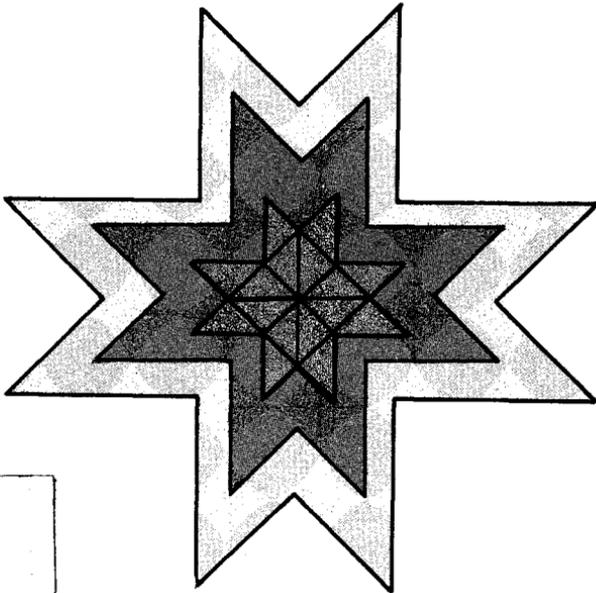


CONTINUING EDUCATION FOR THE HEALTH PROFESSIONS

1973-1974
Programs



MSD
H349
A3c
1973/74

Health Sciences Continuing Education



Health Sciences Center
UNIVERSITY OF MINNESOTA

Publication of this brochure was supported in part by funds provided through a grant from Northlands Regional Medical Program, Contract No. P-74.

MSD
112-17
1099/1-4

○ School of Dentistry ○●

Medical School ○ School of Nursing

College of Pharmacy

●○ School of Public Health ○○

College of Veterinary Medicine

●● CONTINUING EDUCATION IN THE HEALTH SCIENCES ●●

Community Services Program ○ Dental

Hygiene Program ● Dental Assisting Program

Dietetics ○ Food Science ^and Nutrition ●○

Health Professionals Drug Abuse Education Project

● Interdisciplinary Programs ○

●○ Minnesota Medical Information Service

Occupational Therapy ○ Physical Therapy

Rural Physicians Associate Program

●●○

Speech Therapy

●●

**HEALTH SCIENCES CONTINUING EDUCATION
COORDINATING COUNCIL**

Robert D. Jeronimus
Dentistry

William W. Metcalfe
Public Health

Stoddard G. Cortelyou
Medicine

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University Hospitals

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Pharmacy

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Allied Health

William J. Hodapp
Coordinator and Chairman

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UNIVERSITY OF MINNESOTA HEALTH SCIENCES CENTER

"The University of Minnesota has served as the primary source of health professionals for the State of Minnesota for nearly ninety years in response to the needs and expectations of the people of the State" (*Health Sciences Mission Statement and Proposed Structure and Governance*, Board of Regents, July 10, 1970). This published document forms the basis for the formal identification of the Health Sciences Center at the University of Minnesota, and provides an administrative structure for its governance. Lyle A. French, M.D., Ph.D., was named as the Health Sciences' first Vice President in February of 1971; he directs the educational, research, and service activities of the programs in dentistry, medicine, nursing, pharmacy, public health, and the University Hospitals, and provides for close liaison with the program in veterinary medicine. The rationale for existence of the health sciences as a unit is straightforward. All of these disciplines focus their primary educational attention on one subject: the "Patient." The organizational combination of these units, therefore, will facilitate the building of a health-team approach to better patient care.

HEALTH SCIENCES CONTINUING EDUCATION

The *Mission Statement* also recognizes "the University's responsibility for maintaining and developing the competence of health professionals now in practice." The Regents encouraged "the development of inventive and imaginative programs in continuing education" and specifically state that assistance and coordination be provided by the Vice President and his staff to the health science units in their continuing education efforts.

Health sciences continuing education functions in two forms: a) each unit provides learning experiences which are designed for their own discipline; and b) interdisciplinary programs are provided when the subject area meets the learning needs of more than one discipline. The health team approach to patient care is an ever-present guide for all program development and the needs of the profession determine the subject area.

A philosophy of life-long learning and responsiveness to professional needs is now a characteristic of both "professional-in-training" and "professional-in-practice" education in the health sciences. The faculty of the health sciences stand ready to assist you as a practicing health professional to meet your educational needs. Should you have questions or suggestions concerning continuing education in the health sciences; if your discipline has needs which the health sciences might meet through continuing education; or if you wish to initiate communication with personnel in the health sciences; please feel free to address your constructive criticism, suggestions, or questions to:

William J. Hodapp
Health Sciences Coordinator for Continuing Education
7208 Powell Hall
University of Minnesota
Minneapolis, Minnesota 55455
(612) 373-8973

HOW TO USE THE BOOKLET

This booklet has been designed as a convenient, ready reference for your use. It will provide immediate access to:

- Continuing education programs in your discipline;
- Continuing education in other disciplines which may be of interest to you;
- Interdisciplinary continuing education programs;
- Names and addresses of those individuals who are responsible for programming in each of the health disciplines;
- Other services of the health sciences which are not traditionally considered as continuing education, but which may be of educational value to you or your organization.

The table of contents will facilitate your use of this booklet. Continuing education in dentistry, medicine, nursing, pharmacy, public health and veterinary medicine are listed in separate sections, while the remainder of the health disciplines are grouped in the allied health section. Heading each section is a chronological listing of programs for your ready reference. The second part of each section provides a more complete description of each planned program.

Under the title of "Other Programs" will be found additional health sciences services which have continuing education components. In this, and in all other sections, your University health sciences contact is listed by name, address, and telephone so that you may make personal inquiries or suggestions to the director of that program.

RETURN CARDS

On the last pages of the booklet, you will find return address postcards which may be used for several purposes; e.g., to register for a program; to request more information on a program where dates or fees may not have been set at the time of printing; to present your ideas on program development in your discipline; or to begin your communication with any individual listed in the booklet. All cards will be routed on the day of arrival to the appropriate resource person within the health sciences.

In this booklet you will find, for the first time, a listing of continuing education programs which encompass activities of most of the units within the health sciences. As in any "first time" publication, there will be room for improvement, change, and for additional inclusions. Your comments will be welcomed as a stimulus for the production of a 1974-75 Health Sciences Continuing Education joint brochure.

HEALTH SCIENCES CONTINUING EDUCATION

PROGRAM FORMATS

Institutes

Seminars

Television

Correspondence

Programmed Instruction

Telelecture

Residencies

Audio-Cassette Learning Packages

Individual Consultation

MEETING YOUR NEEDS

Any member of health sciences continuing education stands ready to assist you in meeting your continuing education needs. Please call on us for assistance. The more precise you can be in identifying your needs, the more effective we can be in meeting these needs. Many units within health sciences continuing education have arranged for accreditation of their programs for your convenience. Similarly, on-campus and off-campus institutes and seminars are combined with television, telelecture, and other audio and/or visual media use to make the offerings convenient in time and accessible in distance to you.

Many health sciences continuing education offerings are programmed through the Continuing Education and Extension unit at the University of Minnesota. This unit is available to provide support services and programming assistance to individuals and organizations both within and outside of the University.

ADDITIONAL SOURCES OF INFORMATION ON COURSES AND PROGRAMS OF THE UNIVERSITY OF MINNESOTA

You may wish to participate in formal coursework — either for credit or on an audit basis — as part of your personal continuing education. Bulletins which provide information and registration instructions may be obtained from a variety of sources at the University. Some of these sources are listed below. **PLEASE WRITE DIRECTLY TO THESE SOURCES FOR THEIR BULLETINS.**

Bulletins — — Bulletins

HEALTH SCIENCES UNITS

Programs and course offerings of an individual health sciences unit; e.g., dentistry, pharmacy. Write to:

Office of Admissions and Records
4th Floor, Morrill Hall
University of Minnesota
Minneapolis, Minnesota 55455
(612) 373-2106

Indicate which bulletin you wish to receive. Include your ZIP CODE in your return address (without the zip code, your request cannot be filled).

EXTENSION CLASSES

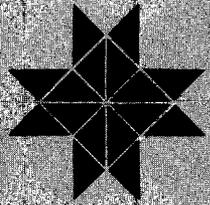
Collegiate level credit and non-credit classes offered throughout the state on a regular, periodic basis or in response to needs of citizens. Ask for the Extension Classes Bulletin. Write to:

Director, Department of Extension Classes
170 Wesbrook Hall
University of Minnesota
Minneapolis, Minnesota 55455
(612) 373-3195

INDEPENDENT STUDY

Correspondence study courses for credit or non-credit at college and postgraduate levels. Ask for the Independent Study Bulletin. Write to:

Director, Department of Independent Study
25 Wesbrook Hall
University of Minnesota
Minneapolis, Minnesota 55455
(612) 373-3256



**CONTINUING EDUCATION
IN
DENTISTRY**

Continuing Dental Education is sponsored by the School of Dentistry, Erwin M. Schaffer, Dean; and by Continuing Education and Extension, Harold A. Miller, Dean.

Robert D. Jeronimus, D.D.S., M.S.

Program Director

Continuing Dental Education

School of Dentistry

University of Minnesota

Minneapolis, Minnesota 55455

(612) 373-7960

For information or registration in continuing education programs in dentistry, contact Dr. Robert Jeronimus — or — complete and mail the form on page 67.

Chronological Course Listings

1973

29th Annual Oral Medicine Seminar	October 12-13, 1973
Endodontics	November 12-13, 1973
Partial Dentures in General Practice: A Participation Course	December 3-5, 1973
The Hinge Axis in General Practice	December 7-8, 1973
Pin Ledge Techniques in Crown and Bridge	December 13-14, 1973

1974

Applied Preventive Dentistry	February 8-9, 1974
Hospital Dentistry	February 19-21, 1974
Dental Pharmacology	February 22, 1974
Practical Oral Rehabilitation	March 4-6, 1974
Periodontics for the General Practitioner	March 7-8, 1974
Pin Ledge Techniques in Crown and Bridge	March 14-15, 1974
The Hinge Axis in General Practice	March 15-16, 1974
Occlusion in Periodontics	April 24-26, 1974
Endodontics	May 13-14, 1974
Pediatric Dentistry	May 17-18, 1974
Advanced Clinical Periodontics	June 3 and June 10, 1974
Oral Surgery	June 10-14, 1974

CONTINUING EDUCATION IN DENTISTRY

Eligibility and Fees

Dentists holding dental degrees from accredited schools are eligible to attend these courses. Fees for each course include scheduled luncheons. Registrants should make their own arrangements with hotels or motels for whatever lodging they desire. All courses will be held on the Minneapolis campus of the University of Minnesota, unless otherwise specified in the quarterly mailing. If you wish to apply for a reserved parking space, please enclose an additional \$1.00 per day with your total registration fee.

Applications

Quarterly mailings are made to dentists. These mailings contain a listing of programs for the succeeding quarter with application forms for these programs. You may also apply by filling in the form which appears on page 00. Applications will be processed in the order received, and the University reserves the right to end registration for a course when the enrollment limit has been reached. In the event rescheduling of a listed course becomes necessary, all applicants will be notified of the change in sufficient time to make the necessary adjustment. Where limited registration for a course is indicated, cancellation of a registration must be submitted at least fifteen (15) days prior to the beginning of a course to be eligible for a refund. All applications should be mailed as soon as practicable to:

Director, Department of Continuing Dental Education
Department of Conferences
Nolte Center for Continuing Education
University of Minnesota
Minneapolis, Minnesota 55455

Continuing Education Credits

All course offerings sponsored by the University of Minnesota School of Dentistry are creditable for relicensure for dentists licensed to practice in Minnesota. Hourly credit is assigned for each course based upon the number of contact hours each course provides. For further information regarding credit, contact the Director of Continuing Dental Education at the address listed under "Applications."

Dental Assisting and Dental Hygiene

For programs in Dental Assisting and in Dental Hygiene, please see the Allied Health Section.

Course Descriptions

29TH ANNUAL ORAL MEDICINE SEMINAR

October 12-13, 1973

This seminar is open to dentists and their spouses, dental hygienists, and dental assistants. Spouses, hygienists, and assistants will be registered at a reduced fee to cover the cost of meals, coffee breaks, and registration.

The theme of this year's seminar will center on food, nutrition, diets, and food fads. A separate brochure will be mailed containing a complete course description and other particulars. The course director is Dr. T. Labuza of the University's Department of Food Science and Nutrition.

Fee: dentists — \$50.00

ENDODONTICS

November 12-13, 1973

May 13-14, 1974

This course will include illustrated lectures, films, and clinical demonstrations covering diagnosis, pulp capping, pulpotomy, sterile technique of opening pulp chambers, removal of pulp contents, medication of the root canal, filling sterile root canals, practical office procedures for culturing root canals, and the significance of findings, apical curettage and apicoectomy, root canal treatment of periapically involved teeth, pharmacology in root canal therapy, and the pulpless tooth as related to systemic infection. The course director is Dr. J.R. Jensen.

Fee: \$60.00

PARTIAL DENTURES IN GENERAL PRACTICE: A PARTICIPATION COURSE

December 3-5, 1973

This course is designed to provide the practitioner with the principles and concepts relating to the rehabilitation of the partially edentulous mouth by means of clasp-retained removable partial dentures. Conference topics will include: diagnosis, treatment planning, principles of surveying and design, tooth modification and/or restoration. Jaw-relation records, preparation of laboratory work authorizations, insertion and postinsertion will be discussed in detail. Participants will have the opportunity to survey casts, wax surveyed crowns, and make impressions of the partially edentulous mouth. The course director is Dr. D.G. Anderson.

Fee: \$75.00

Attendance: limited to 10

THE HINGE AXIS IN GENERAL PRACTICE

December 7-8, 1973

March 15-16, 1974

These two days will be devoted to a thorough discussion of the principles and philosophy of the use of the hinge axis as it applies to the general practice of dentistry. Lectures and demonstrations will acquaint the student with the techniques and armamentarium used in: 1) the development of good models; 2) the split cast; 3) the location of the hinge axis; 4) the transfer of the models to an adjustable articulator; and 5) construction of restorations which match the occlusion. The course director is Dr. W.O. Branstad.

Fee: \$60.00

Attendance: limited to 12

PIN LEDGE TECHNIQUES IN CROWN AND BRIDGE

December 13-14, 1973

March 14-15, 1974

This two-day course is designed to familiarize the dentist with the instruments,

techniques, and philosophies of the utilization of parallel pin retention for both single tooth restorations and for fixed bridges. Lectures and demonstrations will be utilized along with practical laboratory exercises on the part of the students. This principle of retention is rapidly becoming more popular with the profession due to the fine functional and esthetic qualities of this conservative approach to restorative dentistry. The course director is Dr. A.R. Schmidt.

Fee: \$75.00

Attendance: limited to 10

APPLIED PREVENTIVE DENTISTRY

February 8-9, 1974

This is a comprehensive seminar centering about the development of a preventive dentistry program in the dental office. The two-day course will cover current practices in the field of prevention including the basic science background for its rationale. It will include the use of the phase microscope as a tool for patient education, the use of additional training aids, and the utilization of office auxiliaries in the role of patient educators. The role of diet and nutrition as it relates to prevention will be covered. This course is a must for those practitioners who are all too often aware of the continuing deterioration of the oral structures following restoration. The course director is Dr. D.J. Brandstetter.

Fee: \$60.00

HOSPITAL DENTISTRY

February 19-21, 1974

A lecture and demonstration course to familiarize the dentist with hospital protocol. More practitioners will continually be called on to provide dental care in the hospital environment. Topics for discussion will include: selection and admission of patients, hospital-dental practices, charts, pre-operative duties of the dentist, medico-legal considerations and hospital administration. Practical orientation will be covered by excellent films, scrub and gown demonstrations, participation in key areas such as hospital rooms, operating rooms, and recovery rooms. Time will be spent in the operating room for observation and assisting in general anesthetics, patient preparation, restorative, and surgical procedures. The management and progress of patients will be followed closely from admission to discharge. The course is under the direction of the staff of the Division of Oral Surgery. Please note that the Dental Pharmacology course will begin immediately following this course. Those who wish to, may enroll for both courses. The course director is Dr. D.E. Waite.

Fee: \$75.00

Attendance: limited to 10

DENTAL PHARMACOLOGY

February 22, 1974

This one-day seminar directly follows the Hospital Dentistry course and is directed to a review of the drugs used in the dental office in order to "update" the practitioner. New drugs and methods of administration will be covered in detail. Indications and contraindications for the use of antibiotics, analgesics, narcotics, tranquilizers, etc., will be presented. This material is a must for those who routinely prescribe in their office. The course director is Dr. N.O. Holte.

Fee: \$35.00

Attendance: limited to 25

PRACTICAL ORAL REHABILITATION

March 4-6, 1974

This course is designed to give the general dentist greater insight into the problems of complete mouth rehabilitation. Lectures and slide presentations will relate to techniques and procedures involved in extensive restorative dentistry. Students will engage in laboratory exercises in wax to wax techniques and fabricating cast gold-porcelain restorations. A study of articulators and the basic procedures necessary

to proper anatomical mounting of working casts will be discussed in detail. Close supervision of the student will be provided. The course director is Dr. R.J. Goodkind.

Fee: \$100.00

Attendance: limited to 10

PERIODONTICS FOR THE GENERAL PRACTITIONER

March 7-8, 1974

An introductory course in the field of periodontics to reacquaint the general practitioner with fundamentals. Diagnosis and recognition of the incipient periodontal lesion will be stressed. Basic periodontal anatomy and histology will be reviewed followed by lectures on etiology, histopathology, treatment planning, prognosis, and the various therapeutic measures. This course, along with Occlusion in Periodontics, is a prerequisite for Advanced Clinical Periodontics. The course director is Dr. R.E. LaBelle.

Fee: \$60.00

OCCUSION IN PERIODONTICS

April 24-26, 1974

This course is intended for those practitioners who want to update their knowledge in the field of occlusion. Subjects to be covered are anatomy, neurology, and physiology of occlusion; traumatic occlusion, and occlusal trauma; bruxism; examination, diagnosis, and treatment planning of temporomandibular joint dysfunction syndrome; office management of occlusion problem patients; theories or philosophies of occlusion; and occlusal adjustment techniques. While this course is a prerequisite for Advanced Clinical Periodontics, to be conducted on June 3 and 10, 1974, it is not restricted to those intending to enroll for that course. Demonstration and participation will be stressed. The course director is Dr. J.H. Butler.

Fee: \$75.00

Attendance: limited to 20

PEDIATRIC DENTISTRY

May 17-18, 1974

The objective of this course is to bring together practical applications of current research in dentistry for children. The general theme is prevention, not only by means of fluoride systems and pit and fissure sealants but also prevention of restorative failures, including esthetic restoration of fractured and hypoplastic teeth. Diagnosis and treatment of various pulpal conditions will also be presented. By means of an understanding of the psychologic components of behavior, prevention of and dealing with behavior problems is covered. The Pediatric Dentistry staff will direct the course.

Fee: \$50.00

Attendance: limited

ADVANCED CLINICAL PERIODONTICS

June 3 and June 10, 1974

Enrollment for this two-day clinical course is limited to those who have participated in "Periodontics for the General Practitioner" (March 7-8, 1974) and "Occlusion in Periodontics" (April 24-26, 1974). The time will be devoted essentially to the rationale and techniques of roof planning, surgery and occlusal adjustment. Limitation to 10 registrants is necessary because of the close clinical supervision required. Early registration is encouraged. The course director is Dr. R.E. LaBelle, assisted by the clinical staff.

Fee: \$75.00

Attendance: limited to 10

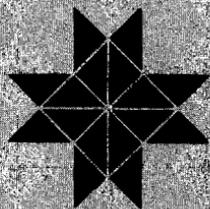
ORAL SURGERY

June 10-14, 1974

This course consists of clinical practice under supervision, group conferences and films. Topics for the conferences include: instrumentation, effective operative techniques, pre-operative and post-operative care, management of complications, preparation of the mouth for dentures, impacted tooth removal, maxillary sinus complications, biopsy techniques, and the pharmacological aspects of antibiotic and anesthetic agents. The course director is Dr. D.E. Waite.

Fee: \$100.00

Attendance: limited to 12



**CONTINUING EDUCATION
IN
MEDICINE**

Continuing Medical Education is sponsored by the Medical School, N. L. Gault, Jr., Dean; and by Continuing Education and Extension, Harold A. Miller, Dean.

Stoddard G. Cortelyou, M.S.
Acting Director
Office of Continuing Medical Education
Nolte Center for Continuing Education
University of Minnesota
Minneapolis, Minnesota 55455
(612) 373-8012

For information or registration in programs in continuing medical education, contact Mr. Stoddard Cortelyou — or — complete and mail the form on page 67.

Chronological Course Listings

1973

Maxillofacial and Laryngeal Injury	September 6-8, 1973
Neurosurgical Problems Related to Trauma	September 7-8, 1973
Third Annual Course in Management of Cerebral Palsy	September 10-15, 1973
Advances in Obstetrics and Gynecology	September 12-14, 1973
Gastroenterology for the Family Physician	September 14-15, 1973
Radiology of the Chest	September 17-21, 1973
Neurologic Aspects of Learning Disabilities for Professionals in Education	October 19, 1973
Death and Dying: Treating the Terminally Ill Patient	October 25, 1973
Principles of Rectal Surgery	October 31-November 2, 1973
Topics in Physician Accountability	November 14-17, 1973
Refraction for the Non-Ophthalmologist	November 14-16, 1973
Improving Patient Records for Better Health Care	December 3-5, 1973
Ophthalmology for Non-Ophthalmologists	December 6-7, 1973

1974

Cardiopulmonary Disease	February 14-16, 1974
Practical Otolaryngology	February 20-22, 1974
Perinatal Care	February 23, 1974
Pediatrics	March 4-6, 1974
Clinical Dermatology for Family Practitioners	March 14-16, 1974
Trauma to the Lower Extremity and Spine	March 22-23, 1974

Psychiatry for the Family Physician	March 28-30, 1974
Allergy and Clinical Immunology	April 4-6, 1974
Anticoagulant and Anti-Platelet Drug Therapy	April 24-26, 1974
Strabismus	May 6-7, 1974
Clinical Genetics for Practicing Physicians and Allied Health Personnel	May 8-10, 1974
Current Concepts in Radiation Therapy	May 15-17, 1974
Surgery	May 29-31, 1974
Fundamentals of Clinical Hypnosis	June 6-8, 1974

CONTINUING EDUCATION IN MEDICINE

The formal programs in continuing medical education are listed on these pages. Information on these programs may be obtained by writing to the Office of Continuing Medical Education at the address listed on the first page of this section. Specific mailings will also be made for individual courses; more detailed information on courses presently listed without the fee, course description, and/or attendance limit will be available at that time.

All courses will be held on the Minneapolis campus of the University of Minnesota, unless otherwise specified in the mailings for the individual courses.

Additional opportunities for personalized continuing education of physicians are available through the various departments of the Medical School. (For physicians interested in the Rural Physicians Associate Program, see the Section on Continuing Education/Other Programs.) Physicians who have interest in a particular field may participate in many of the departmental programs which occur regularly. For more information, please contact the department within the Medical School which represents your area of interest.

Course Descriptions

MAXILLOFACIAL AND LARYNGEAL INJURY September 6-8, 1973

This workshop is designed as an up-to-date survey and application of principles in the treatment of maxillofacial and laryngeal injury. Emphasis will be on the practical aspects of patient care, with an intensive evaluation of standard methods and more recent technical advances in head and neck trauma. Twenty-two members of the faculty will assure personalized instruction for each registrant on how to evaluate occlusion, take impressions and make casts and stents. Registrants will also be instructed on the techniques of intraoral and external wiring of fragments, intraoral, and extraoral devices and laryngeal stents. Ample opportunity will be provided for discussion sessions and a review of controversial subjects.

Fee: \$300.00

Attendance: limited to 30

NEUROSURGICAL PROBLEMS RELATED TO TRAUMA September 7-8, 1973

This course is primarily designed for family physicians, internists, and pediatricians. The course will feature lectures, panel discussions and simulated potentially high-risk neurosurgical clinical conditions which may take place in a home, office, or emergency room setting. An open discussion period will be available for questions.

Fee: \$80.00

Attendance: limited to 75

THIRD ANNUAL COURSE IN MANAGEMENT OF CEREBRAL PALSY September 10-15, 1973

This is an intensive, practically oriented course designed for physicians and other professionals who have a serious interest in the habilitation of patients with cerebral palsy. The subject matter will include normal and disturbed motor development,

identification of the reflex motor activity seen in cerebral palsy, evaluation of intellectual function and communicative problems, prescription of therapy and indications for evaluation of surgical procedures. Particular attention will be paid to consideration of the therapeutic situation as a learning experience, and the application of the principles of learning to the training of motor activity as well as behavior.

Fee: \$150.00

ADVANCES IN OBSTETRICS AND GYNECOLOGY

September 12-14, 1973

Designed for family practitioners, internists, and obstetrician-gynecologists, the sessions will emphasize the latest methods of fertility regulation, evaluation and management of gynecologic-endocrinologic abnormalities, diagnosis and treatment of gynecologic oncology and will evaluate present-day prenatal care and fetal monitoring. Discussion sessions for problems of interest to the registrants will be available. An outstanding guest faculty will participate in the program.

Fee: \$120.00

Attendance: limited to 150

GASTROENTEROLOGY FOR THE FAMILY PHYSICIAN

September 14-15, 1973

This course will feature lectures, small group sessions, case presentations and question and answer periods related to important subjects in gastroenterology. Emphasis will be given to new concepts, treatments and diagnostic techniques which relate to common diseases. The program will be given in the resort area of Brainerd during the beautiful early autumn season.

Fee: \$50.00

RADIOLOGY OF THE CHEST

September 17-21, 1973

A practical and modern approach to this important segment of diagnostic radiology will be presented by a large faculty of acknowledged leaders and teachers in this field. Nuclear medicine will be included. The course is intended for radiologists, but chest physicians and surgeons are welcome.

Fee: \$150.00

(A limited number of residents will be accepted at a fee of \$75.00.)

NEUROLOGIC ASPECTS OF LEARNING DISABILITIES FOR PROFESSIONALS IN EDUCATION

October 19, 1973

This course, intended for professionals engaged in primary and secondary education, is designed to present the neurological aspects of problems manifested by children with learning disabilities. The course features discussions of nervous system function in relation to learning, a brief discussion of the neurological examination, and the medical history of children with learning disability, as well as the minimal brain dysfunction syndrome. Use of the electroencephalogram, and the evaluation and management of hyperactivity and distractibility, including the use of drugs, will be covered. Drs. Kenneth Swaiman and Francis Wright have organized this program, and are accompanied by the staff of the Division of Pediatric Neurology. Participants will gain a better understanding of the medical and neurological problems attendant to learning disabilities and minimal brain dysfunction, and an overview of the present and future role of medicine in the diagnosis and management of children with these disabilities.

Fee: to be determined

DEATH AND DYING: TREATING THE TERMINALLY ILL PATIENT

October 25, 1973

Designed for the medical doctor, this afternoon seminar will feature distinguished speakers and question and answer periods. The program is open only to alumni of the University of Minnesota Medical School.

Fee: \$5.00 (includes a luncheon)
Attendance: limited to 120

PRINCIPLES OF RECTAL SURGERY

October 31-November 2, 1973

This course is designed for family practitioners and general surgeons who are interested in doing their own rectal surgery. The guest lecturer will be Mr. Lynn Lockhart-Mummery, consulting surgeon, St. Mark's Hospital, London, England. The course will feature lectures, and a panel discussion designed to cover the spectrum of rectal diseases with a heavy emphasis on rectal surgery. The course will be under the direction of Dr. Stanley M. Goldberg and the Division of Colon and Rectal Surgery, Department of Surgery.

Fee: \$135.00
Attendance: limited to 36

TOPICS IN PHYSICIAN ACCOUNTABILITY

November 14-17, 1973

This broad-ranging course will feature lectures, panel discussions, and group seminars on a variety of topics which fall under the general rubric of accountability in health care. Included will be reports on the present status of recertification, methods of recredentialing, current trends in the assignment of hospital privileges, current standards of the Joint Commission on Accreditation of Hospitals, and the status of clinic accreditation. The expectations of third party payors such as medicaid and medicare for accountability will be examined along with the implications of national health insurance. Emerging organizational forms which affect accountability such as foundations for medical care and HMO's will be discussed, as well as the updated status of PSRO legislation and its anticipated implementation. Sessions will be conducted on utilization review, the implementation of the Quality Assurance Program of the American Hospital Association, and the performance of the process-oriented medical audit. Dr. William Fifer will coordinate the program which will include a distinguished faculty.

Fee: \$100.00

REFRACTION FOR THE NON- OPHTHALMOLOGIST

November 14-16, 1973

This course in refraction emphasizes the practical application of the information presented in lecture and dialogue techniques through afternoon practice sessions. The registration is intentionally limited to six so that individual attention may be given each applicant. The course is under the direction of Dr. George T. Tani, Clinical Associate Professor and Refractionist, Department of Ophthalmology.

Fee: \$100.00
Attendance: limited to 6

IMPROVING PATIENT RECORDS FOR BETTER HEALTH CARE

December 3-5, 1973

Designed for the practicing physician and other health professionals, this course will present the problem-oriented medical record system through lecture and workshop. Problem solving through the use of this system will be stressed throughout. About half the sessions will be spent in small group workshops addressing the common problems

encountered in implementation of the record. The guest faculty will include Dr. H. Kenneth Walker of Emory University.

Fee: \$90.00

**OPHTHALMOLOGY FOR NON-
OPHTHALMOLOGISTS** December 6-7, 1973

CARDIOPULMONARY DISEASE February 14-16, 1974

PRACTICAL OTOLARYNGOLOGY February 20-22, 1974

This course will be carefully designed to provide practical information on the management of ear, nose, and throat problems. These problems constitute the largest group of reasons for visits to the primary physician. Emphasis will be placed on history, physical diagnosis, and techniques found in otolaryngology.

The first two days of the course will provide a common base of knowledge through lectures, discussions, demonstrations, and problem-solving situations. An elective third day will provide an opportunity for a preceptorship in the clinic and operating room with a practicing otolaryngologist.

Fee: to be determined

PERINATAL CARE February 23, 1974

PEDIATRICS March 4-6, 1974

**CLINICAL DERMATOLOGY FOR
FAMILY PRACTITIONERS** March 14-16, 1974

**TRAUMA TO THE
LOWER EXTREMITY AND SPINE** March 22-23, 1974

The course is designed for general practitioners, specialists in family practice, general surgeons, orthopedic surgeons, and allied health professionals. It will feature lectures augmented by slides and appropriate handouts. Dr. David S. Bradford will organize the program, accompanied by the orthopedic faculty at the University of Minnesota. Attendees will learn and be able to demonstrate the current concepts and up-to-date treatment of fractures and trauma to the lower extremity and the spine by the end of this program.

Fee: to be determined

**PSYCHIATRY FOR THE FAMILY
PHYSICIAN** March 28-30, 1974

ALLERGY AND CLINICAL IMMUNOLOGY April 4-6, 1974

**ANTICOAGULANT AND ANTI-PLATELET
DRUG THERAPY** April 24-26, 1974

STRABISMUS May 6-7, 1974

**CLINICAL GENETICS FOR PRACTICING
PHYSICIANS AND ALLIED
HEALTH PERSONNEL** May 8-10, 1974

The seminar is designed with general sessions in the mornings concerned with basic clinical genetics. Topics include latest techniques for chromosome study, prenatal genetics, biochemical advances for diagnostic uses and genetic counseling. Small groups in afternoon sessions will be structured according to interests, such as family physicians, dieticians, dentists, obstetricians, etc. Attempts will be made to demon-

strate uses of the recent developments in the new discipline of clinical genetics for all levels of health personnel.

Fee: to be determined
Attendance: limited to 150

**CURRENT CONCEPTS IN RADIATION
THERAPY**

May 15-17, 1974

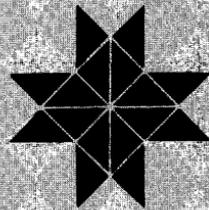
SURGERY

May 29-31, 1974

**FUNDAMENTALS OF CLINICAL
HYPNOSIS**

June 6-8, 1974

Also see "Physiological Hygiene", Public Health Section; "Problem-Oriented Medical System," Nursing Section; and "Coding Electrocardiographs," Physiological Hygiene, Public Health Section.



**CONTINUING EDUCATION
IN
NURSING**

Continuing Education in Nursing is sponsored by the School of Nursing, Isabel Harris, Dean.

Julia S. Randall, R.N.
Chairman
Continuing Education
School of Nursing
University of Minnesota
Minneapolis, Minnesota 55455
(612) 373-3462

For information or registration in continuing education programs in nursing, contact Julia Randall — or — complete and mail the form on page 67.

Chronological Course Listings

1973

Mental Health Issues	October 3, 10, 17, 24, 31, 1973 Central and Northern Sites
Realistic Programming for Patient Education	October 12 and November 30, 1973 Rochester area
Goal Directed Nurse Interviews	November 1, 1973 Detroit Lakes area
Mental Health Issues	November 7, 14, 21, 28, December 5, 1973 Central and Southern Sites
Helping Battered Children and Their Parents	December 6, 1973 Shakopee area

1974

Updating in Medications	January 9, 16, 23, 30, February 6, 1974 Central and Southern Sites
Goal Directed Nurse Interviews	January 17, 1974 Willmar area
Nursing Relating to Persons in Crisis	January 24, 1974 Twin Cities area
Emotional Aspects in Nursing Care	February 7, 8, 1974 Twin Cities area
Problem-Oriented Medical System	February 11, 18, 25, March 4, 1974 Central and Southern Sites
Updating in Medications	February 13, 20, 27, March 6, 13, 1974 Central and Northern Sites
The Patient's Situation in Respiratory Inadequacies	March 27, April 3, 10, 17, 24, 1974 Central and Southern Sites
School of Nursing Alumni Day	April 29, 1974
The Patient's Situation in Respiratory Inadequacies	May 1, 8, 15, 22, 29, 1974 Central and Northern Sites
Nursing Techniques in Respiratory Care	May 2, 1974 Worthington area
Nursing Techniques in Respiratory Care	May 23, 1974 Twin Cities area

Course Descriptions

TELELECTURE SERIES

These programs are presented via amplified telephone transmission to selected sites throughout the state. The presentations frequently utilize projected slides, and always feature an open question and answer period where participants may "talk back" to the lecturer and ask appropriate questions.

For each of the telelecture offerings, specific content will be described in a program brochure. This brochure will also list the precise site within the community where the program may be viewed. Brochures will be available approximately six weeks prior to the first program.

To receive a brochure for a particular program, call or write Julia S. Randall at the address listed on the first page of this section.

Telelecture Sites

Central and Northern Minnesota Sites

Alexandria, Bemidji, Crookston, Detroit Lakes, Duluth, Grand Rapids, Hibbing, International Falls, Minneapolis, St. Cloud, Wadena.

Central and Southern Minnesota Sites

Austin, Mankato, Marshall, Minneapolis, Morris, Red Wing, Rochester, Willmar, Winona, Worthington.

Telelecture Programs

MENTAL HEALTH ISSUES

October 3, 10, 17, 24, 31, 1973

Central and Northern Sites

November 7, 14, 21, 28, December 5, 1973

Central and Southern Sites

This series will present nursing concepts in the promotion of mental health. The focus will be on situations where no pathology is identified.

Classes will meet each Wednesday from 7:00 to 9:00 pm.

Fee: to be determined

UPDATING IN MEDICATIONS

January 9, 16, 23, 30, February 6, 1974

Central and Southern Sites

February 13, 20, 27, March 6, 13, 1974

Central and Northern Sites

This series will present information on new drugs, new pharmacological concepts, and current methods in the giving of medications.

Classes will meet each Wednesday from 7:00 to 9:00 pm.

Fee: to be determined

**PROBLEM-ORIENTED
MEDICAL SYSTEM**

February 11, 18, 25, March 4, 1974
Central and Southern Sites

This series will present an organized concept in total patient care. It is suggested that nursing personnel from all levels attend.

Fee: to be determined

**THE PATIENT'S SITUATION
IN RESPIRATORY
INADEQUACIES**

March 27, April 3, 10, 17, 24, 1974
Central and Southern Sites
May 1, 8, 15, 22, 29, 1974
Central and Northern Sites

Nursing assessment and intervention in the care of the patient with respiratory diseases will be discussed in this series. The content will include recently developed concepts.

Classes will meet each Wednesday from 7:00 to 9:00 pm.

Fee: to be determined

WORKSHOPS

**REALISTIC PROGRAMMING
FOR PATIENT EDUCATION**

October 12 and November 30, 1973
Rochester area

This two-stage workshop will present information on the educational principles which are involved in teaching the individual, in teaching groups, in teaching others to teach, and in the development of health education departments.

Fee: to be determined

**GOAL DIRECTED NURSE
INTERVIEWS**

November 1, 1973
Detroit Lakes area
January 17, 1974
Willmar area

The use of the interview in data collection and the building of relationships will be discussed in these one-day workshops. Structure for the refining of communication skills will also be presented.

Fee: to be determined

**HELPING BATTERED
CHILDREN AND THEIR
PARENTS**

December 6, 1973
Shakopee area

This one-day workshop will be focused on the protection of children through assessing and maximizing parenting capabilities.

Fee: to be determined

**NURSING RELATING TO
PERSONS IN CRISIS**

January 24, 1974
Twin Cities area

This one-day workshop will present current concepts in effective interactions with persons involved in extraordinary situations of various kinds. The subjects of assessment, intervention, nonintervention, and growth in crisis will be included.

Fee: to be determined

**EMOTIONAL ASPECTS IN
NURSING CARE**

February 7, 8, 1974
Twin Cities area

This two-day workshop will explore the commonalities and the dissimilarities for the nurse in the process of caring for the dying patient, the grieving person, the patient with unmanageable pain, the demanding person, the frightened person, etc. The content will deal with personal and situational factors, and the interaction between them.

Fee: to be determined

**NURSING TECHNIQUES IN
RESPIRATORY CARE**

May 2, 1974
Worthington area
May 23, 1974
Twin Cities area

Specific skills will be presented in these one-day workshops. The content will be an elaboration of the concepts presented in the telelecture series on respiratory inadequacies.

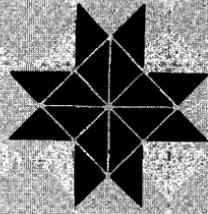
Fee: to be determined

SPECIAL EVENTS

**SCHOOL OF NURSING
ALUMNI DAY**

April 29, 1974

Also see "I. V. Therapy Seminar for Pharmacists and Nurses", Pharmacy Section; "Neurological Aspects of Learning Disabilities for Professionals in Education" and "Improving Patient Records for Better Health Care", Medicine Section; and the Public Health and Allied Health Sections for selected offerings which are of interest to nurses.



CONTINUING EDUCATION IN PHARMACY

Continuing Pharmacy Education is sponsored by the College of Pharmacy, Lawrence C. Weaver, Dean, and by Continuing Education and Extension, Harold A. Miller, Dean.

Thomas M. McKennell
Director
Continuing Pharmacy Education
College of Pharmacy
University of Minnesota
Minneapolis, Minnesota 55455
(612) 373-2197

Cynthia Foster
Program Assistant
Department of Conferences
Nolte Center for Continuing Education
University of Minnesota
Minneapolis, Minnesota 55455
(612) 373-0064

For information or registration in continuing education programs in pharmacy, contact either Mr. Thomas McKennell or Ms. Cynthia Foster — or — complete and mail the form on page 67.

Chronological Course Listings

1973

Practical Dermatology	September 26, October 3, 10, 17, 24, 1973 Worthington
Practical Dermatology	October 2, 9, 16, 23, 30, 1973 Minneapolis
Practical Dermatology	October 3, 10, 17, 24, 31, 1973 Minneapolis
Practical Dermatology	October 4, 11, 18, 25, November 1, 1973 Minneapolis
Practical Dermatology	October 9, 16, 23, 30, November 6, 1973 Rochester
I.V. Therapy Seminar for Pharmacists and Nurses	October 13-14, 1973 Bloomington
Practical Dermatology	October 16, 23, 30, November 6, 13, 1973 Duluth
Practical Dermatology	October 23, 30, November 6, 13, 20, 1973 Hibbing
The Pharmacist and Computer Services	October 27, 1973 Minneapolis
Practical Dermatology	October 31, November 7, 14, 21, 28, 1973 Alexandria
Practical Dermatology	November 7, 14, 21, 28, December 5, 1973 Willmar
Course in Applied Biopharmaceutics and Pharmacokinetics	November 7, 14, 21, 28, December 5, 12, 1973 Minneapolis
Home Health Aids	November 18, 1973 Bloomington

1974

Nature's Remedies	Winter Quarter, 1974 Minneapolis
Practical Dermatology	January 10, 17, 24, 31, February 7, 1974 Mankato
Practical Dermatology	January 23, 30, February 6, 13, 20, 1974 Minneapolis

Conference on Non-Prescription Medication	January 27-February 3, 1974 San Juan, Puerto Rico
Practical Dermatology	February 13, 20, 27, March 6, 13, 1974 Minneapolis
M.S.Ph.A. Mid-Winter Conference on Continuing Education	February 23, 24, 1974 (Site to be determined)
Practical Dermatology	February 26, March 5, 12, 19 26, 1974 Marshall
Practical Dermatology	March 5, 12, 19, 26, April 2, 1974 Brainerd
Practical Dermatology	March 12, 19, 26, April 2, 9, 1974 Bemidji
Practical Dermatology	March 19, 26, April 2, 9, 16, 1974 Moorhead-Fargo
Practical Dermatology	March 26, April 2, 9, 16, 23, 1974 Fergus Falls
Practical Dermatology	March 27, April 3, 10, 17, 24, 1974 Austin
Practical Dermatology	April 2, 9, 16, 23, 30, 1974 St. Cloud
Conference on Modern Management for Pharmacists	April 3, 4, 1974 (Site to be determined)
90th Annual M.S.Ph.A. Meeting	June 7-9, 1974 Duluth

CONTINUING EDUCATION IN PHARMACY

Specific mailings will be made for individual courses; more detailed information on courses presently listed without the fee or specific site will be available at that time. All courses will be held on the Minneapolis campus of the University of Minnesota unless otherwise indicated.

Mandatory Continuing Education for Pharmacists

At the 1973 session of the Minnesota legislature, an act was passed which requires pharmacists to participate in continuing education programs. All of the programs described in this section will carry the appropriate amount of continuing education credit.

Course Descriptions

TELEVISION LECTURE SERIES #7 – PRACTICAL DERMATOLOGY

The seventh pharmacy television lecture series, comprised of five one-hour tapes, will be viewed at a number of sites throughout the state. The subject for the learning programs is practical dermatology, and the resource person is Dr. William Gentry, of the Department of Dermatology, Medical School, University of Minnesota. After the showing of each tape, there will be a resource person present who will answer questions and lead a discussion on the subject.

The program is designed for pharmacists in both hospital and community practice, as well as nurses and others who must care for the patient with a dermatological problem. The course includes a study of dermatitis, acne, psoriasis, cutaneous infections, drug eruptions, dry skin, insect bites and burns. New and unusual therapies will be studied.

The objectives of the program are to familiarize participants with the more common dermatoses clinically, and to understand the pathophysiological processes operating in these diseases. Participants will be assisted in recommending therapy, and to become aware when a physician should be consulted. The rationale for therapy given by dermatologists will also be studied. Course fee includes the lectures, discussions, notebook, and mimeographed outlines and materials.

Fee: \$25.00 for the series
of five programs

TELEVISION LECTURE SERIES #7

FALL, 1973

PLACE	LOCAL COORDINATOR(S)	SITE	TIME	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER
Worthington	Warren Gordon	Worthington State Jr. College	8:00 pm	26	3,10,17,24		
Twin Cities	T.M. McKennell	Site #1 - Minneapolis Campus	8:00 pm		2,9,16,23,30		
Twin Cities	Garry Persons	Site #2 - St. Louis Pk. Meth. Hosp.	8:00 pm		3,10,17,24,31		
Twin Cities	Leonard Lang	Site #3 - St. Paul-Ramsey Hosp.	8:00 pm		4,11,18,25	1	
Rochester	Delbert Fisher Joe Kostick Ron Hartmann	Methodist Hospital	8:00 pm		9,16,23,30	6	
Duluth	David Pederson	U. of M. Duluth	9:30 pm		16, 23, 30	6,13	
Hibbing	Mario Rosatti	Hibbing State Jr. College	8:00 pm		23, 30	6,13,20	
Alexandria	William Trumm Donald Krueger	Alexandria Area Tech. Institute	8:00 pm		31	7,14,21,28	
Willmar	Lois Birk	Willmar State Jr. College	8:00 pm			7,14,21,28	5

TELEVISION LECTURE SERIES #7

WINTER-SPRING, 1974

PLACE	LOCAL COORDINATOR(S)	SITE	TIME	JANUARY	FEBRUARY	MARCH	APRIL
Mankato	Robert Reutzel	Mankato State Coll.	8:00 pm	10,17,24,31	7		
Twin Cities	William J. Hodapp	Site #4 – Minneapolis Campus	8:00 pm	23,30	6,13,20		
Twin Cities	Henri Manasse	Site #5 – Minneapolis Campus	8:00 pm		13,20,27	6,13	
Marshall	Sheldon F. Cline	Southwest MN State College	8:00 pm		26	5,12,19,26	
Brainerd	John Thatcher	Brainerd H.S.	8:00 pm			5,12,19,26	2
Bemidji	Jack Erickson	Bemidji State Coll.	8:00 pm			12,19,26	2,9
Moorhead-Fargo*	Joel Nelson	No. Dak. State Univ. College of Pharmacy	8:00 pm			19,26	2,9,16
Fergus Falls	Jack Andrews	Fergus Falls Jr. Coll.	8:00 pm			26	2,9,16,23
Austin	Earl Peters	Austin State Jr. College	8:00 pm			27	3,10,17,24
St. Cloud	Jim Benn George Reisdorf	St. Cloud V.A. Hosp.	8:00 pm				2,9,16,23,30

*This program is jointly sponsored by the College of Pharmacy, North Dakota State University, and by the College of Pharmacy, University of Minnesota.

I.V. THERAPY SEMINAR FOR PHARMACISTS AND NURSES

October 13-14, 1973
Bloomington

This seminar is designed for pharmacists and I.V. nurse specialists. The program will deal with the theory and practical aspects of parenterals and their administration, centralized admixture services, and will include hyperalimentation. The faculty for this seminar includes physicians, pharmacists, and nurses. It will be held at the Marriott Inn in Bloomington. Those planning to attend are urged to preregister as early as possible.

Fee: to be determined
Attendance: limited

THE PHARMACIST AND COMPUTER SERVICES

October 27, 1973

This lecture and workshop is designed for community pharmacists to acquaint them with the services that are available to assist them in their practice. The two-hour program is part of a homecoming program jointly sponsored by the Alumni Association and the College of Pharmacy. It will be held in Appleby Hall (College of Pharmacy) from 10:00 am to 12:00 noon. Inquiries may be addressed to Mr. Gerald L. Dean, c/o Midway Hospital Pharmacy, 1700 University Avenue, St. Paul, Minnesota 55104, (612) 641-5327.

Fee: to be determined

COURSE IN APPLIED BIOPHARMACEUTICS AND PHARMACOKINETICS

November 7, 14, 21, 28,
December 5 and 12, 1973

The purpose of this course is to reacquaint the practicing pharmacist with the fundamental principles which determine the time-course of drug levels in the body, especially during chronic drug therapy. The pharmacist must have a working knowledge of these principles if he or she is to choose a specific drug product to be dispensed, or suggest a dosage regimen to be employed.

This course, consisting of six weekly two-hour sessions, has been designed for practicing pharmacists. The course will explore the areas of biopharmaceutics and pharmacokinetics with particular emphasis on the application, through problem solving, of the principles presented. Handouts to supplement the course material will be distributed before each session, and weekly readings will be assigned.

The course will be given by Dr. Kenneth W. Miller and Dr. Ronald J. Sawchuk. It will be held in Appleby Hall (College of Pharmacy) at 8:00 pm on Wednesdays.

Fee: \$25.00

HOME HEALTH AIDS

November 18, 1973
Bloomington

This one-day program is jointly sponsored by the Minnesota State Pharmaceutical Association and the College of Pharmacy. It is designed to provide practical information regarding pharmaceutical services for those requiring home health aids, with attention to the individual needs of the convalescent patient. The responsibilities of the pharmacist will be studied, as well as the opportunities for greater effectiveness in meeting the patient's needs. The program will be held at the Sheraton Motor Inn in Bloomington.

Fee: to be determined

NATURE'S REMEDIES

Winter Quarter, 1974

A reasoned and objective evaluation will be developed of those substances obtained from nature that are medicinally used. Chemical and physiological terms will be defined concurrently with the discussions.

Consideration will be given to history and literature; vitamins and enzymes; drugs from animals (hormones); drugs from the sea and microorganisms (antibiotics and vaccines); spices and herbs; tranquilizing plants; stimulating and hallucinogenic plants; poisonous plants and mushrooms. Health foods and vitamins, food additives, diets, and human nutritional needs *will not* be considered.

All individuals interested in the subject matter described are invited to enroll regardless of their academic background. Those interested in enrolling, please write for the Extension Classes Bulletin (address listed on page 4).

The course will be given by Dr. E. John Staba. It will be held in Appleby Hall, room 350, at 6:30 pm on Wednesdays. Three degree credits.

Fee: \$42.00

CONFERENCE ON NON-PRESCRIPTION MEDICATION

January 27-February 3, 1974
San Juan, Puerto Rico

This course is designed for pharmacists who are continually requested to recommend non-prescription drugs and products. It will aid the pharmacist in making rational decisions and in providing appropriate advice for a number of classes of over-the-counter (OTC) preparations.

The participants will study OTC drugs from the perspective of symptomatology. Indications and non-indications, mechanisms of action, how to administer, drug interaction, adverse reactions, and product evaluation will also be covered.

The faculty for this conference includes Dr. Martin Jinks and Dr. Karl Schuttenhelm of the College of Pharmacy.

The registration fee covers notebook, mimeographed handouts, printed materials and tuition.

This conference is being held in the Puerto Rico Sheraton Hotel, San Juan, and permits pharmacists an opportunity to enjoy a winter vacation, coupled with a continuing education experience.

Brochures which provide details about the trip are available on request. Space is limited; early registrations are encouraged.

Fee: \$35.00 (conference fee only)

Attendance: limited

M.S.Ph.A. MID-WINTER CONFERENCE ON CONTINUING EDUCATION

February 23, 24, 1974
Site to be determined

This conference is presented by the Minnesota State Pharmaceutical Association with the cooperation of the Continuing Pharmacy Education Department of the College of Pharmacy. The theme of this year's conference is once again the study of drug interactions. The purpose is to provide the pharmacist with additional technical and professional knowledge that will prove helpful in patient-oriented services. Inquiries may be addressed to Donald A. Dee, Executive Director, Minnesota State Pharmaceutical Association, 2469 University Avenue, St. Paul, Minnesota 55114, (612) 646-4088.

Fee: to be determined

CONFERENCE ON MODERN MANAGEMENT FOR PHARMACISTS

April 3, 4, 1974
Site to be determined

This conference, jointly sponsored by the Minnesota State Pharmaceutical Association and the College of Pharmacy, is designed to provide information that will assist the pharmacist in the areas of merchandising, advertising, and business and financial management. A competent faculty will be responsive to participant questions and

problems, and will seek to provide information and strategies that will be useful in the successful resolution of the problems.

Fee: to be determined

90TH ANNUAL M.S.Ph.A. MEETING

June 7-9, 1974
Duluth

In response to a request from the Minnesota State Pharmaceutical Association, the Continuing Pharmacy Education Department will provide a strong component of continuing education at the annual meeting. The program in continuing education will be designed to meet the needs of both community and hospital pharmacists. The program will be held at the Radisson Hotel, Duluth, Minnesota.

Fee: tuition is included in the meeting registration fee

AUDIO-CASSETTE PROGRAM

INFECTIOUS DISORDERS AND DRUG THERAPY

Continuing Education by audio-cassette is designed for individual or small group study. This series consists of six audio-cassette tapes, each approximately one hour in length, and is designed for pharmacists and other health professionals. The six cassettes are packaged in a holder notebook, which also includes lecture outlines, visual aids, self-check tests, and a final examination. Each student, by completing the final examination, may receive 12 hours of credit in continuing education (1.2 Continuing Education Units). If you chose to study in a group, rather than individually, one complete set may be ordered, with the remainder of the group members ordering study sets at half-price, which contain all materials except the tapes.

Program	Title	Author/Lecturer
1	"Drug, Bug, Host Relationships"	Allan C. Kind, M.D.
2	"Infectious Disorders of the Respiratory Tract"	John B. O'Leary, M.D.
3	"Venereal Diseases and Genitourinary Infections"	Allan C. Kind, M.D.
4	"Antibiotic Sensitivity Testing" and "Veterinary Antibiotics"	Donna J. Blazevic, M.P.P. Paul B. Hammond, D.V.M.
5	"Pediatric and Hospital Infections"	John M. Matsen, M.D.
6	"A Dermatologist and an Internist Discuss Skin and Travelers' Diseases"	Harold G. Ravits, M.D. and Allan C. Kind, M.D.

Fee: \$35.00 (complete set)
\$17.50 (additional sets without audio-cassette tapes)

PROGRAMMED INSTRUCTION PROGRAM

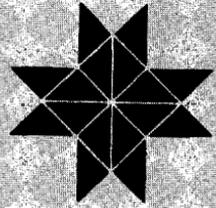
TREATMENT AND CARE OF DIABETICS

Programmed instruction is a rewarding form of individualized study. The learner is led by easy steps at his own pace and at his own site through material which would otherwise require many hours of research into library resources.

For pharmacists and other health professionals, this program will present a description of diabetes and symptoms of the disease. Dietary regulation, appropriate drug therapy and techniques of care will also be covered. In addition, the program will provide information on how to handle acute emergencies in diabetic patients.

Fee: to be determined

Also see "Realistic Programming for Patient Education," Nursing Section.



**CONTINUING EDUCATION
IN
PUBLIC HEALTH**

Continuing Education in Public Health is sponsored by the School of Public Health, Lee D. Stauffer, Dean.

Robert W. Schwanke, M.P.H.
Coordinator for Continuing Education
School of Public Health
1325 Mayo Memorial Building
University of Minnesota
Minneapolis, Minnesota 55455
(612) 373-8060

For information or registration in continuing education programs in public health, contact Mr. Robert Schwanke — or — complete and mail the form on page 67.

Chronological Course Listings

1973

Communication Skills for Health Professionals	Fall Quarter, 1973
Counseling the Alcoholic and Other Drug Dependent People	Fall Quarter, 1973
Environmental Health	Fall Quarter, 1973
Fundamental Aspects of Drug Abuse and Dependency	Fall Quarter, 1973
Group Counseling Techniques Related to Chemical Dependency	Fall Quarter, 1973
Internship in Alcohol and Drug Abuse	Fall Quarter, 1973
Introduction to Air Pollution Problems	Fall Quarter, 1973
Coding Electrocardiographs	September, 1973 (exact dates to be determined)
External Forces Affecting Health Care Delivery	September 10-14, 1973 (residential session)
Administration of Long Term Care Facilities	September 19, 1973- January 8, 1974
7th Alumni Institute on Hospital Administration	October 3-5, 1973
Institutional Health Care Governance and the Community	October, 1973 (residential session; exact dates to be determined)

1974

Communication Skills for Health Professionals	Winter Quarter, 1974
Environmental Aspects of Liquid Waste Disposal	Winter Quarter, 1974
Fundamental Aspects of Drug Abuse and Dependency	Winter Quarter, 1974
Fundamentals of Alcohol and Drug Abuse	Winter Quarter, 1974
Group Counseling Techniques Related to Chemical Dependency	Winter Quarter, 1974

Internship in Alcohol and Drug Abuse	Winter Quarter, 1974
Industrial Hygiene Engineering	Winter Quarter, 1974
Personal and Community Health	Winter Quarter, 1974
The Disease Process and Social Implications of Drug Dependency	Winter Quarter, 1974
Services for Long Term Care Patients	January 9-April 23, 1974
Air Pollution Controls and Surveys	Spring Quarter, 1974
Communication Skills for Health Professionals	Spring Quarter, 1974
Counseling the Alcoholic and Other Drug Dependent People	Spring Quarter, 1974
Environmental Health Aspects of Water Safety	Spring Quarter, 1974
Group Counseling Techniques Related to Chemical Dependency	Spring Quarter, 1974
Internship in Alcohol and Drug Abuse	Spring Quarter, 1974
Hospital Safety	Spring Quarter, 1974
Introduction to Anatomy and Medical Terminology	Spring Quarter, 1974
The Disease Process and Social Implications of Drug Dependency	Spring Quarter, 1974
Ventilation Control of Environmental Hazards	Spring Quarter, 1974
Critical Issues in Aging	April 24-August 6, 1974
Coding Electrocardiographs	June, 1974 (exact dates to be determined)
Epidemiologic Aspects of Population Dynamics	June 23-July 13, 1974
Epidemiologic Basis for Health Services Planning and Evaluation	June 23-July 13, 1974
Epidemiology of Cardiovascular Diseases and Cancer	June 23-July 13, 1974

Fundamentals of Biostatistics	June 23-July 13, 1974
Fundamentals of Epidemiology	June 23-July 13, 1974
Administrative and Professional Relationships Within the Hospital	July 8-19, 1974 (residential session)
External Forces Affecting the Management of Patient Care Services	July 8-19, 1974 (residential session)
Management and Organization Within the Hospital	July 8-19, 1974 (residential session)
Patient Care Management and Organization Within the Hospital	July 8-19, 1974 (residential session)

**Offered Throughout the Year:
Hours/Dates Arranged**

Adult and Geriatric Nurse Practitioner Program
 Contemporary School Nursing
 Human Nutrition
 Practicum in Long Term Care Administration

**CONTINUING EDUCATION
IN
PUBLIC HEALTH**

Most programs will be presented on or near the Minneapolis campus of the University of Minnesota. For registration or further information on courses noted with an asterisk (*), write for the Extension Classes Bulletin (see address listed on page 4). For courses noted with a dagger (†), write for the Independent Study Bulletin (see address listed on page 4).

***PERSONAL AND COMMUNITY HEALTH**

Winter Quarter, 1974

Three credits. The class will meet in Mayo 100, and is taught by Dr. William A. O'Brien and others. Hours: Tuesdays from 7:00 to 9:30 pm. Meets teacher health certification requirement.

Fee: \$45.00

ENVIRONMENTAL HEALTH***ENVIRONMENTAL HEALTH**

Fall Quarter, 1973

Methods for promoting man's health and comfort by controlling the environment. Qualified students may register for graduate credit. Three credits. The course is taught by Dr. Conrad P. Straub and meets in Mayo 1210. Hours: Tuesdays from 7:00 to 9:30 pm.

Fee: \$45.00

***INTRODUCTION TO AIR POLLUTION PROBLEMS**

Fall Semester, 1973

History, sources, controls, effects, surveys, legal aspects, and administration of air pollution programs. Qualified students may register for graduate credit. The class will meet in Mayo 1250, and is taught by Dr. Harold J. Paulus. Three credits. Hours: Mondays from 6:20 to 8:00 pm.

Fee: \$45.00

***ENVIRONMENTAL ASPECTS OF LIQUID WASTE DISPOSAL**

Winter Quarter, 1974

Role of liquid wastes in health of man; physical, chemical, and biological characteristics, evaluation of source, treatment, and disposal facilities. Qualified students may register for graduate credit. Three credits. The class will meet in Mayo 1210 on Tuesdays from 7:00 to 9:30 pm. The course is taught by Dr. Conrad P. Straub.

Fee: \$45.00

***INDUSTRIAL HYGIENE ENGINEERING**

Winter Quarter, 1974

Field and laboratory methods used by industrial hygiene engineers in study and control of occupational health hazards. Qualified students may register for graduate credit. The class will meet in Mayo 1220 on Mondays from 6:20 to 8:50 pm. The course is taught by Mr. Knowlton J. Caplan. Three credits.

Fee: \$45.00

***AIR POLLUTION CONTROLS AND SURVEYS**

Spring Semester, 1974

Public health engineering approach to air pollution controls and surveys. Qualified students may register for graduate credit. Three credits. The class will meet in Mayo 1250, and is taught by Dr. Harold J. Paulus. Hours: Mondays from 6:20 to 8:00 pm.

Fee \$45.00

***ENVIRONMENTAL HEALTH ASPECTS
OF WATER SUPPLY**

Spring Quarter, 1974

Role of water in health of man; physical, chemical, and biological characteristics; evaluation of source, treatment, and distribution system. Qualified students may register for graduate credit. Three credits. The class will meet in Mayo 1220 on Tuesdays from 7:00 to 9:30 pm. The course is taught by Dr. Conrad P. Straub.

Fee: \$45.00

***HOSPITAL SAFETY**

Spring Quarter, 1974

Theories and practices in accident and fire prevention and control for hospitals and other medical care facilities. The class will meet in Mayo 1210 and is taught by Mr. Gustave L. Scheffler. Hours: Mondays from 7:00 to 9:00 pm. Three credits.

Fee: \$45.00

***VENTILATION CONTROL OF
ENVIRONMENTAL HAZARDS**

Spring Quarter, 1974

Theory and application of exhaust ventilation in control of airborne environmental hazards; principles of exhaust hoods, air moving devices; gas cleaning devices; demonstration of measurement techniques; relationship of hazard and process to ventilation design criteria. Qualified students may register for graduate credit. Three credits. The class will meet in Mayo 1220 on Mondays from 6:20 to 8:50 pm. The course is taught by Mr. Knowlton J. Caplan.

Fee: \$45.00

EPIDEMIOLOGY

**NINTH GRADUATE SUMMER SESSION
IN EPIDEMIOLOGY**

June 23-July 13, 1974

Graduate credit available by arrangement. The classes will meet in the Nolte Center for Continuing Education. The fee for any combination of these courses is \$350.00.

Fundamentals of Biostatistics

M, T, W, Th, F — 8:30 am to 12:00 pm

Discussions of incidence, prevalence, probability, and probability methods as well as the elementary principles of statistical inference. Dr. Jacob E. Bearman. Limited to 30 students.

Fundamentals of Epidemiology

M, T, Th, F — 1:00 to 4:30 pm

Basic concepts and methods of epidemiology are presented in lectures and group seminar. Each seminar is devoted to discussion of an exercise dealing with the investigation of a specific disease. Visiting lecturers.

**Epidemiology of Cardiovascular
Diseases and Cancer**

M, W, F — 1:00 to 4:30 pm

Modern concepts of the epidemiology of arteriosclerotic disease and hypertension with particular attention paid to the multivariate setting of etiologies. Visiting lecturers.

**Epidemiologic Basis for Health Services
Planning and Evaluation**

M, W, F — 8:30 am to 12:00

Application of epidemiologic perspectives and techniques to health sciences needs, description, planning and evaluation. The course will be conducted by case-presentations and seminar discussions. Visiting Lecturers. Limited to 20 students.

**Epidemiologic Aspects of Population
Dynamics**

T, Th — 8:30 am to 12:00 pm

Basic demographic concepts including measures of fertility and mortality, cohort and period rates, principles of life tables and population projections, with special emphasis on changing patterns of age structure in populations and their interaction with disease patterns. Visiting lecturers.

HEALTH EDUCATION

***COMMUNICATION SKILLS FOR
HEALTH PROFESSIONALS**

Fall Quarter, 1973
Winter Quarter, 1974
Spring Quarter, 1974

The identification of basic skills in interpersonal and interprofessional relationships. Attention will be given to development of skills in one-to-one communications. Skills in small group interactions, and skills necessary to affect change within human relationships, conflict resolutions, and teamwork. Three credits. The class will meet in 117 Owre Hall on Mondays from 6:20 to 8:20 pm. The course is taught by Dr. Robert L. Veninga.

Fee: \$45.00

***INTRODUCTION TO ANATOMY AND
MEDICAL TERMINOLOGY**

Spring Quarter, 1974

Presentation of a method of medical terminology by body system. Review of anatomy including the regions and systems of the body. Three credits. The class will meet in 74 Jackson Hall on Tuesdays from 6:30 to 8:30 pm. The course is taught by Dr. Carl B. Heggestad.

Fee: \$42.00

HOSPITAL AND HEALTH CARE ADMINISTRATION

**INDEPENDENT STUDY PROGRAM FOR HOSPITAL AND HEALTH CARE
FACILITY ADMINISTRATORS**

**†Course I — Management and Organization
Within the Hospital**

July 8-19, 1974: Residential Session

Emphasis on management, organizational behavior, personnel management, hospital development and organization, financial control, indirect patient care functions, direct patient care functions. Fifteen credits. The course is taught by Dr. Vernon E. Weckwerth, Dr. Edith D. Leyasmeyer, Dr. Willy DeGeyndt, and others. The course is one calendar year long and is independent study.

Fee: \$750.00

**†Course II — Administrative and
Professional Relationships Within
the Hospital**

July 8-19, 1974: Residential Session

Emphasis on the Board of Trustees, role of nursing in the framework of patient services, role of administrator in developing and implementing policy, legal dimensions for hospital administrators, medical records, administrative role in planning, programming and facility development, the hospital as part of the community health system, and administrative responsibilities for continuing education. Fifteen credits. The course is taught by Dr. Vernon E. Weckwerth, Dr. William W. Metcalfe, Mr. Arne R. Sorlein, and others. The course is one calendar year long and is independent study.

Fee: \$750.00

†Course III – External Forces Affecting Health Care Delivery September 10-14, 1973: Residential Session

Concern for the external forces of finance, social policy, manpower, and organizing, on the delivery of health care by hospitals and other health care institutions. Emphasis will be on constraints and opportunities in each subject matter area. Twenty-five graduate credits. The course is taught by Dr. Vernon E. Weckwerth, Mr. Robert Dickler, Mr. Stanley Williams, and others. The course is one calendar year long and is independent study.

Fee: \$750.00

INDEPENDENT STUDY PROGRAM FOR LONG TERM CARE ADMINISTRATORS

†Course I – Administration of Long Term Care Facilities September 19, 1973-January 8, 1974

Relates fundamental management principles to the special problems and concerns of long term care administration. Six credits. On-campus sessions will be September 19, 20, 21, 1973 and January 8 and 9, 1974. The course is taught by Ms. Ruth P. Stryker, Dr. G. Kenneth Gordon, and others.

Fee: \$200.00

†Course II – Services for Long Term Care Patients January 9-April 24, 1974

Relates the physical and psychosocial needs of patients to the services provided in the facility. Six credits. On-campus sessions will be January 9, 10, 11, and April 24 and 25, 1974. The course is taught by Ms. Ruth P. Stryker, Dr. G. Kenneth Gordon, and others.

Fee: \$200.00

†Course III – Critical Issues in Aging April 24-August 5, 1974

Physical, psychosocial and cultural dynamics of aging (gerontology) and public policy affecting adaptation by the aging person. Six credits. On-campus sessions will be April 24 and 25 and August 5 and 6, 1974.

Fee: \$200.00

†Course IV – Practicum in Long Term Care Administration Hours/Dates Arranged

Relates knowledge to practice in a long term care setting under the guidance of a trained preceptor. Six credits. Dates arranged with student and preceptor. Ms. Ruth P. Stryker, Dr. G. Kenneth Gordon, and others. The course is four months of independent study.

Fee: \$200.00

INDEPENDENT STUDY PROGRAM IN PATIENT CARE ADMINISTRATION

Course I – Patient Care Management and Organization Within the Hospital July 8-19, 1974: Residential Session

Improvement in administration by practicing patient care administrators in the internal operations of the health care delivery system. Relationships among people and groups of people functioning within and related to the institutions and external forces which affect the role of the institution within the community. The course is taught by Mr. John R. Malban, Dr. William W. Metcalfe, Ms. Ruth P. Stryker, and others. The course is one calendar year long and is independent study.

Fee: \$750.00

**Course II – External Forces Affecting
the Management of Patient Care Facilities**

July 8-19, 1974: Residential Session

Initiation and management of change in the health care system; implications for education and practice; studying external forces of finance, organizing, social policy, and manpower. The course is taught by Mr. Stanley Williams, Dr. Vernon E. Weckwerth, and others. The course is one calendar year long and is independent study.

Fee: \$750.00

INDEPENDENT STUDY PROGRAM FOR HEALTH CARE TRUSTEES

**Course I – Institutional Health Care
Governance and the Community**

October, 1973: Residential Session
(exact dates to be determined)

Units of independent study for members of the governing boards of hospitals with emphasis on the role, responsibility, function, purpose, organization and accountability of hospital boards in relation to health care governance. The course is taught by Dr. William W. Metcalfe, Mr. Bright M. Dornblaser, Dr. Vernon E. Weckwerth, and others. The residential session is two days long; the entire course is eight months of independent study.

Fee: \$400.00 per individual,
or \$1,000.00 per institution
for three participants

**7TH ALUMNI INSTITUTE ON HOSPITAL
ADMINISTRATION**

October 3, 4, 5, 1973
Radisson Hotel, Minneapolis

General sessions plus concurrent workshops on the force of public policy, finance, the public lever, pressure and control from local government, marketing health care, neo-alternative forms of delivery, managing the dynamics of change. Conference theme: "Public Priorities for Health Care". Mr. Bright M. Dornblaser, Mr. Robert D. Taylor, and others. Open only to MHA graduates of the University of Minnesota.

Fee: no cost

PUBLIC HEALTH NURSING

**ADULT AND GERIATRIC NURSE
PRACTITIONER PROGRAM**

Hours/Dates Arranged

A five-month independent work study program designed to prepare nurses to function as associates to physicians in delivering primary health care. Credit possible by special arrangement. Ms. Eva M. Anderson and Ms. Elaine R. Cooley.

Fee: to be determined

CONTEMPORARY SCHOOL NURSING

Hours/Dates Arranged

Two courses in contemporary school nursing are offered at selected locations in the state during the academic year. Open to all Registered Nurses, but planned primarily for school nurses and public health nurses. Graduate credit available for eligible students.

Fee: to be determined

Also see Section on Continuing Education in Nursing.

PUBLIC HEALTH NUTRITION

HUMAN NUTRITION

Hours/Dates Arranged

Principles of nutrition application to individual and family eating patterns. Discussion of nutritional aspects of selected community problems and programs. Ms. Ruth Stief. Three credits.

Fee: to be determined

Also see Food Science and Nutrition, Allied Health Section.

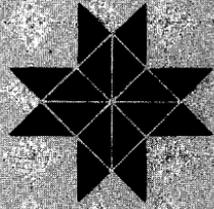
PHYSIOLOGICAL HYGIENE

CODING ELECTROCARDIOGRAPHS

September, 1973 and
June, 1974 (exact dates
to be determined)

A two-week course for physicians, nurses and EKG technicians. Designed to aid observers in spotting abnormalities on EKG's, and coding them according to the new "Minnesota Code". Credit possible by arrangement. Dr. Ronald J. Prineas and others.

Fee: \$100.00



**CONTINUING EDUCATION
IN
VETERINARY MEDICINE**

Continuing Education in Veterinary Medicine is sponsored by the College of Veterinary Medicine, Sidney A. Ewing, Dean, in cooperation with the Office of Special Programs, LaVern A. Freeh, Head, and the Agricultural Extension Service, Roland H. Abraham, Director.

James O. Hanson, D.V.M.
Director
Continuing Education
College of Veterinary Medicine
University of Minnesota
St. Paul, Minnesota 55101
(612) 373-1154

For information or registration in continuing education programs in veterinary medicine, contact Dr. James O. Hanson — or — complete and mail the form on page 67.

Chronological Course Listings

1973

Diagnostic Clinical Bacteriology and Mycology	September 11-12, 1973
Annual Fall Conference for Veterinarians	October 8-9, 1973 Bloomington
Surgery of the Mammary Gland	October 17-18, 1973
Clinical Hematology and Cytology	December 5-6, 1973
Seminar, Metabolic Profile Testing of the Bovine	December 7, 1973

1974

Selected Options of New Radiographic Equipment with Respect to Veterinary Medicine	January 22, 1974
Bull Diagnostic Methods, Breeding Soundness and Infertility	Winter Quarter, 1974 (date to be determined)
Clinical Chemistry, Urinalysis and Diagnosis	March 19-20, 1974
Diagnostics in Equine Reproduction	June 4-5, 1974
Post Mortem Examination and Diagnosis	Date to be determined
Surgical Small Animal Ophthalmology	Fall Quarter, 1974 (date to be determined)
Equine Ophthalmology	Winter Quarter, 1975 (date to be determined)

CONTINUING EDUCATION IN VETERINARY MEDICINE

Registration

You may register in advance for the various courses listed in this brochure by filling in and mailing the form which appears on page 67. (For veterinary medicine only, please disregard the mailing address listed on the form.) Please mail advance registration forms and fees to:

Dr. James O. Hanson
College of Veterinary Medicine
University of Minnesota
St. Paul, Minnesota 55101

All courses will be held on the St. Paul campus of the University of Minnesota unless otherwise specified.

Meals and Lodging

If registration fee includes meals, it will so indicate. The registration fee does not include lodging. Information concerning housing will be made available to those requesting it.

Special Notices

Special notices regarding continuing education courses will appear in each issue of the Veterinary Medicine Newsletter.

Handout Materials

It is planned that handout materials will be provided course participants.

Refunds

Advance registration is encouraged; however, in the event it is necessary for you to cancel prior to date of course, or if a course is canceled because of insufficient registration, a refund will be made.

Course Descriptions

DIAGNOSTIC CLINICAL BACTERIOLOGY AND MYCOLOGY

September 11-12, 1973

The objective of this course is to develop the ability to tentatively identify common pathogenic and contaminant bacteria and fungi. The course will include demonstrations, slides, handouts, and laboratory sessions on techniques as well as recognition of common bacteria and fungi that may be found in a small animal, large animal or mixed animal practice. Faculty will include Dr. Jerry D. Hilgren and staff. Advanced registration only. Each participant may enroll a laboratory technician. Please register

no later than September 1, 1973. The class will meet from 8:00 am to 5:00 pm each day.

Fee: veterinarians — \$60.00
laboratory technicians — \$30.00
(fee includes luncheon and
laboratory notes)

Attendance: minimum of 6 and
maximum of 12 veterinarians

ANNUAL FALL CONFERENCE FOR VETERINARIANS

October 8-9, 1973
Sheraton Motor Inn,
Bloomington

The subject for the Small Animal Medicine Program is gastroenterology; this portion of the conference will take place on Monday, October 8 from 2:00 to 10:00 pm. The faculty will include Dr. Herbert J. Van Kruiningen of the University of Connecticut.

Fee: to be determined

The subject of the Large Animal Medicine Program is bovine infertility and reproduction. The faculty will include Dr. Raimunds Zemjanis and guest faculty. This program will be presented on Tuesday, October 9 from 8:00 am to 5:00 pm.

Fee: to be determined

SURGERY OF THE MAMMARY GLAND

October 17-18, 1973

This will be a lecture-laboratory type presentation which will include a review of embryological development with emphasis on anomalies, anatomy of the mammary gland and preparation for surgery and anesthesia. Each participant will be assigned a cow in the laboratory part. He will have the opportunity to try all of the procedures presented in the course. Faculty for the course will be Dr. John P. Arnold and staff, Dr. Walter J. Mackey, and Dr. Clarence M. Stowe. Advance registration only. Please register no later than October 1, 1973. Additional information including a course outline will be mailed to those registered for the course.

Fee: \$125.00 (includes luncheon
and booklet of course
proceedings)

Attendance: minimum of 6 and
maximum of 8 veterinarians

CLINICAL HEMATOLOGY AND CYTOLOGY

December 5-6, 1973

The course is restricted to *dog* and *cat* hematology and cytology. Presentation will consist of discussion of basic principles and illustrations with visual aids. Laboratories will consist of sample collection from dogs and cats, and sample management. Both fresh and prepared slide material will be studied. Emphasis will be on anemia, leukocyte reactions, bone marrows, body fluids, vaginal smears and common neoplasms. Faculty for the program will be Drs. Victor Perman, J.B. Stevens, and D. Saror. Advance registration only. Participants are encouraged to enroll their laboratory technicians. Please register no later than November 20, 1973.

Fee: veterinarians — \$100.00
laboratory technicians — \$35.00

Attendance: limited to 15 veterinarians

SEMINAR, METABOLIC PROFILE TESTING OF THE BOVINE

December 7, 1973

The seminar will include a discussion of biochemical analysis, practical application and

group discussions, led by practicing veterinarians who have participated in field studies, utilizing this latest diagnostic technique. Dr. Jerry Stevens and staff will serve as faculty for the seminar. Advance registration only. Please register no later than December 1, 1973. The seminar will be held from 1:00 to 6:00 pm.

Fee: \$25.00

SELECTED OPTIONS OF NEW RADIOGRAPHIC EQUIPMENT WITH RESPECT TO VETERINARY PRACTICES January 22, 1974

This will be a half-day, plus an evening, course. It will be held from 1:30 to 5:30 pm, and from 7:00 to 9:00 pm. The program will consist of lectures and demonstrations. It will include the comparison of selected equipment with respect to its approximate price and utility for diagnostic work. One portion will include a method to develop technique charts. Faculty for the program will be Dr. C.R. Jessen and Ms. Sandra Jones, R.T. Advance registration only. Please register no later than January 15, 1974.

Fee: \$45.00 (includes dinner)

Attendance: minimum of 6 and maximum of 15 veterinarians

BULL DIAGNOSTIC METHODS, BREEDING SOUNDNESS AND INFERTILITY Winter Quarter, 1974 (date to be determined)

This will be a one and one-half day course, plus an evening session. It will consist of lectures, demonstration and laboratory sessions. Included will be semen collection and evaluation, genital examination, examination for venereal diseases, impotence and infertility. Bulls will be purchased for use in laboratory sessions of this course. Participants will actively participate in each of the diagnostic procedures outlined above. Dr. R. Zemjanis, staff, and guest instructors will serve as faculty for the course. Advance registration only.

Fee: \$125.00

Attendance: minimum of 6 and maximum of 8 veterinarians

CLINICAL CHEMISTRY, URINALYSIS, AND DIAGNOSIS March 19-20, 1974

This course will be small animal practitioner oriented. The faculty will consist of Dr. Jerry B. Stevens and staff.

Fee: to be determined

Attendance: limited to 15 veterinarians

DIAGNOSTICS IN EQUINE REPRODUCTION June 4-5, 1974

In this course, each veterinarian will perform the following: stallion — collect semen, evaluate semen, palpate stallion and evaluate internal genitalia, and inseminate a mare; mare — rectal palpation, vaginal examination, uterine culture, endometrial biopsy, caslicks operation. It is planned that we will have 4 stallions and 12 mares available for this course. Faculty for the course will be Dr. R. Zemjanis and guest faculty. Advance registration only. Please register no later than May 10, 1974.

Fee: \$125.00 (includes luncheon on the first day and a set of bound notes)

Attendance: minimum of 6 and maximum of 10 veterinarians

POST MORTEM EXAMINATION AND DIAGNOSIS

Date to be determined
Diagnostic Laboratories
College of Veterinary
Medicine

The primary objective of this course is to enable veterinarians to expand upon their present knowledge and abilities to utilize laboratory materials in confirming a clinical diagnosis.

This will be a laboratory participation course for practicing veterinarians. The various bacterial, viral, serological, and pathological techniques will be utilized in arriving at a laboratory diagnosis. Selection and handling of materials for laboratory use will be emphasized. There will be a discussion of toxicology, including mycotoxins and common toxicities of farm animals. Faculty for the course will be Dr. John M. Higbee and staff. Veterinarians are encouraged to bring one or more animals, preferably from clinical cases that have presented problems in your practice.

It is planned that there will be three 2½ day sessions; two will be for large animal practitioners and one will be for small animal practitioners. Minnesota registrants will be given priority. Written course objectives and other class materials will be mailed to each registrant.

Fee: \$25.00

Attendance: limited to 4
veterinarians for
each session

SURGICAL SMALL ANIMAL OPHTHALMOLOGY Fall Quarter, 1974

Date to be determined

This will be a two-day, laboratory-workshop type session. Surgical procedures of the canine and feline orbit, eyelids, nictitating membrane, conjunctiva, nasolacrimal system and cornea will be discussed. Presentations include breed predisposition, clinical signs, prognosis, medical and surgical treatments. Surgical laboratories will follow formal presentations. Faculty will be Dr. Kirk N. Gelatt. Advance registration only.

Fee: \$125.00

Attendance: limited from 12
to 14 veterinarians

EQUINE OPHTHALMOLOGY

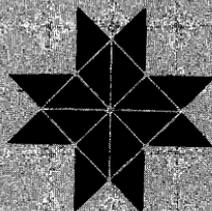
Winter Quarter, 1975

Date to be determined

This will be a one-day, laboratory-workshop type session. Current concepts in equine ophthalmology will be discussed. The pathogenesis, clinical signs, prognosis, medical, and surgical treatments will be included. Particular emphasis will be diseases of the eyelids, recurrent uveitis, cataract and diseases of the ocular fundus. A participation laboratory-workshop type session will follow the formal presentation. Eye examination and diagnostic procedures will be included. Advance registration only.

Fee: \$60.00

Attendance: limited



**CONTINUING EDUCATION
IN
ALLIED HEALTH**

Dental Assisting Program

Dental Hygiene Program

Dietetics

Food Science and Nutrition

Occupational Therapy

Physical Therapy

Speech Therapy

Interdisciplinary Programs

Continuing education in the various allied health disciplines is sponsored by the individual discipline. For further information on continuing education in a specific discipline, please contact the person or office listed in the program description – or – complete and mail the form on page 67.

DENTAL ASSISTING PROGRAM

SEMINAR FOR DENTAL ASSISTANTS

Summer, 1974

Program to be determined. This course will generally cover the credit requirements toward recertification for dental assistants.

For further information on this course, write or contact:

Director, Continuing Dental Education
Department of Conferences
Nolte Center for Continuing Education
University of Minnesota
Minneapolis, Minnesota 55455
(612) 373-3151

DENTAL HYGIENE PROGRAM

ANNUAL FALL SEMINAR FOR DENTAL HYGIENE: PERIODONTICS FOR THE DENTAL HYGIENIST

September 21, 22, 1973
Site to be determined

A review of the periodontium and the characteristics of and treatment for periodontal disease. This course provides justification for soft tissue curettage, and is a pre-requisite for post-graduate training in this procedure. Speaker: Dr. Ronald La Belle.

Fee: to be determined

For further information on this course, write or contact:

Ms. Avis Fellows
Program in Dental Hygiene
School of Dentistry
University of Minnesota
Minneapolis, Minnesota 55455
(612) 373-3271

DIETETICS

CLINICAL INSTITUTE FOR DIETITIANS

Spring, 1974
Site to be determined

For dietitians and nutritionists. Faculty from the University of Minnesota and the Twin Cities area will present a program dedicated to providing information on new developments of current interest to dietitians and nutritionists. Sponsored by the Department of Nutrition, University of Minnesota Hospitals.

Fee: to be determined

For detailed information on this course, write or contact:

Director, Department of Conferences
Nolte Center for Continuing Education
University of Minnesota
Minneapolis, Minnesota 55455
(612) 373-3151

FOOD SCIENCE AND NUTRITION

The following courses are available for persons interested in the fields of food science and nutrition:

Chronological Course Listings

1973

Technology of Food Processing	Fall, 1973
Principles of Nutrition	Fall, 1973
Introduction to Hospitality and Food Service Management	Fall, 1973
Field Experience in Clinical Nutrition	Fall, 1973

1974

Nutrition in the Life Cycle	Winter, 1974
Design and Layout of Food Services	Winter, 1974
Scientific Principles of Food Preparation	Winter, 1974
Management of Food Service and Hospitality Business System	Spring, 1974
Human Nutrition	Spring, 1974
Food Formulation, Product Development	Spring, 1974
Food Management and Marketing	Spring, 1974
Field Experience in Clinical Nutrition	Spring, 1974

For course descriptions and detailed information on these courses and their availability, write for the Extension Classes Bulletin (address listed on page 4) — or — contact:

Division of Food Science and Nutrition
University of Minnesota
St. Paul, Minnesota 55101
(612) 373-1071

Also see Public Health Nutrition, Public Health Section.

OCCUPATIONAL THERAPY — PHYSICAL THERAPY SPEECH THERAPY

Chronological Course Listings

1973

Anatomy of the Extremities	Fall Quarter, 1973
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Anatomy of the Extremities	November 3-4, 1973 and December 1-2, 1973
Functional Neuroanatomy and Neurophysiology	Fall Quarter, 1973
1974	
Kinesiology	Winter Quarter, 1974
Advanced Kinesiology	Winter Quarter, 1974
Theory and Technique of Therapeutic Exercise	Spring Quarter, 1974
Physiologic Bases for Therapeutic Exercise	Spring Quarter, 1974

Course Descriptions

ANATOMY OF THE EXTREMITIES Fall Quarter, 1973

A review of the gross anatomy of the joint structures, muscular, peripheral nervous and circulatory systems. Lecture and laboratory will include demonstration and review of the dissected human body. Must be taken S-N. Faculty: Mr. J. Pohrilla. Classes will meet on Wednesdays, from 6:20 to 9:00 pm. No degree credit.

Fee: \$42.00 plus \$8.00 lab fee

Attendance limited to 30 registered physical therapists
or occupational therapists

ANATOMY OF THE EXTREMITIES November 3-4, 1973 and December 1-2, 1973

This is an identical course to that which is listed above, except that this is a special class which will meet on two separate weekends from 9:00 am to 4:30 pm each day for a total of 25 class hours. This course is being made available for persons outside the metropolitan area who find it difficult to attend evening classes on a weekly basis.

FUNCTIONAL NEUROANATOMY AND NEUROPHYSIOLOGY Fall Quarter, 1973

A study of the neuroanatomic structures as functional systems and the basic neurophysiologic concepts with emphasis on application for understanding and treating physical dysfunction. Faculty: Ms. A. Joy Huss. Classes will meet on Tuesdays from 6:20 to 8:50 pm. Three undergraduate degree credits.

Fee: \$45.00 plus \$4.00 lab fee

Attendance limited to 50 occupational, physical,
or speech therapists or consent of instructor.

KINESIOLOGY Winter Quarter, 1974

Functional anatomy stressing the anatomical, physiological, and biomechanical aspects of normal and pathological human motion. Lecture and laboratory demonstrations. Meets concurrently with Advanced Kinesiology. Faculty: Mr. James F. Pohrilla and

Mr. Martin Mundale. Class will meet on Wednesdays from 6:20 to 9:00 pm. Three undergraduate degree credits.

Fee: \$45.00 plus \$3.00 special fee

Attendance limited to 50 registered physical or occupational therapists

ADVANCED KINESIOLOGY

Winter Quarter, 1974

See course description for Kinesiology, with which it meets concurrently. Three degree credits (may be taken for graduate credit).

Fee: \$45.00 plus \$3.00 special fee

Attendance limited to 50 registered physical or occupational therapists

THEORY AND TECHNIQUE OF THERAPEUTIC EXERCISE

Spring Quarter, 1974

Fundamental principles of physiology, physics, and neurology as a basis for therapeutic exercise. Meets concurrently with Physiologic Bases for Therapeutic Exercise. Faculty: Dr. F.J. Kottke. Class will meet on Wednesdays from 6:20 to 9:00 pm. Three undergraduate degree credits.

Fee: \$45.00

Attendance limited to 50 registered physical or occupational therapists

PHYSIOLOGIC BASES FOR THERAPEUTIC EXERCISE

Spring Quarter, 1974

See course description for Theory and Technique of Therapeutic Exercise, with which it meets concurrently. Three degree credits (may be taken for graduate credit).

Fee: \$45.00

Attendance limited to 50 registered physical or occupational therapists

For detailed information on these courses, write or contact:

Department of Physical Medicine and Rehabilitation
Box 297 Mayo Memorial Building
University of Minnesota
Minneapolis, Minnesota 55455
(612) 373-8990

INTERDISCIPLINARY PROGRAMS

These programs are developed for health professionals from a number of disciplines, rather than from one specific discipline. The programs are open to the disciplines listed in the program description, and, unless specifically stated to the contrary, to other interested health professionals.

CURRENT APPROACHES TO PATIENT THERAPY IN CEREBROVASCULAR ACCIDENTS

August 24, 1973
St. Cloud area

For nutritionists, physical therapists, occupational therapists, speech therapists, and

other interested health professionals. This seminar will provide an understanding of cerebrovascular accidents and the function of the health care team in patient care.

Fee: to be determined

SPECIAL NEEDS OF THE GERIATRIC PATIENT

October 12, 1973
St. Cloud area

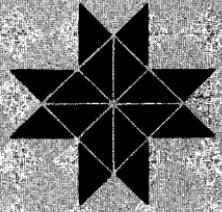
For dietitians, nursing home administrators, nurses, and other interested health professionals. Outstanding health professionals from the area will discuss physiological, psychological and economic aspects of the aging population. This will be related to food consumption patterns and special feeding problems. Workshops will center on new food products and home-delivered meals.

Fee: to be determined

For detailed information on these courses, write or contact:

Thomas McLaughlin
Program Director
Central Minnesota Area Health Education Center
c/o St. Cloud Hospital
St. Cloud, Minnesota 56301

Also see Nursing Section.



CONTINUING EDUCATION / OTHER PROGRAMS

Community Services Program

Health Professionals Drug Abuse Education Project

Minnesota Medical Information Service

Rural Physicians Associate Program

The Programs listed in this section have continuing education components, and are listed for your convenience. Access to these programs is detailed in the description for each program. For further information on any of these programs, contact the person or office listed in the program description.

COMMUNITY SERVICES PROGRAM

University Hospitals

University Hospitals' Community Services Program is designed to bring the University Health Sciences staff and other resources to health care agencies throughout the state. The service is usually provided in the community, and the goal is to establish ongoing relationships between health care agencies and the University. Although service is brought to the community, staff from the community may spend time at University Hospitals to gain experience in specialty areas such as rehabilitation, coronary care, intensive care, housekeeping and maintenance, and with various methods of health care delivery.

The program is funded through the state legislature, and normally there is no charge for the service.

Flexibility is of first importance in the program. It is the intention to provide assistance in any area of University Health Sciences capability that community health care agencies may have need. Some examples of the types of service available are:

Inservice programs for health agency staff

Seminars for medical staff

Organizational review and staff development

Specialty area work experience

Inservice resources pool —

Administration; Central Supply; Housekeeping and Maintenance; Medical Records; Medical Staff; Nursing; Nutrition (dietary); Occupational, Physical, and Speech Therapy; Operational Analysis; Pharmacy; Rehabilitation; Social Service; X-ray; and other Health Sciences resources.

If you are interested in this service or would like to know more about it, please contact:

David R. Preston

Assistant Vice President

Health Sciences

University of Minnesota

Box 501 Mayo Memorial Building

Minneapolis, Minnesota 55455

Phone: (612) 373-7615

-or-

Brenda H. Canedy, R.N.

Coordinator

Community Services Program

University of Minnesota

Box 501 Mayo Memorial Building

Minneapolis, Minnesota 55455

Phone: (612) 373-7623

HEALTH PROFESSIONALS DRUG ABUSE EDUCATION PROJECT

Health Sciences Continuing Education

The Health Professionals Drug Abuse Education Project, an NIMH training grant administered through Health Sciences Continuing Education, offers

training related to drug abuse for community health professionals. Physicians, nurses, pharmacists, dentists, allied health professionals, social workers, and veterinarians from Minnesota, North and South Dakota, northern Iowa, and western Wisconsin are eligible to attend programs which are presented by the Project staff.

Utilizing an interdisciplinary approach, the Project provides information on drug usage, teaches basic skills in drug-related treatment, promotes community involvement, and encourages a more responsive attitude towards drug users. Three-hour community sensitization workshops, three-day regional training retreats, specialty seminars, and internships are available. Most programs are offered at no cost to participants. To obtain more information regarding such a program for health professionals in your community, contact:

James H. Rothenberger
Project Coordinator
Health Professionals Drug Abuse Education Project
160 Frontier Hall
University of Minnesota
Minneapolis, Minnesota 55455
(612) 373-9813

MINNESOTA MEDICAL INFORMATION SERVICE

University Hospitals

Minnesota Medical Information Service (MMIS) is an integrated medical information service available to all physicians, dentists, nurses, pharmacists, and related health personnel in Minnesota. It consists of four component services accessible via telephone (toll free):

1. Dial Access Tapes
2. Drug Information Service
3. Medical Library Service
4. Medical/Dental Specialty Advice

WHERE TO CALL

Minneapolis-St. Paul area. 373-1855
All other areas of Minnesota (toll free). 1-800-552-7210

MMIS is designed to provide the user with a way of obtaining information when his/her existing sources are inadequate. All practitioners are encouraged to continue utilizing their local resources and professional contacts.

SERVICES PROVIDED

DIAL ACCESS TAPES

The tape library consists of 600 audio tape abstracts (4-8 minutes in length) on medical, pharmaceutical, and nursing subjects of interest to health practitioners in Minnesota. A *catalog*, listing the tapes currently in the library, is

distributed through local hospitals or upon request from MMIS*. Announcements of new tapes are made through the professional journals in Minnesota and posted on the bulletin board at local hospitals.

DRUG INFORMATION SERVICE

The Drug Information Center, staffed by pharmacists, provides individualized responses to specific drug-related questions. All health professionals should contact their local pharmacist first. The center, with its specialized information resources, serves as a backup information resource for health professionals. The Drug Information Center is *not* an official poison control center. Calls regarding poison information should be directed to your nearest poison information center.

MEDICAL LIBRARY SERVICE

The Bio-Medical Library provides a photocopy and a computerized bibliographic search service for health practitioners and a consulting service for hospital libraries. These services or further information are available through MMIS for practitioners who do not have access to a hospital or medical library.

The library will provide photocopies of journal articles upon receipt of a request for specific references. Through an agreement with the National Library of Medicine, hospital libraries can receive free photocopies up to a specified limit. Individuals without access to a hospital library can receive up to 25 photocopied articles per year free of charge.

Health professionals also have access to two computerized bibliographic search systems. They are MEDLINE (MEDLARS on-line) from the National Library of Medicine and the SUNY system from the State University of New York. With these two systems it is possible to search the literature from 2800 medical, dental, and nursing journals published since 1964. The cost for a search will range from \$3.00 to \$12.00, depending upon the number of years searched and the number of references obtained.

The library consulting service, through an extension librarian, will provide assistance to hospital libraries to establish or improve their services and collections and to help develop effective channels for obtaining library materials throughout Minnesota.

MEDICAL/DENTAL SPECIALTY ADVICE

This service is designed to provide a practicing physician or dentist with telephone advice from any one of the approximately 1000 participating physicians and dentists from the faculty of the University Schools of Medicine and Dentistry and the Mayo Clinic. It can provide him with a contact to the appropriate specialist to discuss a patient-care problem.

When a physician or dentist calls with a specific problem, the MMIS operator will select the appropriate specialty area and contact the specialist, who will return the call to the inquiring practitioner within a short period of time.

*For further information or to obtain the Dial Access catalog, call or write:

Roger Schroeder

Director

Minnesota Medical Information Service

Box 611 Mayo Memorial Building

University of Minnesota

Minneapolis, Minnesota 55455

Minneapolis-St. Paul area: 373-1855

All other areas of Minnesota (toll free): 1-800-552-7210

RURAL PHYSICIANS ASSOCIATE PROGRAM

Department of Family Practice

Medical School

>The purpose of this program is to encourage senior medical students to practice in rural areas of our state and region. Practicing physician preceptors obtain continuing medical education through monthly visits of medical specialty faculty going to the communities to visit the student and physician on clinical problem situations. The practicing preceptor physician should be willing to take the time to teach the senior medical student for a period of one calendar year, and to pay the student physician \$5,000 for this period. Students may go only into communities where there are qualified and acceptable practicing physicians. For further information, contact:

John Verby, M.D.

Director

Rural Physicians Associate Program

Box 214 Mayo Memorial Building

University of Minnesota

Minneapolis, Minnesota 55455

(612) 376-3375

Use the section which best describes your interest

NAME _____

ADDRESS _____

Mail to: Health Sciences Continuing Education
7208 Powell Hall
University of Minnesota
Minneapolis, Minnesota 55455

Check your area of interest:

- Dentistry
- Medicine
- Nursing
- Pharmacy
- Public Health
- Veterinary Medicine
- Other (specify) _____

Please enroll me in _____
Course Title Beginning Date

- My check is enclosed
 - Please bill me
- (made payable to the University of Minnesota)

Please send me complete information on the program entitled _____
_____ as soon as it is available.

Use the section which best describes your interest

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ADDRESS _____

Mail to: Health Sciences Continuing Education
7208 Powell Hall
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Minneapolis, Minnesota 55455

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- Veterinary Medicine
- Other (specify) _____

Please enroll me in _____
Course Title Beginning Date

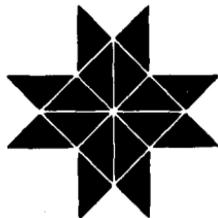
- My check is enclosed
 - Please bill me
- (made payable to the University of Minnesota)

Please send me complete information on the program entitled _____
_____ as soon as it is available.

The University of Minnesota adheres to the principle that all persons shall have equal opportunity and access to facilities in any phase of University activity without regard to race, creed, color, sex or national origin. Under this principle, education, cultural, social, housing, extracurricular, and employment opportunities are available to all on an equal basis.

Health Sciences Continuing Education
7208 Powell Hall
Minneapolis, Minn. 55455

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