McIsaac, Isabel: Primary Nursing Technique. Macmillan. 1907

McKenzie, R. T., M.D.: Exercise in Education and Medicine. Saunders. 1923. $5.00

McLaughlin, A. J.: Communicable Diseases. Harper & Bros. 1923. $3.00

McMillan, M.: Massage and Therapeutic Exercise. Saunders. 1925. $2.50

McMurry, F. M.: How to Study and Teaching How to Study. Houghton Mifflin. 1909. $1.90

Digitized by Google

McMurry, Frank M.: Elementary School Standards. World Book Co. 1913. $2.00

McPherson, William, and Henderson, W. E.: Chemistry and Its Uses. Ginn. 1926. $1.60

MacCallum, W. G., M.D.: Textbook of Pathology. Saunders. 1924. $10.00

MacCunn, John: Making of Character. Macmillan. 1913. $1.75

MacDonald, Violet, M.: Mental Hygiene and the Public Health Nurse. Lippincott. 1923. $1.50

MacFarlane, Catharine, M.D.: Reference Handbook of Gynecology for Nurses. Saunders. 1923. $1.50

Mackenzie, J. S.: Manual of Ethics. Noble, Noble, & Noble. 1901. $2.00

MacLeod, J. J. R.: Physiology and Biochemistry in Modern Medicine. Mosby. 1918. $11.00

Maeterlinck, M.: Life of the Bee. Dodd Mead & Co. 1912. $2.00

Mallory, Frank B., M.D.: Principles of Pathologic Histology. Saunders. 1914. $8.00

Mangold, George B.: Problems of Child Welfare. Macmillan. 1924. $3.00

Manhattan Eye, Ear, Nose and Throat Hospital: Nursing in Diseases of the Eye, Ear, Nose and Throat. Saunders. 1922. $2.25

*March, Nora: Towards Racial Health. Dutton. 1919

Marshall, John S., M.D.: Mouth Hygiene and Mouth Sepsis. Lippincott. 1916. $2.50

Martin, H. N.: Human Body (Briefer Course). Holt. 1917. $1.72

Mason, Charles F.: Complete Handbook for the Sanitary Troops of the U. S. Army and Navy and National Guard and Naval Militia. Wood. 1918. $4.00

Mason, William P.: Water Supply. Wiley. 1916. $5.00

Mathews, A. P.: Physiological Chemistry. Wood. 1925. $7.00

Maxwell, Anna C., and Pope, Amy E.: Practical Nursing. Putnam. 1923. $2.50

May, C. H., M.D.: Diseases of the Eye. Wood. 1924. $4.00

May, James V., M.D.: Mental Diseases, a Public Health Problem. Badger. 1922. $5.00

Mennell, James B.: Massage, Its Principles and Practice. Blakiston. 1920. $6.00

Mental Hygiene (Magazine). National Committee for Mental Hygiene, 370 Seventh Avenue, New York, New York. $3.00

Meumann, Ernest: Psychology of Learning. Appleton. 1913. $2.00

Mitchell, J. K. and Gulick, Luther: Cohen's System of Physiologic Therapeutics, Vol. VII. Blakiston. 1904. $3.25

Mitchell, P. H.: Textbook of General Physiology. McGraw-Hill. 1923. $6.00

Modern Hospital (Magazine). Modern Hospital Publishing Co., 22 East Ontario Street, Chicago, Illinois. $3.00

Moore, Harry H.: Public Health in the United States. Harper Bros. 1923. $4.00

Morgan, J. J. B.: Psychology of the Unadjusted School Child. Macmillan. 1924. $2.00

Digitized by Google

*Morley, Edith J. (Editor): Women Workers in Seven Professions. Dutton. 1914
*Morrow, A. S., M.D.: Immediate Care of the Injured. Saunders. 1917
*Morrow, Prince A., M.D.: Social Diseases and Marriage. Lea & Febiger. 1904
Morse, J. L., M.D.: Care and Feeding of Children. Harvard University Press. 1914. $1.00
*Morse, J. L., M.D., and Talbot, F. B., M.D.: Diseases of Nutrition and Infant Feeding. Macmillan. 1915
Morse, Mary E., M.D.: Bacteriology for Nurses. Saunders. 1924. $2.25
Mosher, C. D.: Woman's Physical Freedom. Woman's Press. 1923. $1.00
Muse, Maude B.: Psychology for Nurses. Saunders. 1925. $2.50
Myers, P. Van Ness: History as Past Ethics. Ginn. 1913. $1.60
Myerson, Abraham, M.D.: The Foundations of Personality. Little, Brown & Co. 1921. $2.25
Nation's Health (Magazine) Modern Hospital Publishing Co., 22 East Ontario Street, Chicago, Ill. $3.00
National Health Series. Funk & Wagnalls. 1924. Set of 20 vol. $6.00; per vol. 30¢
National League of Nursing Education. Annual Reports. Odd volumes. $.50
Neumann, Henry: Education for Moral Growth. Appleton. 1923. $2.50
Newsholme, A., M.D.: The Prevention of Tuberculosis. Dutton. 1916. $5.00
Nightingale, Florence: Notes on Nursing. Appleton. $1.25
*Nightingale, Florence: Talks to Pupils. A Selection of Addresses to Probationers and Nurses. Macmillan. London. 1914
Norris, James F.: Principles of Organic Chemistry. McGraw-Hill. 1922. $3.00
Norsworthy, Naomi, and Whitley, Mary: Psychology of Childhood. Macmillan. 1918. $1.80
Noyes, Frederick B.: Textbook of Dental Histology and Embryology Including Laboratory Directions. Lea & Febiger. 1921. $6.50
Nutting, M. Adelaide: A Sound Economic Basis for Schools of Nursing and Other Addresses. Putnam. 1926. $2.50
*Nutting, M. Adelaide: Educational Status of Nursing. U. S. Bureau of Education. 1912.
Nutting, M. Adelaide, and Dock, Lavinia L.: History of Nursing. 4 vols. Putnam. Vols. I–II 1907. Vols. III–IV 1912. $15.00
Occupational Therapy and Rehabilitation (Magazine). Williams & Wilkins, Baltimore, Md. $5.00
Oppenheimer, Franz: The State: Its History and Development Viewed Sociologically. The Viking Press. 1922. $2.00
Osborne, Oliver T., M.D.: Principles of Therapeutics. Saunders. 1921. $7.00
Osler, William, M.D.: Aequanimitas and Other Addresses. Blakiston. 1914. $5.00

Digitized by Google

Osler, William, M.D.: An Alabama Student and Other Essays. Oxford University Press. 1908. $4.00

Osler, William, M.D.: Counsels and Ideals. Houghton Mifflin. 1921. $2.50

Osler, William, M.D.: Principles and Practice of Medicine. Appleton. 1925. $7.50

Otis, E. O.: Pulmonary Tuberculosis. Gorham Press. 1920. $3.50

Overstreet, H. A.: Influencing Human Behavior. People's Institute Publishing Co. 1925. $3.00

Pacific Coast Journal of Nursing, 721 Call Building, Montgomery and Jessie Streets, San Francisco, Cal. $2.50

Packard, Francis R.: Diseases of Nose, Throat and Ear. Lippincott. 1913. $4.50. (By Subscription Only)

*Paget, Stephen: Confessio Medici. Macmillan. 1908

Palmer, G. H.: The Teacher. Houghton Mifflin. 1908. $2.00

Palmer, Margaret D.: Lessons on Massage. Wood. 1918. $3.75

Park, W. H., M.D. (Editor): Public Health and Hygiene in Contributions by Eminent Authors. Lea & Febiger. 1920. $10.00

Park, W. H., M.D., and Williams, Anna, M.D.: Pathogenic Microorganisms. Lea & Febiger. 1924. $6.50

Parker, E. M., M.D., and Breckenridge, S. C., M.D.: Surgical and Gynecological Nursing. Lippincott. 1925. $3.00

Parker, Linette A.: Materia Medica and Therapeutics. Lea & Febiger. 1926. $2.50

Parker, S. C.: Methods of Teaching in High Schools. Ginn. 1920. $2.00.

Parker, T. J., and Haswell, W. A.: Textbook of Zoology. 2 vols. Macmillan. 1922. $12.50

Parsons, P. A.: Introduction to Modern Social Problems. Knopf. 1924. $2.50

Parsons, Sara E.: Nursing Problems and Obligations. M. Barrows. 1919. $1.25

Paton, Stewart: Signs of Insanity and Principles of Mental Hygiene. Scribner. 1922. $1.50

Patri, Angelo: Child Training. Appleton. 1922. $2.00

Patri, Angelo: School and Home. Appleton. 1925. $1.50

Pattee, Alida F.: Practical Dietetics. Pattee. 1925. $2.60

*Perkins, Agnes F.: Vocations for the Trained Woman. Longmans Green & Co. 1910.

Perry, L. Day: Seat Weaving. Manual Arts Press. 1921. $1.25

Philadelphia General Hospital: Manual of Nursing Precedures. Philadelphia General Hospital School of Nursing. 1924. $1.50. (New edition in preparation)

Pickett, Sarah E.: The American National Red Cross. American Red Cross. 1923. $.50

Pickerill, H. P.: Prevention of Dental Caries and Oral Sepsis. Hoeber. 1924. $6.00

*Pickerill, H. P.: Stomatology in General Practice. Oxford University Press. 1912

Piersol, G. A., M.D.: Human Anatomy. Lippincott. 1918. $9.00

Digitized by Google

Piersol, G. A., M.D.: Normal Histology. Lippincott. 1920. $4.50
Pillsbury, W. B.: Essentials of Psychology. Macmillan. 1911. $2.10
Pinter, Rudolf: Intelligence Testing. Holt. 1923. $2.00
Plass, Everett, M. D.: Obstetrics for Nurses. Appleton. 1922. $3.50
Pope, Amy E.: Essentials of Anatomy and Physiology for Nurses. Putnam. 1922. $2.50
Pope, Amy E.: Manual of Nursing Procedures. Putnam. 1919. $2.00
Popenoe, Paul and Johnson, Roswell A.: Applied Eugenics. Macmillan. 1918. $2.60
Posey, William C., M.D.: Hygiene of the Eye. Lippincott. 1918. $4.50
Pratt, George K., M.D.: Your Mind and You. Funk & Wagnalls. 1924. $.30
Price, George M.: The Modern Factory. Wiley. 1914. $5.00
Proudfit, Fairfax: Dietetics for Nurses. Macmillan. 1924. $2.60
Public Health Nurse (Magazine). National Organization for Public Health Nursing. 370 Seventh Avenue, New York, New York. $3.00
Pusey, William A.: Principles and Practice of Dermatology. Appleton. 1926. $10.00
Pusey, William A.: Syphilis As a Modern Problem. American Medical Association. 1915. $1.00
Pybus, Frederick C.: Surgical Diseases of Children. Blakiston. 1922. $5.00
Pyle, William H.: Psychology of Learning. Warwick and York. 1921. $1.80
Ramsey, W. R., M.D.: Care and Feeding of Infants and Children. Lippincott. 1923. $2.50
Ranson, Stephen W., M.D.: Anatomy of the Nervous System from the Standpoint of Development and Function. Saunders. 1923. $6.50
Ravenel, M. P. (Ed.): A Half Century of Public Health. American Public Health Association. 1921. $10.00
Read, Mary L.: Mothercraft Manual. Little Brown & Co. 1916. $2.00
Red Cross Nursing, History of American. Official. Macmillan. 1922. $5.00
*Report of the Committee to Study Visiting Nursing. National Organization for Public Health Nursing. 1924
Richmond, Mary: Social Diagnosis. Russell Sage Foundation. 1917. $2.00
Richmond, Mary: The Good Neighbor in the Modern City. Lippincott. 1911. $1.00
Richmond, Mary: What is Social Case Work. Russel Sage Foundation. 1922. $1.00
Richards, L. A. J.: Reminiscences of Linda Richards. M. Barrows & Co. 1915. $1.00
Richer, Paul, M.D.: L'Art et la Medicene. Gaultier, Magnier et Cie. Paris. 1902
Robb, Hunter, M.D.: Aseptic Surgical Technic. Lippincott. 1916. $2.75
Robb, Isabel Hampton: Educational Standards for Nurses. Koeckert. 1907. $1.25
Robb, Isabel Hampton: Ethics of Nursing. Koeckert. 1918. $1.75
Robb, Isabel Hampton: Nursing: Its Principles and Practice. Koeckert. 1917. $2.00

Digitized by Google

Roberts, J. G.: Manual of Bacteriology and Pathology for Nurses. Saunders. 1924. $2.00

Robinson, James Harvey: The Mind in the Making. Harper & Bros. 1921. $2.50

Robinson, J. H., Breasted, J. H., and Beard, C. A.: Outlines of European History. 2 vols. Ginn & Co. 1914. $1.96 each vol.

Rockefeller Foundation: International Health Board Annual Reports. Rockefeller Foundation.

Rose, Mary S.: Feeding the Family. Macmillan. 1924. $2.40

Rose, Mary S.: Laboratory Handbook for Dietetics. Macmillan. 1921. $2.10

Rose, William, and Carless, Albert: Manual of Surgery. Wood. 1924. $11.00

Rosenau, M. J., M.D.: Preventive Medicine and Hygiene. Appleton. 1926. $10.00

Royden, A. Maude: Sex and Common Sense. Putnam. 1922. $2.50

Royce, Josiah: Philosophy of Loyalty. Macmillan. 1908. $2.50

Ruhl, Arthur: Rockefeller Inc., Internationalists. Survey, Graphic Number. April 1925.

Ryan, T. J., D.D.S. and Bowers, E. F., M.D.: Teeth and Health. Putnam. 1921. $2.50

*Sabotta, J., and McMurrich, J. P.: Atlas and Textbook of Human Anatomy. Saunders

Sadler, William S.: Essentials of Healthful Living. Macmillan. 1925. $3.50

Safford, M. Victor: Immigration Problems. Dodd, Mead & Co. 1925. $2.50

*Sainsbury, Harrington: Drugs and the Drug Habit. Dutton & Co. 1909

St. George, Armin Von: Textbook of Pathology for Nurses. Macmillan. 1924. $1.75

*Saleeby, C. W.: Surgery and Society. Dodd Mead & Co. 1912

Sampson, C. M.: Physiotherapy Technic. Mosby. 1923. $6.50

Sanford, Frank. G.: The Art Crafts for Beginners. Century Co. 1913. $1.75

Sanders, Georgina J.: Modern Methods in Nursing. Saunders. 1922. $3.00

Sayles, Mary B.: The Problem Child in School. Joint Committee on Methods of Preventing Delinquency. 1925. $1.00

Sedgwick, W. T.: Principles of Sanitary Science and Public Health. Macmillan. 1918. $3.25

Seifert, M. J.: Gynecology for Nurses. Appleton. 1925. $3.00

Sellew, Gladys: Pediatric Nursing Including the Care of the Well Infant and Child. Saunders. 1926. $2.50

Sever, J. W.: The Principles of Orthopedic Surgery for Nurses. Macmillan. 1924. $2.75

Sever, J. W.: Textbook of Orthopedic Surgery for Students of Medicine. Macmillan. 1925. $4.50

Shaw, George Russell: Knots, Useful and Ornamental. Houghton Mifflin. 1924. $2.00

Sherman, H. C.: Chemistry of Food and Nutrition. Macmillan. 1926. $3.25

Sherman, H. C.: Food Products. Macmillan. 1924. $3.00

Digitized by Google

Slagle, Eleanor Clarke: Annual Reports of Division of Occupational Therapy, New York State Hospital Commission. 175 Fifth Avenue New York, N. Y.

Slemons, J. M., M.D.: Prospective Mother. Appleton. 1921. $2.00

Slosson, E. E.: Creative Chemistry. Century Co. 1919. $3.00

Smeeton, Mary: Bacteriology for Nurses. Macmillan. 1924. $2.60

Smith, Amy Armour: The Operating Room. Saunders. 1924. $2.25

Smith, Richard M., and Greene, R.: Baby's First Two Years. Houghton Mifflin. 1924. $1.75

Smith, Stevenson, and Guthrie, E. R.: General Psychology in Terms of Behaviour. Appleton. 1921. $2.50

Smith, Upton, and Gage: Mathematics for Nurses (Pamphlet). Teachers College, Columbia University. 1924. $.25

Snedden, David S.: Vocational Education. Macmillan. 1920. $2.00

Sollman, Torald, M.D.: Textbook of Pharmacology. Saunders. 1922. $7.00

*Solomon, H. C., and Solomon, M. H.: Syphilis of the Innocent. U. S. Interdepartmental Social Hygiene Board. 1922

Southard, E. E., and Jarrett, M. C.: The Kindgom of Evils. Macmillan. 1922. $5.50

Spencer, Anna G.: The Family and Its Members. Lippincott. 1923. $2.50

Spring, Helen M.: Individual Recipes. Barrows. 1922. $.25

Starch, Daniel: Educational Psychology. Macmillan. 1919. $2.50

Starling, E. H.: Principles of Human Physiology. Lea & Febiger. 1926. $8.50

Steindler, Arthur, M. D.: Textbook of Operative Orthopedics. Appleton. 1925. $7.50

Steiner, Jesse F.: Community Organization. Century. 1925. $2.25

Stelwagon, H. W., M.D., and Gaskill, H. K., M.D.: Diseases of the Skin. Saunders. 1921. $10.00

Stevens, A. A., M.D.: A Manual of the Practice of Medicine. Saunders. 1923. $3.50

Stevens, A. A., M.D.: Practice of Medicine. Saunders. 1922. $7.50

Stewart, Isabel M.: Opportunities in the Field of Nursing (Pamphlet). National League of Nursing Education. 1925. $.15

Stiles, Percy G.: Nutritional Physiology. Saunders. 1924. $2.25

Stiles, Percy G.: The Nervous System and Its Conservation. Saunders. 1924. $2.25

Stimson, Julia: Nurses' Handbook of Drugs and Solutions. M. Barrows. 1925. $1.25

Stormzand, Martin J.: Progressive Methods of Teaching. Houghton Mifflin. 1924. $2.00

Strayer, George D., and Norsworthy, Naomi: How to Teach. Macmillan. 1917. $1.80

Strecker, E. A., and Ebaugh, F. G.: Practical Clinical Psychiatry for Students and Practitioners. Blakiston. 1925. $4.00

Struthers, Lina Rogers: The School Nurse. Putnam. 1917. $2.00

Survey (Magazine). Survey Associates, Inc. 112 East 19 Street, New York. N. Y. $5.00

Digitized by Google

Talley, Charlotte: Ethics for Nurses. Putnam. 1925. $1.50
Tansley, Arthur George: The New Psychology and Its Relation to Life. Dodd Mead & Co. 1922. $4.00
Tawney R. H.: The Acquisitive Society. Harcourt, Brace. 1920. $1.50
Taylor, F. W.: Shop Management. Harper & Bros. 1911. $2.50
Terman, L. M.: The Measure of Intelligence. Houghton Mifflin. 1916. $2.00
Thom, D. A.: Child Management. U. S. Children's Bureau. 1925. $.05
Thomas, L. C., and Goldthwait, J. E.: Body Mechanics and Health. Houghton Mifflin. 1922. $1.25
Thorndike, E. L.: Educational Psychology. 3 Vols. Teachers College. 1914. $3.00 Each Volume
Thorndike, E. L.: Elements of Psychology. Seiler. 1907. $1.80
Thorndike, E. L.: Principles of Teaching. Seiler. 1905. $1.60
Tiffany, Rev. Francis: Life of Dorothea Lynde Dix. Houghton Mifflin. 1890. $2.00
*Tigerstedt, R. A., M.D.: Textbook of Physiology. Appleton. 1906
Todd, A. J.: Scientific Spirit and Social Work. Macmillan. 1919. $2.00
Todd, A. J.: Theories of Social Progress. Macmillan. 1918. $2.75
Todd, James C.: Clinical Diagnosis by Laboratory Methods. Saunders. 1923. $6.00
Toldt, Carl: Atlas of Human Anatomy. Macmillan. 1926. $10.00
Tooley, Sarah: History of Nursing in the British Empire. Cassell. London
Towne, E. T.: Social Problems. Macmillan. 1924. $1.68
Townsend, Harriet: Social Work, a Family Builder. Saunders. 1926. $2.25
Tracy, Susan E.: Invalid Occupation. M. Barrows & Co. 1910. $1.75
Trotter, William: Instincts of the Herd in Peace and War. Macmillan. 1926. $1.50
Trudeau, E. L.: An Autobiography. Doubleday Page. 1916. $4.00
Tyler, J. M.: Growth and Education. Houghton Mifflin. 1907. $2.15
Una (Magazine) Equitable Building, Collins Street, Melbourne, Australia. Per copy 6d
Vallery-Radot, D.: Life of Pasteur. Doubleday Page. 1923. $3.00
Van Blarcom, Carolyn C.: Getting Ready to be a Mother. Macmillan. 1922. $1.50
Van Blarcom, Carolyn C.: Obstetrical Nursing. Macmillan. 1922. $3.00
Vaughn, V. C., Vaughan, H. F., and Palmer, G. T.: Epidemiology and Public Health. 3 vols. Mosby. 1922. $9.00 Each Volume
Vedder, E. B.: Syphilis and Public Health. Lea & Febiger. 1918. $3.00
Verrill, A. Hyatt: Knots, Splices, and Rope Work. Henley Publishing Co. 1917. $1.00
Wald, Lillian D.: The House on Henry Street. Holt. 1915. $3.50
Walker, Louisa: Varied Occupations in String Work. Macmillan. 1895. $1.40
Walter, H. E.: The Human Skeleton: An Interpretation. Macmillan. 1918. $2.00
Walters, F. R.: Domiciliary Treatment of Tuberculosis. Wood. 1924. $4.00

Digitized by Google

*Waters, Ysabella: Visiting Nursing in the United States. Russell Sage Foundation. 1912.
Watson, Frank: Charity Organization Movement in the United States: A Study in American Philanthropy. Macmillan. 1922. $4.00
Watson, J. B.: Psychology from the Standpoint of a Behaviorist. Lippincott. 1918. $3.00
Webb, G. B., and Ryder, C. T.: Overcoming Tuberculosis: An Almanac of Recovery. Hoeber. 1925. $2.00
Welch, W. H.: Public Health in Theory and Practice. Yale University Press. 1925. $1.00
Wells, F. L.: Mental Adjustments. Appleton. 1917. $2.75
Wells, F. L.: Pleasure and Behaviour. Appleton. 1924. $2.50
Wharton, H. R.: Minor Surgery, Including Bandaging. Lea & Febiger. 1922. $4.00
Wheller, Ruth, and Wheeler, Helen: Dietetics and Dietotherapy. Saunders. 1926. $1.50
Whipple, G. M.: How to Study Effectively. Public School Publishing Company. 1923. $.60
Whipple, George C.: Vital Statistics. Wiley & Sons. 1923. $4.00
White, C. J.: Care of the Skin. Harvard University Press. 1914. $1.00
White, J. R.: Textbook of Surgical Handicraft. Macmillan. 1926. $6.00
White, Mary: How to Make Baskets. Doubleday Page. 1919. $1.75
White, W. A., M.D.: Outlines of Psychiatry. Nervous and Mental Disease Publishing Co. 1924. $4.00
White, W. A., M.D.: Principles of Mental Hygiene. Macmillan. 1917. $2.75
White, W. A., M.D: The Mental Hygiene of Childhood. Little, Brown. 1919. $1.75
Wiggam, Albert E.: Fruit of the Family Tree. Bobbs-Merrill. 1924. $3.00
Wiggam, Albert E.: The New Decalogue of Science. Bobbs-Merrill. 1923. $3.00
Wilder, H. H.: History of the Human Body. Holt. 1923. $4.75
Wile, Ira S.: Challenge of Childhood. Seltzer. 1926. $3.50
Willard, Florence, and Gillett, Lucy H.: Dietetics for High Schools. Macmillan. 1920. $1.40
Williams, F. E., and Others: Social Aspects of Mental Hygiene. Yale University Press. 1925. $1.60
Williams, J. F., M.D.: Personal Hygiene Applied. Saunders. 1925. $2.00
Williams, J. F., M.D.: Textbook of Anatomy and Physiology. Saunders. 1926. $2.75
Williams, J. W., M.D.: Obstetrics. Appleton. 1923. $9.00
Winslow, C.-E. A.: The Evolution and Significance of the Modern Public Health Campaign, Yale University Press. 1923. $1.50
*Withington, Edward T.: Medical History from the Earliest Times. Jenkins. 1894
Woman's Foundation for Health. Positive Health Series. American Medical Association. 1922. $1.40

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Wood, Bertha M and Weeks, Anne L: Fundamentals of Dietetics. Saunders 1926. $1.75

Wood, F. C., M.D.: Chemical and Microscopical Diagnosis. Appleton. 1917. $7.50

Wood, H. B.: Sanitation Practically Applied. Wiley & Sons. 1917. $3.50

Woodworth, R. S.: Psychology: A Study of Mental Life. Holt. 1921. $2.50

Woolf, M. S.: Principles of Surgery for Nurses. Saunders. 1925. $3.00

Woolley, Paul G.: Fundamentals of Pathology. Mosby. 1916. $2.25

World's Work, The (Magazine) Doubleday Page & Co. Garden City, N. Y. $4.00

Worst, Edward F.: Industrial Work for the Middle Grades. Bruce Publishing Co. 1917. $3.50

*Wright, F. S.: Industrial Nursing. Macmillan. 1919

Zinsser, Hans: Infection and Resistance. Macmillan. 1923. $5.00

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APPENDIX II

LIST OF PUBLISHERS WITH ADDRESSES OF BOOKS AND MAGAZINES INCLUDED IN THE BIBLIOGRAPHY

Allen & Unwin, London, England
Allyn & Bacon, 11 E. 36 Street, New York, N. Y.
American Book Company, 100 Washington Square, New York, N. Y.
American Child Health Association, 370 Seventh Avenue, New York, N. Y.
American Journal of Nursing, 19 W. Main Street, Rochester, N. Y.
American Medical Association, 535 N. Dearborn Street, Chicago, Ill.
American National Red Cross, National Headquarters, Washington, D. C.
American Nurses' Association, 370 Seventh Avenue, New York, N. Y.
American Public Health Association, 370 Seventh Avenue, New York, N. Y.
American Social Hygiene Association, 370 Seventh Avenue, New York, N. Y.
Appleton, D., & Company, 29–35 W. 32 Street, New York, N. Y.
Badger, Richard G., 100 Charles Street, Boston, Mass.
Barrows, M. & Company, Huntington Chambers, Boston 17, Mass.
Blakiston's, P. Son & Company, 1012 Walnut Street, Philadelphia, Pa.
Bobbs-Merrill Company, 185 Madison Avenue, New York, N. Y.
Boyle, R., London, England
British Journal of Nursing, 431 Oxford Street, London, England
Bruce Publishing Company, 354–364 Milwaukee Street, Milwaukee, Wis.
Canadian Nurse, 609 Boyd Building, Winnipeg, Canada
Cassell & Company, Ltd., London, England
Century Company, 353 Fourth Avenue, New York, N. Y.
Chapman & Hall, 11 Henrietta Street, Covent Garden, London, England
Children's Foundation, Valparaiso, Ind.
Collier, P. F. & Son, 250 Park Avenue, New York, N. Y.
Davis, F. A., Company, 1914 Cherry Street, Philadelphia, Pa.
Davis Press, 44 Portland Street, Worcester, Mass.
Dodd, Mead & Company, 443–449 Fourth Avenue, New York, N. Y.
Doubleday, Page & Company, Garden City, N. Y.
Dutton, E. P. & Company, 681 Fifth Avenue, New York, N. Y.
Encyclopaedia Britannica Inc., 342 Madison Avenue, New York, N. Y.
Engineering Magazine Company, 116 W. 32 Street, New York, N. Y.
Funk & Wagnalls Company, 354–360 Fourth Avenue, New York, N. Y.
Gaultier, Magnier et Cie, Paris, France
Ginn & Company, 15 Ashburton Place, Boston, Mass.
Gorham Press, The, 100 Charles Street, Boston, Mass.
Government Printing Office, Washington, D. C.
Hammett, J. L., Company, Kendall Square, Cambridge, Mass.
Harcourt Brace & Company, 383 Madison Avenue, New York, N. Y.
Harper & Brothers, 49 E. 33 Street, New York, N. Y.
Harvard University Press, Cambridge, Mass.
Heath, D. C. & Company, 50 Beacon Street, Boston, Mass.
Henley, Norman W., Publishing Company, 2 W. 45 Street, New York, N. Y.

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Hoeber, Paul B., Inc., 67–69 E. 59 Street, New York, N. Y.
Holt, Henry & Company, 1 Park Avenue, New York, N. Y.
Hospital Social Service Association, 92–37 Street, New York, N. Y.
Houghton Mifflin Company, 2 Park Street, Boston, Mass.
Industrial Press, 140–148 Lafayette Street, New York, N. Y.
International Council of Nurses, 1 Place du Lac, Geneva, Switzerland
International Society for Crippled Children, Elyria, Ohio
Jenkins, Herbert, Ltd., 3 York Street, St. James S. W., London, England
Johns Hopkins Press, Homewood, Baltimore, Md.
Joint Committee on Methods of Preventing Deliquency, 50 E. 42 Street, New York, N. Y.
Judge Baker Foundation, 40 Court Street, Boston, Mass.
Knopf, Alfred A., 730 Fifth Avenue, New York, N. Y.
Koeckert, E. C., 2273 Lee Road, Cleveland, Ohio
Lea & Febiger, 600 S. Washington Square, Philadelphia, Pa.
Lippincott, J. B. Company, E. Washington Square, Philadelphia, Pa.
Little, Brown & Company, 34 Beacon Street, Boston, Mass.
Longmans, Green & Company, 55 Fifth Avenue, New York, N. Y.
Luce, John W. & Company, 212 Summer Street, Boston, Mass.
McBride, Robert M. & Company, 7 W. 16 Street, New York, N. Y.
McCormick, John, Institute for Infectious Diseases, 629 S. Wood Street, Chicago, Ill.
McGraw-Hill Book Company, 370 Seventh Avenue, New York, N. Y.
Macmillan Company, 60 Fifth Avenue, New York, N. Y.
Manual Arts Press, 237 N. Monroe Street, Peoria, Ill.
Modern Hospital Publishing Company, 22 E. Ontario Street, Chicago, Ill.
Modern Medicine Publishing Company, 46 N. Washington Avenue, Battle Creek, Mich.
Moffat, Yard & Company (See Dodd, Mead & Company)
Mosby, C. V. Company, Grand Avenue & Olive Street, St. Louis, Mo.
National Committe for Mental Hygiene, 370 Seventh Avenue, New York, N. Y.
National League of Nursing Education, 370 Seventh Avenue, New York, N. Y.
National Organization for Public Health Nursing, 370 Seventh Avenue, New York, N. Y.
National Tuberculosis Association, 370 Seventh Avenue, New York, N. Y.
Nervous and Mental Disease Publishing Company, 3617 Tenth Street, N. W., Washington, D. C.
New Republic, Inc. 421 W. 21 Street, New York, N. Y.
New York School of Social Work, 105 E. 22 Street, New York, N. Y.
New York State Hospital Commission, 175 Fifth Avenue, New York, N. Y.
Noble, Noble & Noble, 76 Fifth Avenue, New York, N. Y.
Oxford University Press, 35 W. 32 Street, New York, N. Y.
Pacific Coast Journal of Nursing, 721 Call Building, Montgomery & Jessie Streets, San Francisco, Calif.
Pattee, A. F., Mt. Vernon, N. Y.
People's Institute Publishing Company, Inc., 70 Fifth Avenue, New York, N. Y.

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Philadelphia General Hospital School of Nursing, Philadelphia, Pa.
Pitman, Isaac, & Sons, 2 W. 45 Street, New York, N. Y.
Prentice-Hall, Inc., 70 Fifth Avenue, New York, N. Y.
Princeton University Press, Princeton University, Princeton, N. J.
Public School Publishing Company, Bloomington, Ill.
Putnam's, G. P., Sons, 2 W. 45 Street, New York, N. Y.
Revell, Fleming H. & Company, 158 Fifth Avenue, New York, N. Y.
Review & Herald Publishing Association, Takoma Park, Washington, D. C.
Rockefeller Foundation, 61 Broadway, New York, N. Y.
Russell Sage Foundation, 130 E. 22 Street, New York, N. Y.
Saunders, W. B., Company, W. Washington Square, Philadelphia, Pa.
Scribner's, Charles, Sons, 597 Fifth Avenue, New York, N. Y.
Seiler, A. G., 1224 Amsterdam Avenue, New York, N. Y.
Seltzer, Thomas, Inc., 66 Fifth Avenue, New York, N. Y.
Survey Associates, Inc., 112 E. 19 Street, New York, N. Y.
Swan, Sommenschen & Company, London, England
Teachers College, Columbia University, New York, N. Y.
Treat, E. B., Company, 45 E. 17 Street, New York, N. Y.
United States Children's Bureau, Washington, D. C.
United States Bureau of Education, Washington, D. C.
United States Interdepartmental Social Hygiene Board, Washington, D. C.
University of Chicago Press, 5750 Ellis Avenue, Chicago, Ill.
Viking Press, Inc., 30 Irving Place, New York, N. Y.
Warwick & York, Inc., E. Center Street, Baltimore, Md.
White, S. S., Dental Manufacturing Company, 211 S. 12 Street, Philadelphia, Pa.
Wiley, John, & Sons, 440 Fourth Avenue, New York, N. Y.
Williams & Wilkins, Mt. Royal & Guilford Avenues, Baltimore, Md.
Wilson, H. W., Company, 958–972 University Avenue, New York, N. Y.
Woman's Press, 600 Lexington Avenue, New York, N. Y.
Wood, William, & Company, 51 Fifth Avenue, New York, N. Y.
World Book Company, Yonkers, N. Y.
Yale University Press, 143 Elm Street, New Haven, Conn.

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APPENDIX III

Inexpensive and Free Bulletins, Pamphlets, and Reports for use in teaching nurses, may be secured by writing to the following organizations, bureaus, and firms. By explaining the purpose for which it is to be used, much of this literature may be secured in quantities for distribution.

American Academy of Periodentology, Rector Building, Columbus, Ohio. (Pamphlets, diet lists, popular research data.)

American Association of Hospital Social Workers, 30 East Ontario Street, Chicago, Illinois.

American Association for Labor Legislation, 131 East 23 Street, New York, New York.

American Association for Organizing Family Social Work, 130 East 22 Street, New York, New York.

American Child Health Association, 370 Seventh Avenue, New York, New York.

American Home Economics Association, 1211 Cathedral Street, Baltimore, Maryland.

American Medical Association, 535 North Dearborn Street, Chicago, Illinois.

American Posture League, 1 Madison Avenue, New York, New York. (Lantern slides, reprints, and posture charts.)

American Public Health Association, 370 Seventh Avenue, New York, New York.

American Red Cross, Washington, D. C.

American Social Hygiene Association, 370 Seventh Avenue, New York, New York.

American Society for Control of Cancer, 370 Seventh Avenue, New York, New York.

Arlington Chemical Company, Yonkers, New York. (Pamphlets—Art in Medical History.)

Armour & Company, Chicago, Illinois. (Data on research on glands, etc.)

Associated Out-Patient Clinic of the New York Tuberculosis and Health Association, 244 Madison Avenue, New York, New York.

Association for the Prevention and Relief of Heart Disease, 370 Seventh Avenue, New York, New York.

Association for Improving the Condition of the Poor, 105 East 22 Street, New York, New York.

Child Welfare League of America, 13 East 22 Street, New York, New York.

Cornell University, Ithaca, New York. (Bulletins for farmers' wives.)

Cowles Detergent Company, Commonwealth Building, Cleveland, Ohio. (Bulletins on soap, laundry, bleaches, etc.)

Departments of Health: State and City. (Weekly, monthly, and special bulletins and reports.)

Elizabeth McCormick Memorial Fund, 848 North Dearborn Street, Chicago, Illinois. (Pamphlets, exhibits, films, and slides on child welfare.)

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Federal Products Company, 229 Race Street, Cincinnati, Ohio. (Pamphlets on regulations for distributing, manufacture of, and denaturing of alcohol.)

Forsythe Dental College, The Fenway, Boston, Massachusetts. (Pamphlets on teeth, posters, etc.)

Good Housekeeping Magazine Institute Bulletins, 119 W. 40 Street, New York, New York.

Health Education League, 8 Beacon Street, Boston, Massachusetts. (Popular health pamphlets.)

Hospital Library and Service Bureau, 22 East Ontario Street, Chicago, Illinois.

Life Extension Institute, 25 West 45 Street, New York, New York.

Maternity Center Association, 578 Madison Avenue, New York, New York.

Metropolitan Life Insurance Company, 1 Madison Avenue, New York, New York. (Patterns for maternity and infant outfits. Pamphlets on hygiene, first aid, etc.)

National Bureau of Economic Research, 474 West 24 Street, New York, New York.

National Child Labor Committee, 215 Fourth Avenue, New York, New York.

National Child Welfare Association, 70 Fifth Avenue, New York, New York.

National Civic Federation, 1 Madison Avenue, New York, New York. (Pamphlets on old age annuities.)

National Committee for Mental Hygiene, 370 Seventh Avenue, New York, New York.

National Committee for Prevention of Blindness, 370 Seventh Avenue, New York, New York.

National Conference of Social Work, 277 East Long Street, Columbus, Ohio.

National Congress of Parents and Teachers, 1201–16 Street, N. W., Washington, D. C.

National Consumers' League, 156 Fifth Avenue, New York, New York.

National Dairy Council, 1211 Arch Street, Philadelphia, Pennsylvania. (Health pamphlets, posters, plays, exhibits, films, and slides.)

National Health Library, 370 Seventh Avenue, New York, New York.

National Housing Association, 105 East 22 Street, New York, New York.

National League of Nursing Education, 370 Seventh Avenue, New York, New York.

National Organization for Public Nursing, 370 Seventh Avenue, New York, New York.

National Safety Council, 120 West 42 Street, New York, New York.

National Tuberculosis Association, 370 Seventh Avenue, New York, New York.

New York School of Social Work, 105 East 22 Street, New York, New York.

Playground and Recreation Association of America, 315 Fourth Avenue, New York, New York.

Rockefeller Foundation, 61 Broadway, New York, New York. (Annual reports.)

Russell Sage Foundation, 130 East 22 Street, New York, New York. (Bulletins on education and social welfare.)

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Teachers College, Columbia University, New York, New York. (Technical education bulletins on nutrition, diet, clothing, etc.)

U. S. Bureau of Education, Department of the Interior, Washington, D. C. (Bulletins on education, rural, vocational, adult, health, etc.)

U. S. Children's Bureau, Department of Labor, Washington, D. C. (Pamphlets on prenatal, child care, etc.)

U. S. Department of Agriculture, Washington, D. C. (Bulletins on foods, food adulteration, food preparation, household pests, disinfectants, etc.)

U. S. Department of Labor, Washington, D. C. (Bulletins on industrial conditions, safety, industrial poisons, fatigue, etc.)

U. S. Public Health Service, Washington, D. C. (Bulletins on sanitation, preventive medicine, infectious diseases, etc., bibliographies.)

Women's Foundation for Health, 370 Seventh Avenue, New York, New York.

Woman's Home Companion, 381 Fourth Avenue, New York, New York. (Better babies health exhibit, posters, booklets, pamphlets.)

Women's Press, 600 Lexington Avenue, New York, New York. (Posture and food charts.)

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APPENDIX IV

Some Firms Supplying Equipment and Illustrative Material for Use in Schools of Nursing. Sample exhibits from commercial firms may sometimes be secured free if it is understood that they are to be used for educational purposes.

Amberg File and Index Company, 79 Duane Street, New York, New York. (Filing cabinets, card index, guides, etc.)

American Museum of Natural History, New York, New York. (Lantern slides, charts, etc., for free loan.)

American Posture League, 1 Madison Avenue, New York, New York. Directory of available articles (school, library, office and industrial furniture) officially approved by the American Posture League and bearing its label.

American Reedcraft Corporation, 130–132 Beekman Street, New York, New York. (Occupational therapy supplies.)

American Red Cross, First Aid Service, Washington, D. C. (Charts and first aid outfits.)

Bausch and Lomb Optical Company, Rochester, New York. (Microscopes, etc.)

Becton, Dickinson & Company, Rutherford, New Jersey. (Exhibit of manufacture of thermometers and pamphlets.)

Betz & Company, Frank S., Hammond, Indiana. (Hospital and laboratory equipment.)

Caxton School Supply Company, 2347–49 South LaSalle Street, Chicago, Illinois. (Blackboards, erasers, etc.)

Chase, M. J., Pawtucket, Rhode Island. (Dolls for demonstration.)

Colgate & Company, New York, New York. (Samples of soap, talcum powders, etc., with pamphlets, booklets, and posters.)

Curtis and Cameron, 6 Harcourt Street, Boston, Massachusetts. (Copley prints: prints of historical pictures.)

Davis and Geck, Inc., 211–221 Duffield Street, Brooklyn, New York. (Pamphlets on sutures, history and sterilization; pamphlets on drugs.)

Denoyer-Geppert Company, 5235–5257 Ravenswood Avenue, Chicago, Illinois. (Charts, models, skeletons, specimens and slides.)

Earnshaw Sales Company, 325 West Jackson Boulevard, Chicago, Illinois. (Sample outfits of Vanta garments for babies. Pamphlets.)

Educational Exhibition Company, Providence, Rhode Island. (Charts, maps, slides on public health. Films.)

Eimer and Amend, Third Avenue, 18 to 19 Street, New York, New York. (Microscopes, and other apparatus for biological laboratories.)

Fife Corporation, R. A., 28–34 Waverly Avenue, Mamaroneck, New York. (Anatomical life-size charts.)

Franklin Filing Supply Company, 70 Duane Street, New York, New York. (Filing equipment and service.)

Gaylord Brothers, Syracuse, New York. (Library supplies.)

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General Biological Supply House, 761–763 East 69th Place, Chicago, Illinois. (Lantern slides, films, charts, etc. All laboratory supplies.)

Godfrey Nurse Laboratories, 185 West 135 Street, New York, New York. (Bacteriological slides, etc.)

Harvard Apparatus Company, Cambridge, Massachusetts. (Scientific laboratory supplies.)

Hospital Supply Company, 155 East 23 Street, New York, New York. (Hospital equipment and supplies.)

Johnson and Johnson, New Brunswick, New Jersey. (Surgical materials, first aid cabinets, with booklets on first aid.)

Knott Apparatus Company, L. E., Ames and Amherst Streets, Boston, Massachusetts. (Laboratory equipment and supplies.)

Knox Gelatine Company, Johnstown, New York. (Pamphlets, recipes, reprints from Journal of Metabolic Research. Diet lists.)

Kny-Scheerer Corporation, 119 Seventh Avenue, New York, New York. (Hospital supplies, models, skeletons, microscopes, slides, anatomical charts, and laboratory equipment.)

Lewis Manufacturing Company, Walpole, Massachusetts. (Gauze samples and pamphlets.)

Library Supplies, 380 Broadway, New York, New York. (Library supplies.)

Lippincott Company, J. B., Washington Square, Philadelphia, Pennsylvania. (Piersol's Anatomical Charts.)

McIntosh Stereoptican Company, 1150 South Michigan Avenue, Chicago, Illinois. (Lantern slides.)

Midwest Air Filters, Inc., Bradford, Pa. (Ventilation diagrams, charts, reports, etc.)

National League of Nursing Education, 370 Seventh Avenue, New York, New York. (Slides illustrating the history of nursing.)

New York Biological Supply Company, 34 Union Square, New York, New York. (Slides, specimens, etc.)

Nystrom & Company, A. J., 2249 Calumet Street, Chicago, Illinois. (Anatomical life-size charts, skeletons, models, etc.)

Parke, Davis & Company, Detroit, Michigan. (Charts and pictures of medicinal plants.)

Powers and Powers, Station A, Lincoln, Nebraska. (Ameba, microscopic slides.)

Proctor and Gamble, Cincinnati, Ohio. (Laundry materials. Pamphlets: house cleaning hints, laundering, etc.)

Royal Baking Powder Company, 135 William Street, New York, New York. (Booklets, recipes, analysis reports.)

Scientific Equipment Company, 70 Fifth Avenue, New York, New York. (Laboratory equipment, etc.)

Sheldon & Company, E. H., Muskegon, Michigan. (Laboratory furniture.)

Spencer Lens Company, Buffalo, New York. (Microscopes, projection apparatus, etc.)

Stickney and Poor Spice Company, Boston, Massachusetts. (Assorted samples of whole spices for Materia Medica—$1.00.)

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Thomas, Arthur H., West Washington Street, Philadelphia, Pennsylvania. (Laboratory apparatus and reagents.)

Ward's Natural Science Establishment, Rochester, New York. (Human anatomical models and skeletons. Biological specimens and supplies, etc.)

Washburn Crosby Company, Minneapolis, Minnesota. (Gold Medal Flour. Home Service Department. Educational exhibit material. Pamphlets. Charts.)

William Dixon, Inc., 32–36 East Kinney Street, Newark, New Jersey. (Occupational therapy reference catalogue, 500 pages. Illustrated.)

Worcester Salt Company, New York, New York. (Sample exhibit and pamphlets. Iodized salt literature.)

Young Women's Christian Association, 600 Lexington Avenue, New York, New York. (Posters on personal hygiene.)

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APPENDIX V

Sample Schedules Showing the Arrangement of Hours for an Eight Hour Day and Night

Note: The method of arranging the students' hours and the number of students required on a given ward depends on the administration and organization of the particular institution, the number of patients on the wards, the number of ward helpers and maids, the proportion of nurses to patients, and the arrangement of the class schedules and standards for nursing care.

If the work is to be carried out in a systematic way, it is obvious that to give time off, relief nurses must be provided in direct ratio to the number off duty. An arrangement may provide for one or more nurses to be on night duty for a continuous period as night relief. The number will depend on the number of nurses to be relieved.

These schedules provide for 7 nurses to a ward, including the relief and night nurses. They are merely suggestive for the grouping of hours. Any combination can be arranged to meet the daily class schedule and the assignment of patients which will meet the requirement of the nursing school and nursing service.

No. 1

A 56-hour week with 7 eight hour days
(Night duty on same basis)

Hours on duty

7:00 a.m. to 3:30 p.m.
3:00 p.m. to 11:30 p.m.
11:00 p.m. to 7:30 a.m.

The above arrangement provides for overlapping at the hours of change. One half hour is allowed for meals.

No. 2

A 52-hour week with 6 eight hour days and 1 four hour day or 1 half day
(Night duty on same basis)

Hours on duty

A.M.	P.M.
7–9	1–7
7–11	7–11
7–12	1–4
7–1	5–7
9–1	3–7
7–11	½ day off
	11–7

No. 3

A 48-hour week with 6 eight hour days and 1 day off
(Night duty on same basis)

Schedule No. 1 can be used if one additional nurse is provided for relief to take the time and work of the nurse off duty, or

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A schedule similar to schedule No. 2 can be arranged with broken hours using the relief nurse as above.

No. 4

A 44-hour week with 5½ eight hour days and 1½ days off
(Night duty on same basis)

Hours on duty

A.M.	P.M.
7–9	1–7
7–1	5–7
7–1	4–6
	2:30–11
7–11	½ day off
	whole day off
	11–7

One additional nurse is required to act as relief nurse for the nurse having the day off.

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