Approved: March 17, 1994
Date

MINUTES OF THE HOUSE COMMITTEE ON PUBLIC HEALTH AND WELFARE.

The meeting was called to order by Chairperson Joann Flower at 1:30 p.m. on March 14, 1994 in Room 423-S of the Capitol.

All members were present except: Representative Swall, excused.

Committee staff present: Emalene Correll, Legislative Research Department
Norman Furse, Revisor of Statutes
Sue Hill, Committee Secretary

Conferees appearing before the committee:

Dr. Steven Potsic, Director of Health, Department of Health/Environment
Chip Wheelen, Director of Public Affairs, Kansas Medical Society
Joe Furjanic, Executive Director, Kansas Chiropractic Association
Mary Kopp, R.N., Kansas State Nurses Association
Sydney Hardman, Advocacy Coordinator, Kansas Action for Children, Inc.
Keith Landis, Christian Science Committee on Publication for Kansas
Karen Lowery, Coordinator of Governmental Relations, Kansas Association of School Boards

Others attending: See attached list

Chairperson Flower called the meeting to order welcoming visitors. Attention was drawn to Committee minutes for March 9, and 10. If there are any corrections or suggestions call the Committee secretary by 5:00 p.m. tomorrow, March 15th, otherwise these minutes will be considered approved as presented.

Chair requested a staff briefing on **SB 520.** Ms. Correll gave background information , noting this legislation was recommended by the Joint Committee on Health Care Decisions for the 1990s and then gave a comprehensive explanation of **SB 520.** She noted the repealer was acted upon by the Senate in final action on the Senate floor, the repealer was substituted by language found on page 4, which creates new law, beginning with 1997-98 school year the Board of Education or the Governing Board requires pupils obtain a health assessment. She detailed requirements of the new law proposed. She noted this will affect both public and private schools

HEARINGS BEGAN ON **SB 520**.

Dr. Steven Potsic, Director of Health, Department of Health/Environment, (KDHE) (Attachment No.1),offered two amendments to **SB 520**, i.e., 1) to require the health assessments only for elementary school children who have not been previously enrolled in any school in the state; 2) in cooperation with the Department of Health/Environment, the State Board of Education shall prescribe guidelines for child health assessments. He noted with these amendments, the KDHE is in support of **SB 520.** He answered numerous questions, i.e., 15% of children tested to have an above normal level of lead; guidelines to be developed for health assessments should cover lead testing only for those children at risk, not all children. It was determined the testing for lead screening is approximately $125 per screening.

Chip Wheelen, Kansas Medical Society,(KMS) (Attachment No.2) stated support for the initial version of **SB 520**. The Kansas Medical Society, Kansas Chapter of American Pediatrics, the Kansas Academy of Family Physicians, and others knowledgeable, worked very hard to develop meaningful amendments to current law, into more practical law. He noted KMS supported the original version of **SB 520** except for paragraph (1) of sub-section (c), section one; the religious exemption, but does not have a formal position on the current bill as written. It is the belief of the KMS that all children should be medically evaluated at least annually, whether or not the child attends school, with exceptions of course for those children with conditions that warrant medical evaluation more often.

Mr. Wheelen continued:

The health assessment program actually is targeted for those children who otherwise would not receive medical attention. Even though a child might be properly immunized, he/she might not have ever received a medical evaluation. This health assessment should be performed by a physician or nurse who has been certified for obtaining the specialized training. The Task Force agreed with the position of KMS on this quality of care issue. **SB 520** as currently written does not identify a role for the public health agencies in this process. Not all of the recommendations of KMS were adopted in the initial legislation, but the end result reflected extensive deliberation and compromises among school officials, public health agencies, physicians, and Health/Environment. He answered numerous questions, i.e., lead screening concerns. He noted current law will mandate screening for lead and anemia for every child, and unless this Session there is a change in that law, it will go into effect and be a very costly project. The original version of **SB 520** set out a significant role for the Health departments, and that is not addressed at all in the current version of **SB 520.** He urged the Committee to focus their attention on that issue while deliberating the bill.

Joe Furjanic, Kansas Chiropractic Association(Attachment No.3) stated support for the general concept that school children should have physical exams. If there was a choice, the Kansas Chiropractic Association, (KCA) would be more supportive of the original **SB 520** as introduced, with small changes, i.e., page 1, lines 22-23, to delete the original language and substitute the following: "(5) licensee means a person licensed under the Healing Arts Act."; on page 2, line 43, delete the word "physician" and insert "licensee". He drew attention to the balloon amendment indicated in Attachment No. 3. He noted criteria under section 7, would be within the scope of Chiropractic practice. He drew attention to (Attachment No.4) a course syllabi, Chiropractic College from Kansas City, Missouri. He stated, he just isn't sure where the current version of **SB 520** is headed. He answered questions.

Mary Kopp, Kansas State Nurses Association, (KSNA) offered hand-out (Attachment No.5). KSNA supported **SB 520** in the Senate with some recommendations for amendments to bring the health assessment schedule in line with the Academy of Pediatrics time lines. KSNA is disappointed the current **SB 520** in no way resembles the initial version heard in the Senate Public Health and Welfare Committee. KSNA supports that a uniform system for health assessments for school age children be adopted by the state, along with consultation from the Department of Health/Environment. It is vital that young children are provided with preventive health care services.

Sydney Hardman, Kansas Action for Children, Inc., (Attachment No. 6) noted support for the overall concept of health assessments for children entering school. There was an attempt in the Senate to reinstate the original provision of **SB 520** back into the bill. This floor amendment failed by a large vote in the Senate. Now with the current version of **SB 520,** Kansas Action for Children is willing to leave the School Boards, and the State Board of Education language in new Section 1, and willing to support amendments suggested today by Dr. Potsic, since this is at least assures some form of health assessments for children in Kansas. They are concerned if the earlier version of **SB 520** had been adopted, or if provisions of it are incorporated now, there wouldn't be a health assessment provision enacted at all. She was asked which version they would prefer. Ms. Hardman said the current version of **SB 520** with amendments proposed by Dr. Potsic.

Keith Landis, Christian Science Publications (Attachment No.7) noted the Legislature has been kind over the years in accommodating the religious views in respect to legislation for their group, and he is back to ask for that again. The original version of **SB 520** included an alternative health assessments for those with religious objectives to the assessments. The current version does not include that alternative. He offered an amendment to **SB 520,** i.e., page 2, lines 25-29 the stricken language be reinserted to perhaps read as follows: "As an alternative to the required health assessment, a pupil shall present a written statement signed by one parent that the child is an adherent of a religious denomination whose religious teachings are opposed to such assessments". He stated he views this request as not to cause any problems for the schools.

Karen Lowery, Coordinator of Governmental Relations, Kansas Association of School Boards. (Attachment No.8). Health assessments prior to school entrance are a useful tool. She stated commitment to working cooperatively with the State Board of Education in the development of guidelines for the health assessments. They support strongly the change that lessens the burden placed on school districts to cover the cost of the assessment and requests this remain unchanged. She noted, when asked later, they do NOT support school boards being liable for the cost of all these assessments.

Numerous questions were asked of several conferees. The cost of assessments was of great concern; who will pay for these mandated assessments. It was noted that Chiropractors currently do many physical examinations for school children participating in athletics, for truck drivers examinations for the Department of Transportation requirements. It was noted the Kansas Chiropractors Association is sure what a physical examination is, but very unsure what an assessment is.

Ms. Correll gave background information, noting the recommendation of the Special Committee on Children's Initiatives that the parents are to be responsible for the health assessments for their children and for the cost of that assessment. She pointed out that the original Committee however, did not contemplate all the writing into the law that has happened as regard to all the specifics of what kind (s) of screening would be done. It was also noted **SB 520** in the original form would have allowed the Department of Health/Environment to make grant funds available to local health departments to assist those families needing help with the required health assessments for their children. Noted, the original **SB 520** provided a provision that would allow the physician to attest to the fact an examination had been given a child within two years, if in fact that was the case. The testing would also apply to children 9 years and younger. Staff members noted there had been no opposition by conferees during the Senate hearing. Staff noted that most were in favor of the concept, a few amendments were proposed, however, it was the consensus of the Senate Committee they could support the bill even without amendments.

HEARING CLOSED ON **SB 520.**

At this point, Chairperson Flower stated, it is evident there are problems to be worked out on **SB 520**. She had reached the decision to appoint a Sub-Committee with Rep. Wagle as Chair, and Rep. Neufeld, Rep. Sader also serving.

HEARING BEGAN ON **SB 575**.

Chair requested a staff briefing. Mr. Furse detailed the process of notification of families of school age children, the exemptions and exclusions. He drew attention to language allowing the Board permissive authority for exclusion from school for noncompliance. It was pointed out that page 3, line 9 "excluded" also needs to be deleted.

Mary Kopp, Kansas State Nurses Association(KSNA) (Attachment No. 9) spoke in support of **SB 575.** The recommended amendments are a step in the right direction towards preventing the senseless spread of childhood diseases. KSNA did support the original bill's mandatory language change from "may" to "shall". They recognize, however, the Senate Committee did not support this change. She drew attention to a school in the Southwestern part of the state that has decided to work smarter earlier and notified parents by August 15, thus allowing the school to experience a rapid reduction in noncompliance, saving both nursing and clerical time. She urged support.

Karen Lowery, Kansas Association of School Boards, (Attachment No. 10) stated school districts support universal immunization for all children in the state and support **SB 575** as amended. As originally drafted **SB 575** required a mandatory exclusion of pupils who had not received proper inoculations. This provision has been deleted, and she asked that Committee to not reinstate that concept. She stated students should not be punished for the failure of their parents/guardians neglect to seek appropriate health care. There is concern that parents who do not ensure immunizations may not always ensure school attendance either. They are willing to work with local and state health officials to improve immunization rates, but think mandatory exclusion from school is not the proper path. She urged favorable consideration for **SB 575.**

Dr. Steven Potsic, Department of Health/Environment offered hand-out (Attachment No. 11).He cited specific statistics, noting 87% of 5-7 year olds actually are up to date with their immunizations. The Department does support **SB 575** as amended. There was discussion on the term, "personal grounds" for those not receiving immunizations. Updated medical/religious exemptions are still honored in current language of **SB 575.**

Numerous questions were asked, i.e., bad serum for pertussis. Dr. Potsic stated he wouldn't characterize it as bad serum and explained. It was noted there is new data stating there have been specific cases linked to specific lot number of serum being administered. This report will be made available for Dr. Potsic and for Committee members by Rep. Rutledge.

Questions continued:

Dr. Potsic, when asked, detailed how numerous diseases can and will continue to be controlled via vaccine, and the continued importance of the immunization programs available. He stated, when asked, the language in page 2, section 2, relating to costs/funding would not work as well for the health assessment program due to cost. Dr. Potsic agreed early smart start is a good idea, will help to work the process without making a mandatory exclusion. If this is the will of the Legislature, they will try to work with it. When asked, he stated it would be better to make expulsion mandatory.

Staff noted, there is nothing in current law that requires schools to report inoculations to the state. The state has required this reporting, however, there is no specific statute mandating that reporting. **SB 520** would seem to enact the requirement for reporting immunizations to the state, and also require the information be reported to the state on a form adopted by the Secretary. When asked, Dr. Potsic said they would like more specific data, but if reporting would have to be done in a more confidential manner in order to have this legislation passed, then, the Department would go along with that. He explained the Department is attempting to develop an immunization tracking system. He explained. Some states have language saying as long as it is in the best interest of the child specific information can be obtained, i.e., birthdate, grade in school, private providers, public providers. Once the data is in place, follow-ups can be made. Without more specific information, they will be unable to have the follow up system they feel is necessary. He said, at some point , it is the hope of the Department they will be given the ability to track children for health issues in a more effective way. Discussion continued in regard to pertussis and clusters of instances of the disease. It was suggested that the Headstart children would be a good record keeping source. Concerns expressed by some members regarding safety issue voiced by parents regarding vaccines. To some families this is a real issue. A lengthy discussion ensued regarding "a medical reason" for refusing inoculations.

HEARINGS CLOSED ON **SB 520.**

Rep. Samuelson announced a Sub-Committee meeting will be announced later on **SB 615.**

Chairperson Flower adjourned the meeting at 3:05

The next meeting is scheduled for March 15, 1994.

VISITOR REGISTER

HOUSE PUBLIC HEALTH AND WELFARE COMMITTEE

DATE March 14, 94

NAME	ORGANIZATION	ADDRESS
Judy Johnson	BHA	
Robin Walker	SRS	
Steven C French	BHA	
Joe Turgeon	KCA	Topeka
Karen Gallery	Ks Assn. School Boards	Topeka
Mary Kopp	Ks State Nurses Ass	Topeka
Jamie Stubby		Newton
Nancy Phipps		Whitewater
Steven Potsic, M.D.	KDHE	Topeka
Chip Wheelen	KMS	Topeka
Connie Hubbell	SBd of Ed	Topeka
Joyce Sugrue	SRS	DSOB
David Hanzlick	KS Dental Assn	Topeka
Harold Riehm	KAOM	Topeka
Ronna K.S. Zoeller D.C.		Topeka
Shelby Smith	KPMA	Wichita
KEITH R LANDIS	CHRISTIAN SCIENCE COMM ON PUBLICATION FOR KS	TOPEKA
SYDNEY HARDMAN	KS ACTION FOR CHILDREN	Lawrence
Kerry Slaughter	KMS	Topeka

State of Kansas
Joan Finney, *Governor*

Department of Health and Environment
Robert C. Harder, *Secretary*

Testimony presented to

House Public Health and Welfare Committee

by

The Kansas Department of Health and Environment

SB 520

Thank you for the opportunity to discuss SB 520, as amended, Child Health Assessment at School Entry. The Kansas Department of Health and Environment supports the rationale for providing child health assessment at school entry. This type of examination will assist to identify, for all children, the existence or the potential for health problems that could interfere with the educational process. The time of first school entry is also the one point where all children can be targeted for a determination of their health status. Further, health status information on children assists school personnel in planning for children and their individual needs to enhance their learning experiences.

The Kansas Department of Health and Environment would like to offer two friendly amendements for your consideration: 1) To require the health assessments only for elementary school children who have not been previously enrolled in any school in this state; and 2) in cooperation with the Kansas Department of Health and Environment, the State Board of Education shall prescribe guidelines for child health assessments.

The Kansas Department of Health and Environment supports SB 520 as amended. Again, thank you for the opportunity to provide testimony today.

Testimony presented by: Steven Potsic, M.D., M.P.H.
Director, Division of Health
March 14, 1994

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3-14-94
Attm. # 1.

KANSAS MEDICAL SOCIETY
623 SW 10th Ave. • Topeka, Kansas 66612 • (913) 235-2383
WATS 800-332-0156 FAX 913-235-5114

March 14, 1994

To: House Public Health and Welfare Committee

From: Chip Wheelen, KMS Director of Public Affairs

Subject: Senate Bill 520 as Amended by the Senate

The Kansas Medical Society does not have a formal position on SB520 as amended by the Senate. We did support the original version of SB520 except for paragraph (1) of subsection (c), section one; the religious exemption.

It is our belief that all children should be medically evaluated at least annually whether or not the child attends school. The obvious exceptions are infants and children with conditions that warrant a medical evaluation more often than once a year. It is important to keep in mind that the health assessment is intended principally for those children who otherwise do not receive medical attention. Although the child might be properly immunized at a public health office or immunization clinic, he or she might not ever receive a medical evaluation. If any disabling condition is overlooked during this early involvement in the health care system, the child could suffer consequences for years to come and possibly the rest of his or her life. It is for that reason that the KMS believes that **the health assessment should be performed by a physician or by a nurse who has been certified for obtaining the specialized training.** The task force agreed with our position on this quality of care question.

It is indeed unfortunate that those children who most need the health assessment are likely to be the dependents of parents who can least afford the cost of a medical evaluation. It is for that reason that the original version of SB520 identified a significant role for public health agencies. We are not certain how the State Board of Education or local school boards would deal with such cases.

The original version of SB520 was the product of extensive study by a task force organized by the Department of Health and Environment as well as interim hearings by the Joint Committee on Health Care Decisions. Although neither the task force nor the Joint Committee adopted all of our recommendations for amendments to K.S.A. 1993 Supp. 72-5214, the end result was a bill that reflected extensive deliberation and compromises among school officials, public health agencies, physicians, and the KDHE.

Thank you for considering our comments even though we are neutral on this version of SB520.

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3-14-94
Attm #2

Kansas
Chiropractic
Association

Before the House Committee on Public Health and Welfare
March 14, 1994

Testimony of Joe Furjanic
Executive Director, Kansas Chiropractic Association
in support of SB 520

Thank you Madam Chairperson and members of the Committee for the opportunity to speak in support of SB 520.

The Kansas Chiropractic Association is in support of the general concept of SB 520 in that school children should have physical exams. However, KCA would, if there was a choice, be far more supportive of SB 520 as it was originally introduced in the Senate Public Health and Welfare Committee with small changes in the original bill. On page one (1) at lines 22 and 23 delete the original language and substitute the following:

"(5) 'licensee' means a person licensed under the Healing Arts Act."

And on page one (1) at line 43 delete the word "physician" and insert the word "licensee."

I have contacted three (3) present Chiropractic members of the Board of Healing Arts and one (1) former member of the Board of Healing Arts and all four of them have assured me that the criteria under Section #7 which reads:

"health assessment" means a health history, physical examination and such screening tests as are medically indicated to determine hearing ability, vision ability, dental health, nutrition adequacy and appropriate growth and development

falls within the Chiropractic scope of practice.

Thank you very much for the time you have given me. If you have any questions I will be happy to respond.

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attm #3

1334 S. TOPEKA BLVD. • TOPEKA, KANSAS 66612-1878 • (913) 233-0697 • FAX (913) 233-1833

Session of 1994

SENATE BILL No. 520

By Committee on Public Health and Welfare

1-18

AN ACT relating to health assessments of school pupils; amending K.S.A. 1993 Supp. 72-5214 and repealing the existing section.

Be it enacted by the Legislature of the State of Kansas:

Section 1. K.S.A. 1993 Supp. 72-5214 is hereby amended to read as follows: 72-5214. (a) As used in this section:

(1) "School board" means the board of education of a school district and the governing authority of any nonpublic school;

(2) "school" means all elementary~~,~~ ~~junior~~ ~~high,~~ ~~or~~ ~~high~~ schools within the state;

(3) "local health department" means any county or joint board of health having jurisdiction over the place where any pupil affected by this section may reside;

(4) "secretary" means the secretary of health and environment;

"licensee" means a person licensed under the Healing Arts Act

(5) "physician" means a person licensed to practice medicine and surgery;

(6) "nurse" means a person licensed to practice professional nursing;

(7) "health assessment" means ~~a basic screening for hearing, vision, dental, lead, urinalysis, hemoglobin/hematocrit, nutrition, developmental, health history and complete physical examination~~ *a health history, physical examination and such screening tests as are medically indicated to determine hearing ability, vision ability, dental health, nutrition adequacy and appropriate growth and development.*

(b) Subject to the provisions of subsection (d) and subsection (g), on and after July 1, 1994, every pupil *up to the age of nine years* who has not previously enrolled in any school in this state, prior to admission to and attendance in school, shall present to the appropriate school board the results of a health assessment, ~~recorded on a form provided by the secretary~~ *pursuant to subsection (g)*, which assessment shall have been conducted within ~~six~~ *24* months ~~before admission~~ *of school entry* by a nurse ~~or health care provider other than a physician approved by the secretary to perform health assessments~~ *who has completed the department of health and environment training and certification* or by a physician. ~~In~~

licensee

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~~approving health care providers other than physicians to conduct health assessments, the secretary shall not approve such providers individually but shall approve such providers by credentialed group.~~ Information contained in the health assessment shall be confidential and shall not be disclosed or made public beyond that necessary under this section except that: (1) Information contained in the health assessment may be disclosed to school board personnel but only to the extent necessary to administer this section and protect the health of the pupil; (2) if a medical emergency exists, the information contained in the health assessment may be disclosed to medical personnel to the extent necessary to protect the health of the pupil; (3) if the parent or guardian of a pupil under 18 years of age consents to the disclosure of the information contained in the health assessment or, if the pupil is 18 years of age or older, if the pupil consents to the disclosure of the information; and (4) if no person can be identified in the information to be disclosed and the disclosure is for statistical purposes.

(c) As an alternative to the health assessment required under subsection (b), a pupil shall present:

(1) A written statement signed by one parent or guardian that the child is an adherent of a religious denomination whose religious teachings are opposed to such assessments~~,~~. *General philosophy or moral reluctance to allow the health assessment will not provide a sufficient basis for the exception to the statutory requirement;* or

(2) a written statement signed by one parent or guardian that such assessments ~~are in the process of being received and~~ will be *scheduled and* completed within 90 days after admission to school.

~~(d) Every pupil enrolling or enrolled in any school in this state who is subject to the requirements of subsection (b) and who has not complied with the requirements of subsections (b) or (c), shall present evidence of compliance with either subsection (b) or (c) to the school board upon admission to school.~~

~~(c)~~ *(d)* Prior to the commencement of each school year, the school board of every school affected by this section shall give to all known pupils ~~who are enrolled or~~ who will be enrolling in the school and who are subject to the requirements of subsection (b) *or (c)(1) and (2)*, a copy of ~~this section and~~ any policy regarding the implementation of the provisions of this section adopted by the school board.

~~(f)~~ *(e)* If a pupil transfers from one school to another, the school board of the school from which the pupil transfers shall forward with the pupil's transcript, upon request of the parent or guardian of the pupil therefor, the ~~certification or statement~~ *results of the health*

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assessment showing evidence of compliance with the requirements of this section to the school board of the school to which the pupil transfers.

~~(g) The local health department, upon application of the school board of any school affected by this section, at federal, state, county, municipal, local health department or school district, or any combination thereof, expense (to the extent that funds are available for this purpose) and without delay, shall provide the health assessments required by this section to such pupils as are not provided with them by their parents or guardians and who have not been exempted under subsection (c).~~

(f) Local health departments may charge a *sliding* fee for providing such health assessments based on ability to pay ~~except that no pupil eligible to participate in the school lunch program under K.S.A. 72-5112 *et seq.*, and amendments thereto, shall be charged a fee by the local health department for a health assessment required by this section. If no funds are available for the local health department to provide a health assessment to a pupil unable to pay for the health assessment, the local health department shall certify to the school board that insufficient funds are available for the local health department to provide the health assessment for such pupil. Upon receipt of such certification by the local school board, such pupil shall be exempt from the requirements of subsection (b)~~ *and no pupil shall be denied the health assessment due to inability to pay*. The local health officer shall counsel and advise *local* school boards ~~concerning~~ *on* the administration of this section. *The secretary may adopt rules and regulations to award grants to assist local health departments in providing such health assessments, consistent with state appropriations.*

~~(h)~~ *(g)* ~~The secretary shall prescribe the content of forms and certificates to be used by the school boards in carrying out this section and shall provide, without cost to the school boards, sufficient copies of this section for distribution to pupils.~~ The secretary may adopt ~~such~~ rules and regulations ~~as are~~ necessary to carry out the provisions of this section, *but shall not prescribe a form on which the results of health assessments are reported.*

~~(i)~~ *(h)* The school board of every school affected by this section may exclude from school attendance, or by policy adopted by any such school board authorize any certificated employee or committee of certificated employees to exclude from school attendance, any pupil who is subject to and who has not complied with the require-

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ments of subsection (b) or (c). A pupil shall be subject to exclusion from school attendance under this section until such time as the pupil shall have complied with the requirements of subsection (b) or (c). The policy shall include provisions for written notice to be given to the parent or guardian of the involved pupil. The notice shall indicate the reason for the exclusion from school attendance, state that the pupil shall continue to be excluded until the pupil has complied with the requirements of subsection (b) or (c) and inform the parent or guardian that a hearing thereon shall be afforded the parent or guardian upon request for a hearing.

~~(i)~~ *(i)* The provisions of K.S.A. 72-1111 and amendments thereto do not apply to any pupil while ~~subject to exclusion~~ *excluded* from school attendance under the provisions of ~~this section~~ *subsection (h)*.

(j) The provisions of this section shall expire on July 1, 1999.

Sec. 2. K.S.A. 1993 Supp. 72-5214 is hereby repealed.

Sec. 3. This act shall take effect and be in force from and after its publication in the statute book.

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attm #3-5
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Course Number: 651

Course Title: Physical Diagnosis

Trimester: Winter, 1993

Lecture Hours Per Week: 4

Lecture Hours Per Trimester: 60

Laboratory Hours Per Week: 1

Laboratory Hours Per Trimester: 15

Course Instructor: Lecture - Ruth Sandefur, D.C., Ph.D.
Laboratory - Tom Nichols, D.C.

Office Location: Clinical Research Laboratory-Sandefur
Clinician's Office-Nichols

Office Telephone: 333-8230

Office Hours: By appointment

P. Howe
3-14-94
Attm. # 4

Course Syllabus

Course Prerequisites: Anatomy 341; Physiology 431

Course Description: This course is a presentation of the methods and instruments used in physical examination. Emphasis is placed on the chiropractic analysis and evaluation of the patient. A laboratory supplements the lecture material.

Text Required: MOSBY'S GUIDE TO PHYSICAL EXAMINATION, Seidel, Ball, Dains & Benedict. Mosby, 1991.

Reference Texts:

BEDSIDE DIAGNOSTIC EXAM, DeGowan & DeGowan, MacMillan, 1976

Fundamental of Chiropractic Diagnosis and Management, Lawrence, Dana, Williams & Wilkins, 1991.

RAPID ACCESS GUIDE TO THE PHYSICAL EXAMINATION, Novey, D.W., Year Book Medical Publishers, 1988

Attendance, Tardiness and Absenteeism: Attendance is required at all times, attendance is taken at every class session, and students are responsible for all assignments and requirements whether or not they are in attendance. Attendance may be used for grade considerations at the discretion of the instructor.

Evaluations: Your final course grade will be determined by your performance in both lecture and laboratory as follows:

Lecture examinations (3)	300 points
Laboratory	50 points
Final examination	150 points

Laboratory Grade

The grade for the 50 points that can be earned in the laboratory portion will be based on a total points value for in-class quizzes, classroom participation, attendance and written reports.

Four (4) - 10 question quizzes
Four (4) - Written report

The student must be present when laboratory quizzes are scheduled. No make-up's will be given.

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Lecture Grade

The lecture examinations will be scheduled periodically during the trimester at approximately the weeks indicated in the lecture schedule. Testable material includes class lecture material, audio-visual presentations, and reading assignments. The final examination is comprehensive. If a make-up examination is necessary, the student is responsible for making arrangements to accomplish this. The make-up will cover the same material as the original test, will offer the same number of points possible, and will be in essay format. Quizzes may be given periodically during the course, at the instructor's discretion.

From the total possible 500 points, the following grades can be earned.

A -- 90%
B -- 80%
C -- 70%
Below 70% -
repeat course

Grade Requirements Cleveland Chiropractic College requires that all 600-700 and 800 level courses be completed with a grade of C or better to be admitted to clinic and to graduate. Students who receive a D or F in these courses will be required to repeat the entire course.

Adademic Policies The college policies regarding course withdrawals, course incompletes, etc. will be followed.

Standards of Conduct As a future Doctor of Chiropractic, you are expected to adhere to the highest professional, ethical, and personal standards of conduct. Any activities that violate the standards of student conduct specified in the college catalog will form the basis of disciplinary action towards those involved. Steps will be taken to discourage dishonesty during examinations.

Course Objectives

I. Master the terminology associated with the physical diagnosis of the body systems.

II. Become familiar with the instrumentation used to perform the physical examination through:

A. Selection and acquisition of the student's personal collection of diagnostic equipment.

B. Practice in the use of said instruments during skill development laboratories.

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Eff 3/7/95

III. Gain awareness of common findings and conditions that might be discovered during the course of the physical examination.

IV. Learn the procedures comprising the physical examination.

V. Begin the process which will eventuate in learning to correlate the examination findings into an appropriate diagnosis by:

A. Developing a systematic technique for recording findings derived from the examination.

B. Relate findings in the examination to appropriate organ or system and consider possible diagnoses.

IV. Be given an introduction to those courses that will be presented at a later time in the curriculum and for which this course acts as an introduction.

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General Course Outline

Lecture Schedule

Week	1	Course Introduction The History and Inteviewing Process	Chapter 1
	2	Examination Techniques & Equipment	Chapter 2
	3	Vital Signs	Chapter 2
		Growth and Measurement	Chapter 3
	4	Skin, Hair and Nails	Chapter 4
		Lymphatic System	Chapter 5
		Exam I	
	5	Head and Neck	Chapter 6
	6	Eyes	Chapter 7
	7	Ear-Nose-Throat	Chapter 8
	8	Exam II	
	9	Chest and Lungs	Chapter 9
	10	Heart & Blood Vessels	Chapter 10
	11	Exam III	
	12	Breast & Axilla	Chapter 11
	13	Abdomen Genitalia	Chapter 12 Chapter 14
	14	Neurologic System	Chapter 17
	15	Final Exam	

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LAB SCHEDULE
651L

Week 1	Course Introduction	
Week 2 & 3	Height, weight, age, sex, pulses, respiratory rate, blood pressure	Chp. 2
Week 4 & 5	Ears, nose, throat	Chp. 8
Week 6 & 7	Eyes	Chp. 7
Week 8 & 9	Lung and chest evaluation	Chp. 9
Week 10 & 11	Heart evaluation	Chp. 10
Week 12 & 13	Abdomen	Chp. 12
Week 14 & 15	Neurological examination	Chp. 17

Equipment Required for Physical Diagnosis

Equipment bag	Thermometer and covers
Sphygmomanometer	Reflex percussion hammer
Stethoscope	Pinwheel
Ophthalmoscope	Tuning fork - 128 & 512
Nasal speculum	Cotton balls
Transilluminator	Large safety pin
Penlight	Tape measure - soft
Two small glass containers	Watch with second hand

The student will be required to bring all of their diagnostic equipment to each laboratory class.

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COURSE SYLLABUS

Course Number:	Diagnosis 655
Course Title:	Clinical Laboratory Methods
Trimester:	V
Lecture Hours Per Week:	3
Lecture Hours Per Trimester:	45
Laboratory Hours Per Trimester:	N/A
Trimester Credit Hours:	3
Trimester Contact Hours:	45
Course Instructor:	Nancy Childs B.A., M.T.(ASCP)
Office Location:	Clinical Laboratory, Room 221
Office Telephone:	Ext. 228
Office Hours:	Posted on office door
	(and by appointment)

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Course Prerequisites: Successful completion of Chemistry 423

Course Description: This course is an introduction to clinical laboratory procedures, including the physical and chemical basis of select tests. The interpretation of these tests and their correlation with clinical findings are discussed. Manual procedures, automation, and laboratory safety principles are also included.

Texts, Required: Seymour Bakerman. M.D..PhD, ABC's of Interpretive Laboratory Data, 2nd Edition. Interpretive Laboratory Data, Inc.. Greenville, NC. 1984.

Texts Reference: John Bernard Henry. M.D., Clinical Diagnosis and Management by Laboratory Methods. 17th Edition, Philadelphia. W.B. Saunders Company, 1984.

Jacques Wallach, M.D., Interpretation of Diagnostic Tests--A Synopsis of Laboratory Medicine, 4th Edition, Little, Brown, & Co., Boston/Toronto. 1986.

Attendance, Tardiness, and Absenteeism: Attendance is required at all times, attendance is taken at every class session, and students are responsible for all assignments and requirements whether or not they are in attendance. If a student is not in class during roll call, he/she will be counted absent. Unexcused absences for class sessions in which a quiz is given will result in a 0 point grade for the exercise.

Evaluation: The final course grade will be determined as follows:

Exam 1 (6th week)	100 points
Exam 2 (10th week)	100 points
Quizzes & Assignments	See below**
Final Exam	150 points
Total	350 points**

Up to 50 points **may be added to the number of points possible for the course with unannounced quizzes and/or written assignments.

Make-up assignments **MAY** be given at the discretion of the instructor if the student's absence was excused **PRIOR TO** the class session in which the quiz was given. If the absence is unexcused, the student will receive a grade of 0 for the exercise. All written assignments **MUST** be handed in on time unless special permission for extended time is received from the instructor **IN ADVANCE OF THE DUE DATE**. Students submitting incomplete or late papers will receive a grade of 0 for the assignment.

The College grading scale will apply to individual examinations and final course grades:

A	90-100%
B	80-89%
C	70-79%
D	60-69%
F	0 -59%

Academic Policies: The College policies regarding course withdrawals, course incompletes, etc. will be followed.

Standards of Conduct: As a future Doctor of Chiropractic, you are expected to adhere to the highest professional, ethical, and personal standards of conduct. Any activities that violate the standards of student conduct as specified in the College catalog will form the basis of disciplinary action towards those involved.

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Course Objectives: The objectives of this course are:

1. Become familiar with the appropriate terminology associated with the Clinical Laboratory
2. Become familiar with the appropriate measurements and examinations for diagnosis, confirmation of a clinical impression, therapeutic or management guideline data, prognosis, and screening for or detection of disease.
3. Become familiar with the order in which such measurements and examinations would be requested.
4. Gain skills in the interpretation and translation of laboratory measurements and examinations.
5. Understand the pathophysiology or sequence of disease as reflected by clinical laboratory data.
6. Be able to interpret data from patient records derived from other health care practitioers.
7. Understand how to make comparisons of different laboratories' data by evaluating differences in normal ranges or type of units used in reporting results.
8. Become familiar with reports, both those which would be likely to be included in the scope of Chiropractic practice and those used in various other specialties.
9. Become familiar with various references which will provide in depth information on the use of laboratory testing and interpretation of data in the diagnosis and management of disease.
10. Gain an awareness of proper specimen collection, labeling, preservation, and transportation.

General Course Outline: The following schedule is intended to be a guide to the approximate times for lectures and examinations so that students can be prepared for each topic introduced. It is not absolutely rigid and may be altered as deemed necessary by the instructor so that all material can be thoroughly covered.

Week 1:
- Course introduction
- Methods used to evaluate patient results
- Specimen collection
- Description of the vacutainer system
- Specimen requirements & interfering substances

Week 2:
- Tests included within the hematology department
- CBC with Differential
- Reticulocyte Count
- Erythrocyte Sedimentation Rate
- Hematology terminology

Week 3:
- Anemias:
- General manifestations
- Classification by RBC morphology
- Pathophysiological classification
- Blood loss (acute & chronic)
- Iron deficiency
- Non-megaloblastic macrocytosis

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Megaloblastic anemias: B12/Folate deficiencies
Other anemias secondary to non-hematological disorders
Aplastic anemia & pure red cell aplasia

Week 4:
Classification of hemolytic anemias
Hemoglobin structure abnormalities -- Sickle Cell & Hemoglobin C
Hemoglobin synthesis abnormalities -- Thalassemia syndromes

Week 5:
Metabolic defects of the RBC -- G6PD deficiency
Membrane abnormalities -- Spherocytosis
Hemolytic processes with extra-corpuscular defects
Pseudoanemia
Review of anemias -- case reports

Week 6: Exam #1
Polycythemia
Absolute/Relative WBC Differentials

Week 7:
General hematopoiesis & maturation of WBCs
Non-neoplastic disorders of white blood cells
Review -- case reports

Week 8:
Neoplastic disorders involving all blood cells
Key characteristics of leukemias
Review -- case reports

Week 9
Urinalysis -- overview
Urine specimen collection
Basic urinalysis -- gross & microscopic
Review -- case reports

Week 10: Exam #2
Coagulation
Chemistry testing -- individual tests

Week 11:
Chemistry testing -- individual tests continued
Cardiac enzymes
Diagnostic sequencing of the Multi-Chem (Comprehensive SMAC)

Week 12:
Organ panels
Chemistry review with case reports
Immunology/Serology

Week 13:
Immunology/Serology continued
Review of case reports

Week 14:
Review and case reports

Medication interaction in laboratory testing will be discussed throughout all lectures as it applies to the course material. A constant attempt to provide the most current information available will be made by the instructor relating to both the physiological effect of the drug on the patient and the chemical interference with the specific laboratory determination whenever possible. These concepts may involve:

1. Prescription medications & therapeutic drug monitoring
2. Non-prescription medications (including vitamins and food supplements)
3. Common illegally used drugs as they relate to laboratory results

Shaheen Ahmed M.D., Pathologist will deliver lectures involving case presentations with laboratory reports, and/or slides. Definite dates for these lectures will be announced in during the course of the trimester.

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attm #4-12
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Course Number: Diagnosis 661

Course Title: Gastrointestinal-Genitourinary Diagnosis

Trimester: Winter 1993
Lecture Hours Per Week: 3
Lecture Hours Per Trimester: 45
Trimester Credit Hours: 3

Course Instructor:
G. Michael Whitehead, D.C., D.A.C.B.R.
Associate Professor

Office Location: Clinic
Office Telephone: 333-8230 Ext. 288

Office Hours: By Appointment

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Course Syllabus: 661

Course Prerequisite: Diagnosis 651: Physical Diagnosis

Course Description: This course is a survey of disorders affecting the digestive and urogenital systems. The various procedures for diagnosing and monitoring these conditions are discussed. Emphasis is placed on conditions that are commonly encountered in the practice of chiropractic.

Texts, Required:

Cecil Textbook of Medicine: Wyngaarden JB, Smith LH; WB Saunders, Philadelphia. 19th edition, 1992

Mosby's Guide to Physical Examination: Seidel HM, Ball JW, Dains JE, Benedict GW; Mosby Year Book, St. Louis 2nd edition, 1991.

Texts, Reference:

Chiropractic Diagnosis and Management: Lawerence DJ; Williams and Wilkins, Baltimore. 1991.

Textbook of Internal Medicine: Kelley WN; JB Lippincott, Philadelphia. 2nd edition, 1992.

Schedule: Refer to trimester schedule for meeting times and room numbers.

Attendance: Attendance in all classes is mandatory. The student is expected to be in class, on time for each class. If the student is not in class during roll call, he or she will be counted absent. The student is responsible for all missed assignments, however, the student will not be able to make-up unannounced or announced quizzes.

Evaluation: All tests are comprehensive. The final course grade will be determined from the following:

2 examinations 100 pts. each
1 final examination 100 pts.
unannounced quizzes (optional no more than 10pts. each)

The College grading scale will apply to individual and final course grades:

90-100	A
80-89	B
70-79	C
60-69	D
0-59	F

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Cleveland Chiropractic College requires that all 600, 700, and 800 level required courses be completed with a grade of "C" or better to be admitted into clinic and to graduate. Students receiving a grade of "D" or "F" in these courses are required to repeat the entire course.

Additional Considerations: No make-up examinations will be given unless extenuating circumstances are demonstrated and are accepted as such by the instructor. Some of the assigned reading may not be covered during class lecture, however, you are responsible for the material on the examinations.

Academic Policies: The College policies regarding course withdrawals, course incompletes, etc. will be followed.

Standards of Conduct: As a future Doctor of Chiropractic, you are expected to adhere to the highest professional, ethical, and personal standards of conduct. Any activities that violate the standards of student conduct specified in the College catalog will form the basis for disciplinary action towards those involved.

Course Objectives:

1. To review the major disorders affecting the gastro-intestinal and urogenital systems with emphasis on conditions encountered in chiropractic practice.

2. To acquaint the student with the various methods of diagnosing and monitoring digestive and urogenital disorders, ie. laboratory, endoscopy and special imaging procedures.

3. To present the student with a logical, algorithmic approach to the diagnosis of various conditions.

4. To review history taking and physical examination procedures as they relate to gastrointestinal and urogenital diagnosis.

5. To present the role of the chiropractor as a primary health care provider in the treatment and management of gastrointestinal and urogenital disorders. Medical management will also be discussed.

General Course Outline: The following schedule is intended to be a guide for students so that they may anticipate upcoming lecture topics and examinations. The schedule is not absolutely rigid and may be altered as deemed appropriate. Such alterations will be communicated to you as soon as they are known.

Week Topic

I. GASTROINTESTINAL DISEASES:

A. Introduction:
B. The Diagnostic Process:
   1. History
   2. Examination Procedures and Relevant Findings

C. Diagnosis of Esophageal Disorders:
   1. Clinical Symptomatology
      a. Heartburn, Dysphagia, Regurgitation Odynophagia, Colic and Hematemesis
   2. Diagnostic Procedures
   3. Esophageal Diseases.
      a. Motor Disorders
      b. Esophageal Reflux Disease
      c. Esophageal Tumors
      d. Miscellaneous Disorders

D. Approach to the Patient With Abdominal Pain:
   1. Types of Abdominal Pain
   2. Mechanism of Pain
   3. Clinical Correlations

E. Approach to the Patient With Nausea and Vomiting:
   1. Causes
   2. Clinical Correlations

F. Disorders of the Stomach
   1. Gastritis
   2. Peptic Ulcer
   3. Zollinger-Ellison Syndrome
   4. Neoplasms of the Stomach

G. Approach to the Patient With Constipation:
   1. General Considerations
   2. Mechanisms and Causes
      a. Neurogenic
      b. Muscular
      c. Mechanical

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H. Approach to the Patient With Diarrhea:
   1. General Considerations
   2. Mechanisms
   3. Clinical Correlations

I. Motility Disorders of the Stomach, Duodenum, Small Bowel and Colon:
   1. Pyloric Stenosis
   2. Ileus: Adynamic and Mechanical
   3. Irritable Bowel Syndrome
   4. Megacolon: Congenital and Acquired
   5. Diverticulosis

J. Malabsorption:
   1. Nontropical Sprue (Celiac Disease)
   2. Whipple's Disease
   3. Disaccharidase Deficency
   4. Miscellaneous Causes

K. Approach to Gastrointestinal Tract Bleeding:
   1. Definitions
   2. Indications of Blood Loss
   3. Diagnostic Procedures

L. Inflammatory Bowel Diseases:
   1. Crohn's Disease
   2. Ulcerative Colitis

M. Intestinal Neoplasms:
   1. Polyps of the Colon
   2. Inherited Polyp Syndromes
   3. Adenocarcinoma of the Colon

N. Misc. Inflammatory Diseases of the Intestine:
   1. Acute Appendicitis
   2. Diverticulitis of the Colon

O. Pancreatic Disorders:
   1. Pancreatitis (Acute and Chronic)
   2. Pancreatic Carcinoma

P. Approach to the Patient With Jaundice and Abnormal Liver Chemistries:
   1. Review of the Bilirubin Pathways

Q. Liver and GallBladder Disorders:
   1. Cholecystitis (Acute and Chronic)
   2. Cirrhosis
   3. Hepatobiliary Neoplasms
   4. Viral Hepatitis
   5. Miscellaneous Conditions

II. GENITOURINARY DIAGNOSIS:

A. Approaches to the Diagnosis of Urogenital Diseases:
   1. Hematuria
   2. Proteinuria
   3. Dysuria
   4. Pyuria
   5. Laboratory Evaluation

B. Disorders of the Urogenital Tract:
   1. Glomerulonephritis
   2. Obstructive Nephropathies
   3. Renal Lithiasis
   4. Neoplasms
   5. Anomalies
   6. Epididymitis
   7. Prostatic Disorders:
      a. Benign Hyperplasia
      b. Prostatic Carcinoma
   8. Testicular Tumors

Finish Material for Final

FINAL EXAMINATION (COMPREHENSIVE)

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TEST-TAKING BEHAVIORS

Any form of cheating on an examination constitutes unprofessional conduct and may result in disciplinary action as sat forth by the COLLEGE CATALOG and STUDENT HANDBOOK. Certain behaviors are considered inappropriate during the administration of an instrument meant to evaluate student progress (examination, test, quiz, practical, papers, etc.). The following are specifically prohibited and represent academic misconduct.

1. Having personal belongings other than writing implements in the vicinity of the test; examples include but are not limited to briefcases, backpacks, purses, notebooks, textbooks, etc. These materials may be left at the front of the room.

2. Eyes wandering toward other students papers (tests).

3. Placing one's test booklet and/or answer sheet in a position which allows another student to see it.

4. "Crib" notes of any kind.

5. Wearing of hats.

6. Unauthorized use of headphones.

7. Unauthorized exit from the room; ANYONE WHO LEAVES THE ROOM DURING THE TESTING PROCEDURE MAY NOT RETURN.

8. Eating or drinking during the test.

9. Talking, tapping fingers, feet, or making other distracting noises or gestures that may be interpreted as signalling.

10. Distracting others when entering or leaving the test area.

ALL TESTS SHOULD BE SELF EXPLANATORY. THE INSTRUCTOR WILL NOT ANSWER ANY QUESTIONS DURING THE TEST.

If this instructor is satisfied that academic misconduct has occurred, he will terminate the examination for the individual(s) involved and record a test grade of zero. The names of those individuals involved in the incident will be reported to the Vice President of Academic Affairs, the Director of Student Services and the Chairman of the Department. Following an investigation of the allegation, additional disciplinary sanctions may be imposed.

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attm #4-20
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Course Number: 662

Course Title: Cardiovascular-Respiratory Diagnosis

Trimester: Winter, 1993

Lecture Hours Per Week: 4

Lecture Hours Per Trimester: 60

Course Instructor: Ruth Sandefur, D.C., Ph.D.

Office Location: Clinical Research Laboratory

Office Telephone: 333-8230, X233

Office Hours: By appointment

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Course Syllabus

Course Prerequisites: Diagnosis 651; Pathology 551

Course Description: A study of the procedures used to diagnose diseases of the the heart, blood vessels, and the lungs.

Required Text: Cecil's Textbook of Medicine, Wyngaarden/Smith/Bennett, Saunders, 1992.

Recommended Text:

FUNDAMENTALS OF CHIROPRACTIC DIAGNOSIS AND MANAGEMENT, Lawrence, Dana. Williams & Wilkins, 1991.

THE MERCK MANUAL, Berkow & Fletcher, Eds. Merck, Sharp, & Dohme Research Laboratories, New Jersey, 1987.

Attendance, Tardiness and Absenteeism: The attendance policy for this class is in keeping with the policies as outlined by Cleveland Chiropractic College in the current catalog. Attendance will be taken at each class period and reported weekly to the Administrative Offices. Instructor may elect to use attendance for grade considerations.

Evaluations: At least three major examinations will be given. Other examinations may be scheduled and quizzes may be given periodically, at the instructor's discretion. Testable material will be from class lectures, presentations and reading assignments. The Final Test will be comprehensive. From the total points earned, the following grades can be earned:

A = 90%
B = 80%
C = 70%
Below 70% - repeat course

When a personal or family emergency or illness prevents taking a test during the regular scheduled time, a makeup test may be taken. It is the responsibility of the student to contact the instructor and schedule the makeup exam. The makeup will cover the same material as the original test but will be in essay format. There are no exceptions to this policy.

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Grade Requirements Cleveland Chiropractic College requires that all 600-700 and 800 courses be completed with a grade of C or better to be admitted to the clinic and to graduate. Students who receive a D or F in these courses will be required to repeat the entire course.

Academic Policies The college policies regarding course withdrawals, course incompletes, etc. will be followed.

Standards of Conduct As a future Doctor of Chiropractic, you are expected to adhere to the highest professional, ethical and personal standards of conduct. Any activities that violate the standards of student conduct specified in the college catalog will form the basis of disciplinary action towards those involved. Actions will be taken to assure that tests are administered under extremely watchful conditions. Any unusual test-taking behaviors will be considered wrongful conduct on the part of the students and will not be tolerated.

Course Objectives

I. Demonstrate an understanding of the examinations of the cardiovascular-respiratory systems by achieving the following specific skills:

   A. Knowledge of the specific components comprising the examination.

   B. Knowledge of the ways in which the examination findings are interpreted in order to formulate a diagnosis.

   C. Capability of planning the treatment/referral of the patient.

II. Become familiar with a wide variety of disorders with emphasis applied to those most likely to be encountered in a chiropractic practice. The student must:

   A. Be able to recognize various diseases/disorders of the given systems.

   B. Have the ability to manage the conditions or to make the appropriate referral.

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III. Develop an understanding of the principles involved in the differential diagnosis of diseases from a carefully obtained, detailed history and physical examination.

IV. Differentiate disorders treatable by the Doctor of Chiropractic and those for which a referral will be necessary through demonstration of:

A. Understanding of the application of chiropractic to the specific treatment of various disorders of the CVR system.

B. A basic grasp of the currently accepted medical management of these disorders.

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Course Schedule

UNIT ONE

Week 1	Atherosclerosis
Week 2	Degenerative and Inflammatory Arterial Disease
Week 3	Diseases of the Veins
Week 4	Systemic Arterial Hypertension
Week 5	Examination of Peripheral Vasculature Examination

UNIT TWO

Week 6	Examination of Heart
Week 7	Ischemic Heart Disease Myocardial Infarction
Week 8	Congestive Heart Failure
Week 9	Valvular Heart Disease Heart Murmurs
Week 10	Other Cardiac Disorders
Week 11	Cardiac Arrythmias Examination

UNIT THREE

Week 12	Examination of Pulmonary System
Week 13	Common Pulmonary Diseases
Week 14	Other Pulmonary Disorders Cystic Fibrosis
Week 15	FINAL EXAMINATION

Course Number: Diagnosis 663

Course Title: Psychology/Psychiatry

Trimester: Spring 1993

Lecture Hours Per Week: 3

Lecture Hours Per Trimester: 45

Trimester Credit Hours: 3

Course Instructor: Charles F. Dorlac, Ph.D.

Office Telephone: 341-8658
276-4729

Office Hours: By Appointment

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Course Syllabus: 663

Course Prerequisite:

Course Description: The course will present a doctoral level understanding of psychology and relationship skills for chiropractic students.

Texts, Reference:

Benjamin, Alfred. The Helping Interview.

Schedule: Wednesday - 9:30 A.M. to 10:20 A.M. Room Gr x 1
Fridays - 9:30 A.M. to 11:20 A.M. Room 130

Attendance: Attendance in all classes in mandatory. The student is expected to be in class, on time for each class. If the student is not in class during roll call, he or she will be counted absent. The student is responsible for all missed assignments, however, the student will not be able to make up unannounced quizzes.

Evaluation: All tests are comprehensive. The final course grade will be the average of the grades on the mid-term exam, the comprehensive final and the weekly quizzes. Details regarding the tests will be discussed in class. There will be a Quiz each Friday at the beginning of class.

The College grading scale will apply to individual and final course grades:

90-100	A
80-89	B
70-79	C
60-69	D
0-59	F

Cleveland Chiropractic College requires that all 600, 700, and 800 level required courses be completed with a grade of "C or better to be admitted into clinical and to graduate. Students receiving a grade of "D" or "F" in these courses are required to repeat the entire course.

Additional Considerations: No make-up examinations will be given unless extenuating circumstances are demonstrated and are accepted as such by the instructor. Some of the assigned reading may not be covered during class lecture, however, you are responsible for the material on the examinations.

Academic Policies: The College policies regarding course withdrawals, course incompletes, etc. will be followed.

Standards of Conduct: As a future Doctor of Chiropractic, you are expected to adhere to the highest professional, ethical, and personal standards of conduct. Any activities that violate the standards of student conduct specified in the College catalog will form the basis of disciplinary action towards those involved.

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Course Objectives:

1. Knowledge and practice of therapeutic communication.
2. Psychological theories and research findings appropriate to the helping professions.
3. Knowledge of the dynamics of personality from the major theoretical perspectives.
4. Knowledge of abnormal psychology and relevant concerns for professional practice.
5. Knowledge of common contemporary problems in the area of human sexuality, AIDS, stress management, crisis intervention, and drug and alcohol abuse.

General Course Outline: The following schedule is intended to be a guide for students so that they may anticipate upcoming lecture topics and examinations. The schedule is not absolutely rigid and may be altered as deemed appropriate. Such alterations will be communicated to you as soon as they are known.

Week	Topic
UNIT I	Therapeutic Communication: Necessary conditions for helping.
Week 1	A. Therapeutic Communication: Basic elements and methods.
Week 2	B. Skill building, Therapeutic Communications Continued. Use of Silence: Fewer mistakes are made when you kept you mouth shut.
	C. Use of Questions.
Week 3	D. Additional Therapeutic Techniques: Trust
UNIT II	Human Sexuality
Week 4	E. Desensitization, specific sexual language Common sexual problems.
Week 5	F. Effects of Disease and Disability on Sexuality.
	G. Transference and Countertransference The seductive patient
	H. AIDS: The AIDS patient in your practice.
Week 6	I. AIDS: 1. Attitudes safety, ethics. 2. Sexual identity, impact of AIDS.

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Week 7

J. Freud: Psychoanalytic theory development, Mental structures theory of neurosis

K. Freud continued
1. Jung: Major concepts
2. Collective unconscious
3. The neo-Freudians: Adler, Horney, Sullivan

Week 8

L. Learning Theory
1. Behaviorism
2. Classical conditioning
3. Operant condition
4. Associative responses - practical application

M. Third Force Theories
1. Phenomenology
2. Existentulism
3. Humanistic psychology
4. Rogers & Maslow

Week 9

Review for Mid-Term Exam

Mid-Term Exam

UNIT IV Abnormal Psychology

Week 10

N. Abnormal Psychology and Psychological problems of normal people
1. Stress
2. Defense Mechanisms.

O. Crisis Counseling and Stress Reaction.

Week 11

P. Anxiety Disorders

Week 12

Q. Anxiety Disorders continued

R. Physical Effects of Emotions and Stress.

Week 13

S. Major Disorders
1. Psychosis and Bipolar
2. Affective Disorders

T. Disorders of Children.

Week 14

U. Disorders of Children continued.

V. Special Topics

Review for Final

Final Exam as scheduled by College

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Course Number: 664

Course Title: Neuromusculo- skeletal Diagnosis I

Trimester: Fall 1992

Lecture Hours per week: 2

Laboratory Hours per week: 1

Trimester Contact Hours: 45

Course Instructor: Raymond A. Maucere, B.A., D.C.

Office Location: Clinic

Office Hours: By Appointment

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Course Syllabus for 664/674

Course Prerequisites:

Successful completion of Anatomy 341 is required prior to admission to Diagnosis 664.

Successful completion of Diagnosis 664 and 651 is required prior to admission to Diagnosis 674.

Description:

This course will cover common conditions of the human neuromusculo-skeletal complex, and promote an understanding and clinical application of this information. The purpose of this course is to help the student develop his and her ability in formulating differentials in the typical neuromusculo-skeletal diagnosis.

This course will focus on neuromusculo-skeletal conditions of the spine, pelvis, and thorax.

Class discussion will include the case history, subjective findings, objective findings, special procedural findings, treatment and prognosis for each topic covered.

Texts Required:

Lecture Text: Practical Orthopedics, Lonnie R. Mercier (664)
Functional Soft Tissue Exam., W.Hammer (674)

Lab Text: Photographic Manual of Regional Orthopaedic and Neuro. Tests., Joseph Cipriano

Reference Texts:

Recommended Texts for Additional Reading and Reference:

Turek, Samuel; Orthopedics
Hoppenfeld, Stanley; Physical Examination of the Spine and Extremities.

Cyriax, James; Textbook of Orthopedic Medicine Vol. 1 and 2.

Culliet, Rene; Scoliosis

Cailliet, Rene; Cailliet Pain Series.

Zohn/Mennell Diagnosis and Treatment of Musculoskeletal pain.

Magee; Orthopedic Physical Assessment.

Foreman and Croft:

White, Panjabi, Clinical Biomechanics of the Spine Management of Low Back Pain.

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.rdiness and Absenteeism:

Roll will be taken promptly at the start of each class period. Any student who comes to class late must make a personal effort at the end of class that day to get credit for the portion of class attended. Credit will only be given if corrected on the same day as the time missed.

The instructor reserves the right to enforce the rules for attendance requirement, as set forth by this institution, which are as follows:

Attendance in all classes is mandatory. The student is expected to be in class, on time, for each session. If a student is not in class during roll class, he/she will be considered absent.

Since all absences (excused or unexcused) interrupt the student's learning process, the following minimum guidelines will be used by the College in determining the effect of student absences on grades.

> 10-15% absences--lowering of final grade 1 full grade
> 15-20% absences--lowering of final grade 2 full grades
> more than 20% absences--the student will be subject to automatic withdrawal.

Note: Students on an irregular schedule must verify their schedule with the instructor, and the allowable absences will be calculated based on the actual class hours required by the special schedule.

600, 700, and 800 level course grades

The following policy is to appear in all syllabi for clinical science courses:

> Cleveland Chiropractic College requires that all 600, 700, and 800 level required courses be completed with a grade of "C" or better to be admitted to clinic and to graduate. Students receiving a grade of D or F in these courses are required to repeat the entire course.

Grades

Grades will be based on the accumulative points the student has earned on the course examinations and laboratory practical examinations. Grades are based on a 90, 80, 70, 60 percentage basis. Grading based on a curved scale is an option reserved by the instructor.

Exams

There will be (a minimum of two) exams during the course of the trimester. Exam number one will be scheduled with at least two weeks advance notice to the students. The final exam will be given at the time scheduled by the administration. Lab practicals will be given at the end of the lower extremity units and again at the end of the upper extremity units. Unannounced quizzes may be given.

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All exams must be taken on the day scheduled. Any other arrangements must be discussed with the instructor at least two weeks in advance of the exam date. Only conditions that constitute an emergency (as determined by the instructor) will be considered as grounds for missing any exam. No exceptions will be made.

Points

Exam 1 points to be determined later

Final Exam = 200 points

Lab Practical 1 = 50 points
Lab Practical 2 = 50 points

Total points available = Depend on total of exams.

A grade of C or better is required for a satisfactory completion of this course.

Make-Up Examinations:

A student will be allowed to take a make-up only when the excuse for missing a regularly scheduled exam meets the requirement as stated before in this syllabus. The time and place of the make-up exam will be arranged by a meeting between the course instructor and the student. final exam make-ups will be given on the day designated for such exam by the administration and will be changed only when prior arrangements have been made with the course instructor and administration.

Academic Policies:

The college policies regarding course withdrawals, course incompletes, etc. will be followed.

Standards of Conduct:

As a future Doctor of Chiropractic, you are expected to adhere to the highest professional, ethical, and personal standards of conduct. Any activities that violate the standards of student conduct specified in the college catalog will form the basis of disciplinary action towards those involved.

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Lecture Objectives

I. CERVICAL SPINE AND NECK
- A. Appropriate Anatomical Overview
  1. Osseous Structures
  2. Muscles
  3. Ligaments
  4. Neurological
- B. Cervical Biomechanics
  1. Occiput/C1
  2. C1/C2
  3. C2 - 7
- C. Conditions of the neck and Cervical Spine
  1. Verteral basilar artery insufficiency
  2. Cervical Sprain
  3. Cervical Strain
  4. Headache of cervical spine origin
  5. Whiplash; Hyperextension-Flexion injury; Accleration/Deceleration injury
  6. Cervical Disc Syndrome
  7. Cervical Spondylosis and DJD
  8. Wry Neck; Torticollis
  9. Cervical Subluxation
  10. Cervical Spinal Stenosis
  11. Cervical Fractures and Dislocations
- D. Neurological and Orthopedic Testing Laboratory (Practical Applications Lab)

II. Thoracic Spine and Ribcage
- A. Anatomical Overview
  1. Osseous
  2. Muscular and Ligmentous
  3. Neurological
- B. Thoracic Biomechanics
- C. Conditions of the Thorax
  1. Sprain
  2. Strain
  3. Intercostal Neuralgia
  4. Rib Subluxation
  5. Rib Fracture or Dislocation
  6. Thoracic Intervertebral Disc Syndrome
  7. Meningeal Contusions
  8. Thoracic Outlet Syndromes
- D. Conditions of the Thoracic Spine
  1. Thoracic Outlet Syndrome
  2. Thoracic Sprain
  3. Thoracic Strain
  4. Scapulo Thoracic Bursitis
  5. Thoracic Subluxation
  6. Thoracic Intervertebral Disc Syndrome
  7. Fracture and Dislocation of the Thorax
  8. Myofascial Fibrositis and Related Conditions
  9. Spinal Stenosis
- E. Neurological and Orthopedic Testing. Practical Application Lab.

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III. Scoliosis
- A. Eitiologies
- B. Biomechanics
- C. Classifications and Analysis
- D. Examination Procedures
- E. Treatment and Referral
- F. Prognosis

IV. Lumbar Spine
- A. Anatomical Overview
  1. Osseous
  2. Muscular and Ligamentous
  3. Neurological
- B. Lumbar Biomechanics
- C. Common Conditions of the Lumbar Spine
  1. Lumbar Strain
  2. Lumbar Sprain
  3. Posterior Joint Syndrome
  4. Intervertebral Disc Syndrome
  5. Caudieguina Syndrome
  6. Neurogenic Intermittent Claudication
  7. Spondylolisthesis
  8. Spondylosis and D.J.D.
  9. Fracture and Dislocations
- D. Neurological and Orthopedic Testing Practical Application Lab.

V. Sacroiliac Joints and Pelvis
- A. Anatomical Overview
  1. Osseous
  2. Muscle and Ligamentous
  3. Neurological
- B. Biomechanics
- C. Common Sacral and Pelvic Conditions
  1. SI Joint Sprain
  2. Tortipelvis
  3. Piriformis Syndrome
  4. Myofascial Syndromes
  5. Fracture and Dislocation
  6. Sacro Coccygeal Conditions
- D. Orthopedic and Neurolocial Testing Practical Application Lab

VI. Lab Objectives
- A. Postural Evaluation Examination
  1. Anteroposterior Evaluation
  2. Lateral Evaluation
  3. Antalgic Positions
  4. Gait Abnormalities
- B. Risk Evaluation for Vascular Insufficiency Syndromes
  1. Georges Test

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C. Cervical Spine

Sitting Position

1. R.O.M. C Spine
2. Jacksonian Compression
3. Maximal Cervical Compression
4. Cervical Distraction
5. Valsulva
6. Naffziger

Standing

1. Lehrmitte's

Supine

1. Soto Hall

D. Thoracic Outlet

1. Allens
2. Adson's
3. Wright's
4. Eden's

E. Thoracic Spine

1. Adams
2. R.O.M. Dorsal Spine
3. Soto Hall
4. Thoracic Compression

F. Lumbar, Hips and Pelvis

Standing

1. Adams
2. Neri
3. Lewins Test
4. Lewins Sign
5. Trendelenburg
6. Kemps
7. Magnuson's
8. Belt Test

Kneeling

1. Burn's Bench

Sitting

1. Becterew
2. Minors
3. Homans

Supine

1. Laseque's
2. Braggard's
3. Well Leg Raise
4. Fajersztajns
5. Goldwaiths
6. Double Leg Raise
7. Beevor's
8. Milgrams
9. Hoover's

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G. Prone Lumbar Spine
   1. Ely's
   2. Nachlas
   3. Hibbs
   4. Yeomans
   5. Mennells

H. Side Position
   1. Pelvic Compression
   2. Pelvic Rock
   3. Derefield

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Course Number: 671

Course Title: Neurology

Trimester: Winter 1993
Lecture Hours Per Week: 4
Lecture Hours Per Trimester: 60
Trimester Credit Hours: 4

Course Instructor:
G. Michael Whitehead, D.C., D.A.C.B.R.
Associate Professor

Office Location: Clinic
Office Telephone: 333-8230 Ext. 288

Office Hours: By Appointment

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Course Syllabus: 671

Course Prerequisite: Diagnosis 651: Physical Diagnosis

Course Description: This course is a survey of conditions and procedures used in the diagnosis of disorders of the central and peripheral nervous systems. Emphasis is placed upon those conditions commonly encountered in the practice of chiropractic

Texts, Required:

Essential Neurology: Pryse-Phillips W, Murry JJ; Medical Examinations Publishing, New York. 4th ed., 1992.

Mosby's Guide to Physical Examination: Seidel HM, Ball JW, Dains JE; Mosby Year Book, St. Louis. 2nd ed., 1991

Texts, Reference:

Cecil Textbook of Medicine: Wyngaarden JB, Smith LH; WB Saunders, Philadelphia. 19th ed., 1992.

The Chiropractic Neurological Examination: Ferezy JS; Aspen Publication, Gaithersburg. 1992.

Chiropractic Diagnosis and Management: Lawrence DJ; Williams and Wilkins, Baltimore. 1991.

Correlative Neuroanatomy: de Groot J, Chusid JG; Appleton and Lange, East Norwalk. 12th ed., 1988.

Schedule: Refer to the trimester schedule for meeting times and room numbers.

Attendance: Attendance in all classes is mandatory. The student is expected to be in class, on time for each class. If the student in not in class during roll call, he or she will be counted absent. The student is responsible for all missed assignments, however, the student will not be able to make up unannounced or announced quizzes.

Evaluation: All tests are comprehensive. The final course grade will be determined from the following:

2 examinations 50 pts. each
1 midterm examination 100 pts.
1 final examination 100 pts.
unannounced quizzes (optional not to exceed 10 pts each)

The College grading scale will apply to individual and final course grades:

90-100	A	70-79	C	59-0	F
80-89	B	60-69	D		

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Cleveland Chiropractic College requires that all 600, 700, and 800 level required courses be completed with a grade of "C" or better to be admitted into clinic and to graduate. Students receiving a grade of "D" or "F" in these courses are required to repeat the entire course.

Additional Considerations: No make-up examinations will be given unless extenuating circumstances are demonstrated and are accepted as such by the instructor. Some of the assigned reading may not be covered during class lecture, however, you are responsible for the material on the examinations.

Academic Policies: The College policies regarding course withdrawals, course incompletes, etc. will be followed.

Standards of Conduct: As a future Doctor of Chiropractic, you are expected to adhere to the highest professional, ethical, and personal standards of conduct. Any activities that violate the standards of student conduct specified in the College catalog will form the basis for disciplinary action towards those involved.

Course Objectives:

1. To provide a basic knowledge of major neurological disorders affecting the central and peripheral systems with emphasis on conditions encountered in chiropractic practice.

2. The student should be able to perform a neurological examination and be able to correctly interpret the findings of that examination.

3. To acquaint the student with the various methods of diagnosing neurological disorders such as special imaging procedures.

4. To provide the student with a logical, algorithmic approach to the diagnosis of various conditions from a sign/symptom presentation.

5. Since the mode of treatment employed by the Doctor of Chiropractic is essentially through the nervous system, it is important that he/she be able to assess the integrity of the nervous system and to be competent in evaluating the efficacy of chiropractic care.

General Course Outline: The following schedule is intended to be a guide for students so that they may anticipate upcoming lecture topics and examinations. The schedule is not absolutely rigid and may be altered as deemed appropriate. Such alterations will be communicated to you as soon as they are known.

WEEK	TOPIC	READING ASSIGN.
Week 1	I. Introduction:	
	II. The Neurological Assessment:	Mosby's Guide
and	A. History	to Physical
	B. Neurological Examination:	Examination
Week 2	1. Higher Cortical Function	(pp. 619-
	2. Gait and Stance	672)
	3. Cranial Nerves	
	4. Motor System	Essential
Week 3	5. Sensory System	Neurology
	6. Reflexes	(pp. 3-54)
	7. Autonomic and Neurovascular	
	8. Skull and Spine	
Week 4	**TEST: COVERING NEURO ASSESSMENT**	
	III. Localization in the Nervous System:	
	A. Localization of Disease:	
	1. Cerebral Hemispheres	pp. 123-59
	2. The Frontal Lobes	
	3. The Temporal Lobes	
	4 The Parietal Lobes	
	5. Occipital Lobes	
	6 The Brainstem	
	7. The Cerebellum	
	8. The Spinal Cord	
	9 Peripheral Nerves	
	10. Myoneural Junction	
	11. Muscle	
Week 5	IV. Approach to Neurological Symptoms:	
	A. Headache:	pp. 250-66
	1. Mechanisms of Head Pain	
	2. Approach to the Diagnosis	
	3. Description of Headache Types	
	B. Visual Disorders:	pp. 278-87
	1. Sudden Loss of Vision	
	2. Types of Acute Visual Loss	
	3. Optic Neuritis	
	4. Papilledema	
Week 6	C. Ocular Disorders:	pp. 289-304
	1. Pupil Abnormalities	
	2. Diplopia	
	3. Ptosis	

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4. Nystagmus
5. Eye Pain

D. Facial Pain: pp. 306-15
1. Clinical Approach
2. Clinical Presentations

Week 7 E. Facial Palsy: pp. 316-21
1. Localization of Lesions
2. Bell's Palsy

F. Deafness, Vertigo, and Tinnitus: pp. 322-32
1. Deafness
2. Vertigo
3. Tinnitus

Week 8 **MIDTERM EXAMINATION**

G. Bulbar and Pseudobulbar Palsy: pp. 333-35
1. Bulbar Palsy
2. Pseudobulbar Palsy

Week 9 H. Weakness: pp. 336-44
1. Generalized Weakness
2. Localized Weakness
3. Proximal Weakness and Wasting
4. Distal Weakness

I. Disorders of Movement: pp. 353-59
1. Irregular Movements Caused by Disease of the Basal Ganglia
2. Misc. Localized Irregular Movements
3. Regular Movements

Week 10 J. Back Pain: pp. 360-72
1. Varieties of Pain
2. Evaluation
3. Diseases Associated with Back Pain

K. Abnormalities of Gait: pp. 375-79

Week 11 **THIRD EXAMINATION**

L. Patterns of Sensory Deficit: pp. 392-98
1. Peripheral Lesions
2. Spinal Cord Lesions
3. Thalamus

M. Pain Syndromes: pp. 399-406
1. Physiology of Pain
2. Clinical Syndromes

Week 12 N. Reduction In Conscious Level: pp. 163-77
1. Coma
2. Clinical Approach
3. Syncope vs. Seizure

O. Delirious States vs. Dementia pp. 178-197

P. Elevated Intracranial Pressure pp. 238-49

Week 12	V. Important Neurological Diseases:	
	A. Strokes:	pp. 411-44
	1. Classification of Strokes	
	2. Pathogenesis	
	3. Clinical Features	
	B. Head Injuries and Spinal Trauma:	pp. 443-59
	1. General Management	
	2. Complications	
	3. Spinal Trauma	
Week 13	C. Disorders of the Peripheral Nerves:	pp. 589-612
	1. Varieties of Neuropathy	
	a. Neuronal Neuropathy	
	b. Demyelinating Neuropathies	
	c. Compressive Neuropathies	
Week 14	D. Parkinson's Disease and Other Diseases of the Basal Ganglia	pp. 639-658
	1. Parkinson's Disease	
	2. Huntington's Chorea	
	3. Wilson's Disease	
	E. Diseases of Myelin:	pp. 666-76
	1. Multiple Sclerosis	
	F. Diseases of the Cerebellum;	pp. 680-89
	1. Friedreich's Ataxia	

FINAL EXAMINATION

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TEST-TAKING BEHAVIORS

Any form of cheating on an examination constitutes unprofessional conduct and may result in disciplinary action as sat forth by the COLLEGE CATALOG and STUDENT HANDBOOK. Certain behaviors are considered inappropriate during the administration of an instrument meant to evaluate student progress (examination, test, quiz, practical, papers, etc.). The following are specifically prohibited and represent academic misconduct.

1. Having personal belongings other than writing implements in the vicinity of the test; examples include but are not limited to briefcases, backpacks, purses, notebooks, textbooks, etc. These materials may be left at the front of the room.

2. Eyes wandering toward other students papers (tests).

3. Placing one's test booklet and/or answer sheet in a position which allows another student to see it.

4. "Crib" notes of any kind.

5. Wearing of hats.

6. Unauthorized use of headphones.

7. Unauthorized exit from the room; ANYONE WHO LEAVES THE ROOM DURING THE TESTING PROCEDURE MAY NOT RETURN.

8. Eating or drinking during the test.

9. Talking, tapping fingers, feet, or making other distracting noises or gestures that may be interpreted as signalling.

10. Distracting others when entering or leaving the test area.

ALL TESTS SHOULD BE SELF EXPLANATORY. THE INSTRUCTOR WILL NOT ANSWER ANY QUESTIONS DURING THE TEST.

If this instructor is satisfied that academic misconduct has occurred, he will terminate the examination for the individual(s) involved and record a test grade of zero. The names of those individuals involved in the incident will be reported to the Vice President of Academic Affairs, the Director of Student Services and the Chairman of the Department. Following an investigation of the allegation, additional disciplinary sanctions may be imposed.

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Course Number: 672
Course Title: Pediatrics

Trimester: Winter 1993
Lecture Hours Per Week: 3
Laboratory Hours Per Trimester: 5

Course Instructor: Dr. Linda Haynes
Office Location: downstairs clinicians office
Office Telephone: 333-8230
Office Hours: By Appointment

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Prerequisite:

Successful completion of all courses as set forth in the Cleveland Chiropractic College of Kansas City catalog. These courses include but are not limited to: Diagnosis 651: Physical Diagnosis

Course Description:

This is a comprehensive course in the diagnosis and treatment of the disorders and general health problems affecting infants and children. Emphasis is placed on common orthopedic and developmental problems and their chiropractic management.

There is a specialized segment of the pediatrics course that is solely devoted to chiropractic spinal manipulations and soft tissue techniques utilized on pediatric patients.

General Objectives:

To provide the student with a comprehensive survey of diseases and health problems affecting infants and children.

Specific Objectives:

To acquaint the student with the diagnosis and widely accepted methods of treatment of the most common diseases affecting infants and children.

Special emphasis will be placed on common pediatric examination, growth and development and when applicable the chiropractic management of various disease processes and conditions.

Chiropractic adjustment of the pediatric patient will be discussed and demonstrated.

Attendance, Tardiness and Absenteeism:

Attendance is required at all times and attendance is taken at every class session. Students are responsible for all assignments and requirements whether or not they are in attendance.

Required Text:

Adjusting the Child by Dr. D. Stierwalt.

Current Pediatric Diagnosis and Treatment: Kempe, Silver, O'Brien and Fulginiti; Appleton and Lange, Norwalk. 9th edition, 1987.

Supplemental Texts:

Pediatric: Wood, Fosarelli, Hudak, Lake and Modlin; J.B. Lippincott: Philadelphia; 1st edition, 1989.

Pediatric Medicine: Mary Ellen Avery and Lewis R. First; Williams and Wilkins, Baltimore, 1st edition, 1989.

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Irse Outline:

I. Introduction:
   A. Definitions
   B. Goals and Concerns

II. The Diagnostic Process: pp. 1-8
   A. Pediatric History
   B. Pediatric Examination

III. Growth and Development: pp. 8-29
   A. Definitions
   B. Periods of Growth - Infancy/Childhood/Youth
   C. Measurements of Growth
   D. Abnormal Development
   E. Anticipatory Guidance

IV. Normal Childhood Nutrition and Its Disorders: pp. 104-130
   A. General Nutrition Requirements and Composition
   B. Feeding of Infants
      1. Breast Feeding
      2. Formula Feeding
      3. Introduction of Solids
   C. Disorders of Nutrition

V. Immunization: pp. 130-148
   A. Pros
   B. Controversies
   C. Recommended Schedules

VI. Neonatology: pp. 50-104
   A. Evaluation of the Newborn
      1. Apgar Score
      2. Reflexes
   B. Specific Diseases of the Newborn Infant:
      1. Respiratory Diseases pp. 97-106
      2. Heart Disease pp. 148-157
      3. Jaundice in the Newborn Infant pp. 115-123
      4. Infections pp. 138-147
      5. Gastrointestinal and Abdominal Surgical Conditions pp. 124-137
      6. Hematologic Disorders
      7. Metabolic Disorders
      8. Renal Disorders
      9. Brain and Neurologic Disorders
      10. Congenital Anomalies

VII. Infection and Immunity:
   A. Recurrent Infections in Childhood pp. 518-573
   B. Meningitis
   C. Pneumonia
   D. Otitis Media
   E. Streptococcal Infections
   F. Fever
   G. Infectious Mononucleosis
   H. Viral Syndromes pp. 815-898
   I. Acute Diarrhea
   J. Respiratory Disorders pp. 361-412

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Neurological Reflexes/Orthopedic Signs, Tests and Maneuvers Dr. J.M. Mazion.

Core Textbook of Pediatrics: Kaye, Oski and Barness, J.B. Lippincott, Philadelphia, 3rd edition, 1988.

Principles and Practice of Pediatrics: Frank A. Oski, J.B. Lippincott, Philadelphia, 1st edition, 1990.

Chiropractic Pediatric Reference Manual by Dr. J. Peet.

Evaluation:

The final course grade will be determined from the following:

Three Examinations 300 total points possible

A minimum of 3 formally scheduled examinations will be given (mid term, pediatric adjusting and final). "Pop" tests may be given at the instructors discretions anytime during the course.

Further, at the instructor's discretion, course papers maybe assigned and submitted for a grade.

Grading scale:

A = 300-250
B --249-200
C = 199-150
D = 149-100
F = 100-0

Cleveland Chiropractic College requires that all 600, 700 and 800 level required courses be completed with a grade of "C" or better to be admitted to clinic and to graduate. Students receiving a grade of "D" or "F" in these courses will be required to repeat the course in its entirety.

No make-up examination will be given.

General Course Outline:

The following schedule is intended to be a guide for students so that they may anticipate upcoming lecture topics and examination. This schedule is not absolutely rigid and may be changed at the instructors discretion. Further, the reading list is included. The student is responsible for all of the materials stated even if it is not covered in class times.

Reading Assignments: Course Outline

Reading assignments will be given through out the duration of the course. The student is responsible for the information on examinations.

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K. Urinary Tract Infections

VIII. Gastroenterology: pp. 538-607
- A. Recurrent
- B. Abdominal Pain
- C. Abdominal Mass
- D. Chronic Diarrhea
- E. Constipation

IX. Renal System: pp. 608-632
- A. Enuresis
- B. Differential Diagnosis of Edema
- C. Hematuria and Proteinuria

X. Pulmonology: pp. 361-412
- A. Asthma
- B. Cystic Fibrosis
- C. S.I.D.S.

XI. Endocrinology and Metabolism: pp. 770-815
- A. Diabetes Mellitus
- B. Hypoglycemia
- C. Reye's Syndrome

XII. Hematology: pp. 470-518
- A. Splenomegaly
- B. Lymphadenopathy

XIII. Oncology: pp. 958-972
- A. Childhood Leukemia
- B. Wilm's Tumor
- C. Neuroblastoma
- D. Hodgkin's Disease
- E. Brain Tumors

Pediatric Adjusting text by Dr. Stierwalt

XIV. Neurology: pp. 652-727
- A. Seizures
- B. Loss of Consciousness
- C. Headache
- D. Closed Head Trauma

XV. Orthopedics: pp. 632-651
- A. Approach to a Child with a Limp
- B. Spinal Disorders
  - 1. Scoliosis
  - 2. Torticollis
- C. Misc. Conditions

XVI. Child Abuse and Psychosocial Aspects of Pediatrics: pp. 727-770

Note: This course outline is subject to change in order and in content at the discretion of the instructor.

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THE SPINAL ADJUSTING COMPETENCIES

PREAMBLE

The spinal adjustment is that element of case management in which correction of vertebral subluxation is effected.

A. COGNATIVE COMPETENCIES: THE SPINAL ADJUSTMENT

KNOWLEDGE AND UNDERSTANDING

1. Demonstrate a knowledge base that illustrates an adequate understanding of the structural and functional relationships normally observed in the spine of a healthy patient.

2. Demonstrate a knowledge base that illustrates an understanding of spinal pathomechanics that result in abnormal function.

3. Demonstrate a knowledge base that allows description of those biomechanical abnormalities of the spine that are both common to the practice of chiropractic and for which treatment by adjustive procedures is indicated.

4. Demonstrate a knowledge base that illustrates an understanding of the physical and physiological principles utulized in the adjustment of the spine.

5. Demonstrate a knowledge base that allows description of the rationale through with a particular spinal adjustive procedure is selected.

6. Demonstrate a knowledge base that allows description of both indications for and contraindications to the performance of a particular spinal adjustive procedure.

CLINICAL JUDGEMENT

7. Select spinal adjustive or other procedures that are consistent with the effective correction of the pathomechanics of the spine.

8. Select spinal adjustive procedures that are consistent with the effective correction of the pathomechanics of the spine.

9. Identify contraindications, both absolute and relative, for the spinal adjustive procedure considered.

10. Identify a clinical rationale for the selection of a spinal adjustive procedure.

11. Identify where possible the biologic effects, both beneficial and adverse, that may result from performance of the spinal adjustive procedure selected, and identify a procedure whereby those effects can be evaluated.

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FFECTIVE COMPETENCIES: THE SPINAL ADJUSTMENT

ATTITUDE AND HABITS

1. Demonstrate an attitudinal awareness of the relationship between patient apprehension and effectiveness of the spinal procedure selected.

2. Demonstrate an attitudinal awareness of the patient's right to privacy and perform the spinal adjustive procedure accordingly.

3. Demonstrate an attitudinal awareness of the necessity to perform the procedure in a confident and decisive manner.

4. Demonstrate the habit of selecting procedures that are consistent with clinical indications and the treatment plan and reflect the most effective treatment of the pathomechanical state.

5. Demonstrate the habit of anticipating the biologic effects that may result from performance of the spinal adjustive procedure selected, and recognize the need to conduct appropriate evaluation.

6. Demonstrate an attitudinal awareness of the need to provide appropriate explanation of the spinal adjustive procedure selected, and recognize the need to conduct appropriate evaluation.

7. Demonstrate the habit of identifying indications for and contraindications to the procedure considered, and determining a rationale for its selection.

INTERPERSONAL SKILLS

8. Establish an atmosphere of physical comfort, ease and rapport which is conductive to the effectice performance of the spinal adjustive procedures selected.

9. Provide for the presence of a third party while performing spinal adjustive procedures that so require.

10. Consider normal apprehension and perform spinal adjustive procedures in a manner that will minimize patient concern, whether real or imagined.

11. Effectively perform spinal adjustive procedures on a patient who may exhibit hostile, abnormal or disorganized behavior.

12. Effectively perform spinal adjustive procedures on a patient with different ethnic, cultural or linguistic background.

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PSYCHOMOTOR COMPETENCIES: THE SPINAL ADJUSTMENT

TECHNICAL SKILLS

1. Demonstrate the ability to select and utilize the adjustive equipment utilized, that is consistent with the requirements of the spinal adjustive procedure.

2. Demonstrate the ability to properly position the patient, relative to the equipment, that is consistent with the requirements of the spinal adjustive procedure selected.

3. Demonstrate the ability to assume a physical attitude relative to the properly positioned patient, that is consistent with the requirements of the spinal adjustive procedure selected.

4. Demonstrate the ability to accuratley identify, locate and establish the points of patient contact require for the proper performance of the spinal adjustive procedure.

5. Demonstrate the ability to deliver an adjustive force along a vector that is consistent with the anatomic relationships of the articular structure, the nature of the procedure selected, and the effective restoration of articular biomechanics.

6. Demonstrate the ability to properly modify spinal adjustive procedures to meet particular needs demanded by the patient's physical habitus or clinical status.

7. Demonstrate the ability to perform the spinal adjustive procedures in a skillfull manner that results in the minimum possible patient discomfort.

8. Demonstrate the ability to identify and evaluate biologic effects that may result from performance of a spinal adjustive procedure.

9. Demonstrate the ability to record data relevant to the performance of a spinal adjustive procedure in an organized manner.

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TEST-TAKING BEHAVIORS

Certain behaviors are considered inappropriate during the administration of an instrument meant to evaluate student progress (examination, test, quiz, practical, etc.). The following are specifically prohibited and are violations of the Standards of Conduct.

1. Having personal belongings other than writing impliements in vicinity of the test; examples of personal belongings include: Briefcases, backpacks, purses, notebooks, textbooks, etc. These materials may be left at the front of the room.

2. Eyes wandering toward anyones else's paper.

3. Placing one's test booklet and/or answer key so that another student may see it.

4. "Crib" notes of any kind.

5. Wearing of hats.

6. Unauthorized use of headphones.

7. Unauthorized exit from the room; ANYONE WHO LEAVES THE ROOM MAY NOT RETURN.

8. Eating or drinking during the test.

9. Talking, tapping fingers, feet, or making other distracting noises or gestures that may be interpreted as signalling.

10. Distracting others when entering or leaving the test area.

ALL TESTS SHOULD BE SELF EXPLANATORY. THE INSTRUCTOR WILL NOT ANSWER ANY QUESTIONS DURING THE TEST, SO DO NOT ASK ANY.

If this instructor is satisfied that a misconduct has occurred he will terminate the test for that individual(s) involved, record a test grade of zero, and report the names of the individual(s) to the Vice President of Academic Affairs, the Chairman of the Department,and the Director of Student Services. Other sanctions may follow depending on the circumstances.

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Course Number: Diagnosis 673

Course Title: Clinical Laboratory Diagnosis

Trimester: Winter 1993
Hours Per Week: 2
Hours Per Trimester: 30
Trimester Credit Hours: 1.5

Course Instructors:
G. Michael Whitehead, D.C., D.A.C.B.R.
Linda M. Haynes, D.C.

Office Location: Clinic
Office Telephone: 333-8230 Ext. 288

Office Hours: By Appointment

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Course Syllabus: 673

Course Prerequisite: Must have or is presently taking Diagnosis 655: Clinical Laboratory Methods.

Course Description: This laboratory course consists of two parts. A) Venipuncture and Proper Specimen Preparation, and B) Practical Laboratory Testing. They are designed to provide hands-on, practical experience in venipuncture, specimen handling, and actual testing of blood and urine specimens for diagnostic purposes.

The remaining portion of the syllabus pertains only to the Venipuncture and Specimen Preparation portion of the class. Syllabus for the Practical Lab Testing portion is separate.

Course Material:

Course material is provided in the attached notes.

Schedule: Refer to the trimester schedule for meeting times and room numbers.

Attendance: Attendance in all classes is mandatory. The student is expected to be in class, on time for each class. If the student is not in class during roll call, he or she will be counted absent. The student is responsible for all missed assignments, however, the student will not be able to make up unannounced or announced quizzes.

Evaluation: The student's final grade is based on the following criteria:

1. Written Examination 50 pts
2. 10 venipuncture procedures (required) 5 pts max. each
   - 5 single tube draws
   - 4 multi-tube draws
   - 1 syringe draw

   100 pts possible
3. Unannounced quizzes (optional) No more than 5 pts each.

The College grading scale will apply to individual and final course grades:

100-90	A	79-70	C	59-0	F
89-80	B	69-60	D		
79-70	C				

Cleveland Chiropractic College requires that all 600, 700, and 800 level required courses be completed with a grade of "C" or better to be admitted into clinic and to graduate. Students receiving a grade of "D" or "F" in these courses are required to repeat the entire course.

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Additional Considerations: Required venipuncture draws must be completed within the term or the student will receive a "F" and will be required to repeat the course.

Academic Policies: The College policies regarding course withdrawals, course incompletes, etc. will be followed.

Standards of Conduct: As a future Doctor of Chiropractic, you are expected to adhere to the highest professional, ethical, and personal standards of conduct. Any activities that violate the standards of student conduct specified in the College catalog will form the basis for disciplinary action towards those involved.

Course Objectives:

1. The student should have the skills necessary to perform the mechanical aspect of venipuncture on the mannequin.

2. The student should be able to adequately prepare the patient for venipuncture both during the actual procedure and by providing dietary or other preparatory instructions when necessary for accurate sampling.

3. The student will learn how to properly prepare the acquired specimen for transport to the laboratory for testing purposes.

4. The student will learn how to safely acquire the sample, safely handle and prepare the specimen for transport to the laboratory.

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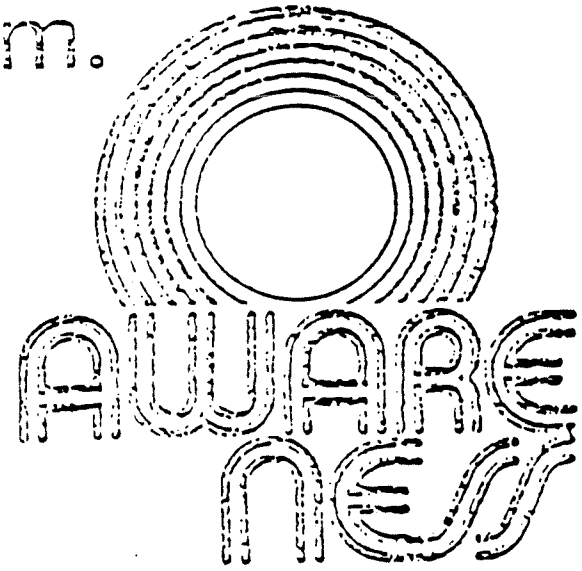
Remember...
you are
an essential
member
of the
patient care
team.



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Clinical Diagnosis Dr. Linda M. Haynes

Grading:

Equipment: All necessary equipment
- Tourniquet
- Cotton balls (1 alcohol and 1 plain)
- Bandaid
- Adaptor
- Needle (sterile)
- Vaccutainer tubes (labeled)
- Gloves for Dr.

Tourniquet: Put on correctly and released properly (pt given instructions, block arm, pump fist etc.)

Vein Entry: Vein immobilized, 15 degree angle, bevel up, smooth entry, (no gouging or harpooning)

Hit Vein: Was vein missed, if probing is necessary, was it done gently and correctly.

Withdrawal and Procedure: Tube removed from adaptor, tourniquet released, cotton over wound, needle withdrawn smoothly and quickly, pt told to apply pressure to wound, needle covered promptly, needle placed in sharp box, tubes mixed if necessary, bandaid on wound, equipment returned to place of origin, or disposed of properly. (gloves etc.)

Date _____

Stdnt Name _____

Pts. Name _____

Eqpmnt.	Trnqt.	Vein Entry	Hit Vein	Wthdrwl & Proc.
_____	_____	_____	_____	_____

Possible 5 Pts.
Points this procedure _____

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Treat
others
as
you'd
like to
be
treated.

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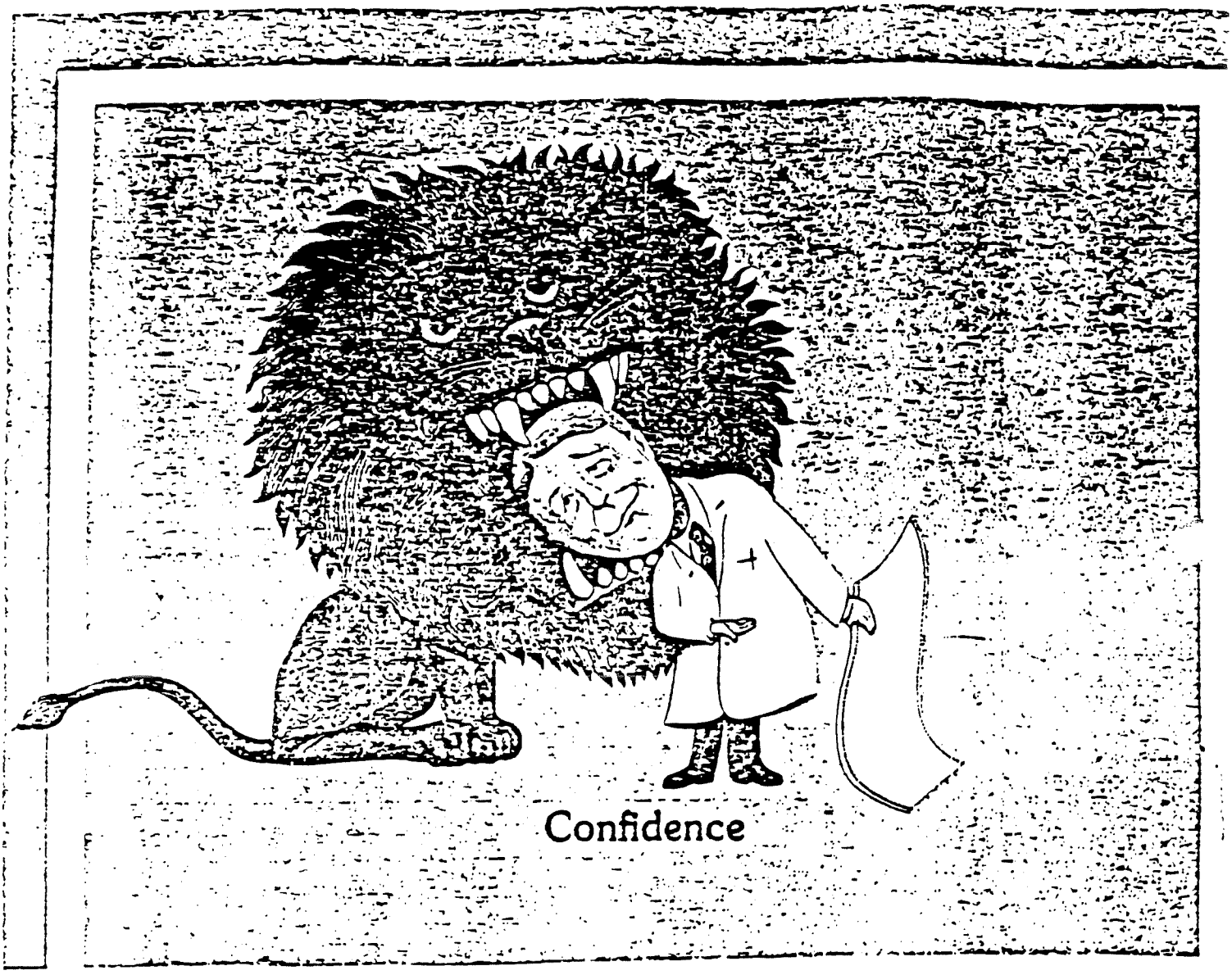

Confidence

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Specimen Collection and Preparation

General Recommendations:

Laboratory tests contribute important and often vital information about a patient's health. Correct diagnostic and theurapeutic decisions depend, in part, on the accuracy of test results. Proper patient preparation, specimen collection and specimen handling, storage, and submission are essential prerequisites for accurate testing. The accuracy of test results depend to a large extent on the integrity of specimens submitted. To obtain reliable specimens, you should observe the following recommendations:

A. - Prepare Yourself

Prior to each collection, review the laboratory's specimen requirement. Note the proper specimen to be collected, the amount, the procedure, the collection materials, storage and handling required.

B. - Prepare the Patient

Provide collection instructions and information on fasting or diet and medication restrictions where necessary.

C. - Prepare the Specimen

After the specimen has been collected, label and confirm the identification in the presence of the patient. Handle the specimen as required to preserve its "in vivo" character until the time of testing. Proper storage is essential.

Remember that medically useful test results measure what is occurring inside the patient, rather than what may occur inside the test tube due to improper preservation and handling of the specimen. The laboratory requires a biologically representative specimen- one that accurately reflects the patient's basal physical state- in order to provide clinically useful test results to the physician. During specimen collection, preparation and submission, there is a much greater possibility of critical error than during actual testing or examination of the specimen; such errors compromise the integrity of the specimen and the test results. The information that follows will help you avoid some of the most common errors that occur, and will emphasize the importance of your role in the overall process of laboratory testing.

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D. - Transfer of Specimen from Syringe:

1. Never express blood through the needle. Remove the needle, and gently expel the blood into the transfer tube.

2. DO NOT shake the tube containing the specimen. Foaming or bubbling of blood causes gross hemolysis.

E. - When Using Vacuum Tubes Containing Anticoagulatants and Preservatives:

1. Tap the tube gently at a point just below the stopper to release any additive adhering to the tube or stopper.

2. Permit the tube to fill completely to ensure the proper ratio of blood to additive.

3. When mixing blood with the anticoagulant or preservative, invert the tube gently 10-12 times to ensure adequate mixing, using a slow rolling wrist motion. Rapid wrist motion or vigorous shaking contributes either to small clot formation or hemolysis and fails to initiate the mixing action.

4. Check to see if all preservatives and anticoagulants are dissolved. If any powder is visible, continue inverting the tube slowly until the powder is dissolved.

5. If multiple samples are being drawn, invert each specimen as soon as it is drawn. DO NOT DELAY.

F. - Vacuum Tubes Containing No Anticoagulants and Preservatives:

1. Permit tube to fill completely.

2. Let specimen stand for a minimum of 30 minutes and not longer than 45 minutes prior to centrifugation. This allows time for the clot to form. If the specimen is allowed to stand for longer than 45 minutes, chemical activity and degeneration of the cells within the tube take place, and test results will be altered as a consequence.

3. Remember that too vigorous rimming of the clot prior to centrifugation may cause hemolysis.

4. Centrifuge (spin down) the specimen at the end of the 30-45 minute period in strict accordance with the manufacturer's instructions for time and speed of centrifiguation.

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I. - COMMON ERRORS

Careful attention to routine procedures can eliminate most of the errors listed below. The complete blood collection system and other collection materials provided by the laboratory will maintain the integrity of the specimen only when they are used in strict accordance with the instructions provided.

A. - Serum Preparation

1. Failure to separate serum from cells within 30-45 minutes of venipuncture.

2. Hemolysis - (Red blood cells damaged and intracellular components spilled into the serum).

3. Turbidity - (Cloudy or milky serum due to patient's diet.)

B. - Plasma Preparation

1. Failure to mix thoroughly but gently with proper additive immediately after collection.

C. - General Preparation

1. If there is air leakage around the needle or loss of vacuum in the tube, replace the vacuum tube.

2. If you are using your own collection equipment instead of the Vacutainer System, use only clean, dry needles, syringes and tubes.

3. Collect blood in room temperature containers unless specimen requirements indicates otherwise.

4. When a vacuum tube fills too slowly because of an incomplete venipuncture, damage to the red blood cells may result. Correct by deeper vein entry or select another puncture site and collect a second specimen.

5. DO NOT remove the needle from the vein until the vacuum tube is completely filled. Premature removal causes a rush of air to enter tube, with damage to the red cells resulting.

6. Be as gentle as possible, drawing the blood slowly and steadily.

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COMMON PROBLEMS

I - Turbidity - (Lipemic Serum)

Normal serum is a clear, light yellow straw color. Turbid serum appears cloudy or milky. Serum may be cloudy due to bacterial contamination or chronic or transient high lipid levels in the patient's blood.

The primary dietary sources of lipids (fatty substances) are meats, butter, cream, and cheese. If the patient has eaten an unusual amount of these foods within the 24-hour period immediately prior to collection of the blood specimen, he may have a temporary elevated lipid level which may be manifested by cloudy or lipemic serum.

Lipemic serum may not be a true indicator of the patient's basal physical state. It is important to obtain a representative specimen which will help the physician differentiate between transient dietary lipemia (moderately high lipid level) and chronic hyperlipidemia caused by other factors.

To avoid dietary-induced high lipid levels prior to testing, many physicians require patients to exclude the high-fat foods from their diets or to fast for 12-14 hours prior to specimen collection. For morning specimen collections the laboratory recommends that the patient, be required to fast from 6 PM, on the previous evening. Even if there are dietary restrictions or fasting prior to blood collection you should routinely practice the following.

1. Examine the serum and notify the physician or note on the test request form in your records if the specimen is lipemic (cloudy, turbid, or milky). These characteristics may be indicative of transient chemical abnormalities.

2. Ask the patient, about his diet during the past 24 hours. If he has eaten an unusual amount of dairy products and/or meat prior to specimen collection, make note of this in your records.

II - Profile Testing

Most laboratories require 12-14 hours fasting specimens for multi-test groupings - especially for the SMA series and comprehensive blood chemistry screens. When profile testing is performed on non-fasting specimens, studies have shown that false abnormal elevations in triglycerides and cholesterol are most likely to occur

III - Insufficient Quantity:

One of the most common and expensive errors in specimen collection is the submission of an insufficient sample for testing. This means that the laboratory has to return the request marked Q.N.S. (quantity not sufficient) and the patient has to be called back for a repeat collection at additional expense and inconvenience to himself and to the doctor. To assure adequate quantity of specimen:

1. Always draw blood in the amount of 2-1/2 times the required volume of serum. - (For example, if 4 ml. serum are required, draw at least 10 ml. of blood).

2. For most profile testing (SMA profiles or Chem. 24) draw at least two red top tubes and submit one full tube of serum (8-10 ml).

3. Another safeguard is to submit the next larger size collection tube rather than the size listed in laboratory specimen requirements. - (For example-substitute a 7 ml. red top tube).

4. Provide adequate containers and instructions for 24-hour urine and stool collections.

A. Patient Instruction

Detailed, simply worded instructions are necessary for many collection procedures such as timed urine collections and glucose tolerance tests. If patients are not adequately instructed, they will fail to comply for various reasons. Many of the common errors in specimen collection are due to inadequate patient instruction.

It is important to gain the patient's understanding and cooperation in obtaining an acceptable specimen. The patient's response is partly determined by your attitude and by the degree of self-confidence you show. If you appear to be organized, skilled, and attentive, the patient is more likely to cooperate, especially when an uncomfortable collection procedure is necessary. Off-hand, casual instructions make little impact, and the patient will either take them seriously or forget them. He will feel more comfortable and secure when adequately informed about the purpose of a test. He is more apt to remember and comply with instructions when they are emphasized as necessary preliminaries for accurate diagnosis and treatment.

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When inconvenient conditions are required for collection of a specimen, the patient should be fully informed. For example, if a blood sugar is ordered for the patient, the patient would be required to fast for 12-14 hours. In addition to telling the patient that he may drink black coffee only in the morning prior to the blood collection procedure, he should also be informed that cream and sugar are to be avoided because they can cause a transitory elevation in his "blood sugar" level. Similarly women patients should be told not to douche prior to a pap smear becuases douching washes away the surface cells required for the diagnostic examination.

B. Basal State Collection:

In general specimens for determining the concentration of body constituents (eg.-glucose and phosphorus) should be collected when the patient is in a basal state - (eg. - in the early morning after awakening and after 12-14 hours after the last ingestion of foods). Normal values are most frequently based on specimens from this collection period; this means that test results will be more reliable when you submit early morning specimens.

The composition of blood is altered after meals by food being absorbed into the blood stream. Consequently, post prandial blood (drawn after a meal) is not suitable for chemistry tests. You should always ask the patient, if he has eaten, before you collect the specimen. If the patient has eaten you want the test to be performed anyway, you should indicate "non-fasting" on the test request form. Fasting or diet restrictions, such as low fat diets, should be explained in detail, particularly to aged or over-anxious patients. For example - it may be necessary to inform some patients that fasting does not include abstaining from water. Dehydration resulting from water abstinence can alter test results.

C. Reporting Test Results

The patient feels more confident, if he knows when to expect the results of the laboratory test. When tests are part of a periodic physical examination, it may be convenient to tell the patient that he will receive no report from the physician's office if all tests are within normal range.

The patient should also be told that it takes time to make clinical determinations and that careful analysis is not possible without a time lapse between taking the

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D. Interference of Medications and Other Substances

Many commonly prescribed medications interfere with chemical determinations or alter levels of substances measured. If the patient cannot be taken off the medication in question, its presence should be noted on the test request form.

1. Direct drug interference is least likely in blood tests, however, drugs are frequently concentrated in the urine in sufficient amounts to interfere significantly with urine assays.

2. Drug effects usually cause false high values rather than false low values.

3. Tranquilizers should be discontinued 48-72 hours before urine specimens are collected for steroid studies (17 - keto-steroids, or 17 ketogenic steroids).

4. Oval contraceptives: Cause a decrease in serum Vitamin B-12 levels, in many cases indistinguishable from Vitamin B-12 deficiency of any cause. Also, cause an increase in total serum - thyroxine - binding globulin. This results in an increase in both total serum thyroxine and unsaturated thyroxine - binding globulin, but no significant change in unbound (free) thyroxine.

Drug interference is so complicated and often method-dependent that only general recommendations can be stated here. Since many medications have been shown to have long-term residual effects that interfere with testing, careful history taking is essential prior to testing. The patient must be questioned closely on his medication history.

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In Summary:

1. Always ask the laboratory what special patient instructions should be given.

2. Provide printed instruction slips whenever possible.

3. Emphasize and clarify important points by discussing them with the patient.

4. When applicable, always provide instructions on:

   a. Special diet or fasting requirements

   b. Avoidance of medications and other substances that may interfere with test results.

   c. Importance of correct collection and storage - (such as 24 hour urine collection).

   d. Timed specimens - importance of specified collection time and recording of time.

   e. Avoidance of exercise or emotional stress when applicable.

VENIPUNCTURE TECHNIQUE
DIAGNOSIS 685

Cardinal Rules:

1. Always use Vacutainer equipment provided by the laboratory you associate with, and always be sure the needle is STERILE and the seal has not been broken. If there is any doubt about the sterility of a needle, refuse to use it and destroy the needle properly.

2. By Law - all disposable equipment (needles-syringe), must be destroyed and disposed of properly. Obtain a chopper box to cut needles off.

3. As Chiropractor's, - NEVER draw from any other location on the patients' body except the antecubital space of the patient's arm. If a sample of blood cannot be obtained from these areas, send the patient to another laboratory for the specimen to be drawn.

4. Never stick the patient more than 2-3 times maximum to obtain a specimen--send them to an outside laboratory.

5. The doctor always stands, -- NEVER sits down for this procedure.

6. NEVER use a needle for more than one injection - (even if it's on the same patient)--always use a new sterile needle each set-up.

7. By Law - all needles-syringes etc. must be kept under lock and key in your office, and not obtainable except by those authorized and qualified in their use.

8. Doctor always palpates for the veins with the fingers--never with the thumb. This is absolutely necessary in palpation when some veins are deep and the doctor must rely on feeling the patients pulse rather than feeling a vein.

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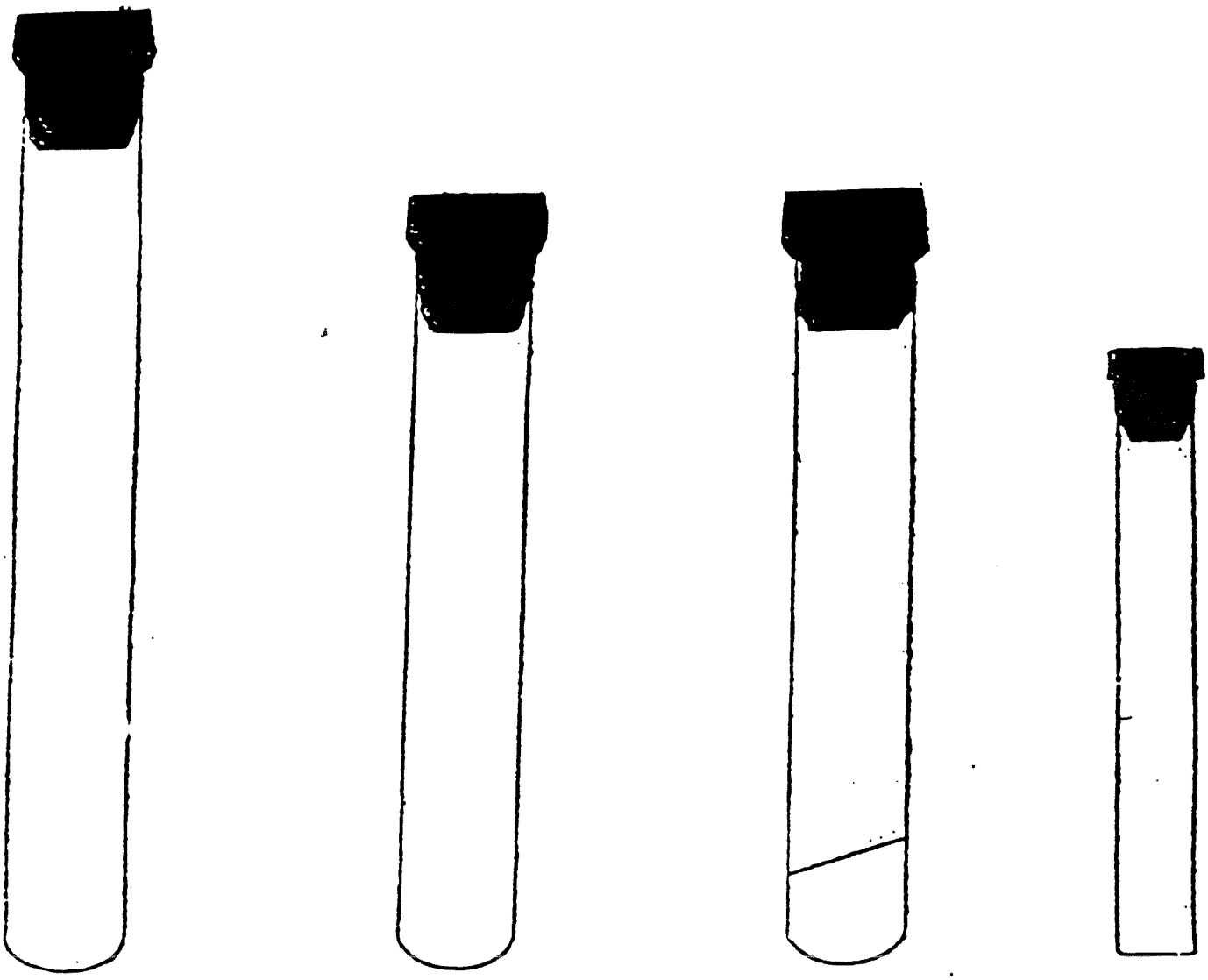
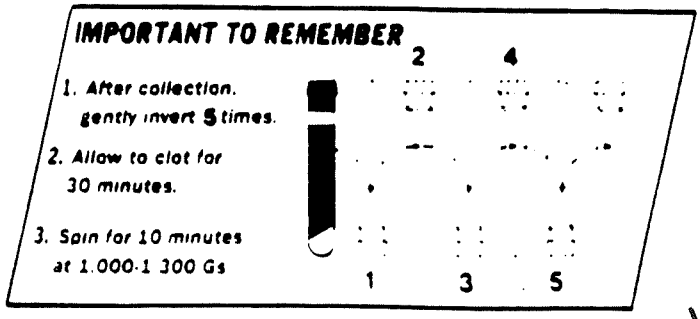
CLOT TUBES



15 ml | 10 ml | 10 ml (silicon) | -Pedi-

CHARACTERISTICS

1. Produce serum
2. Red stoppers
3. Contain no additives
4. Blood forms a clot



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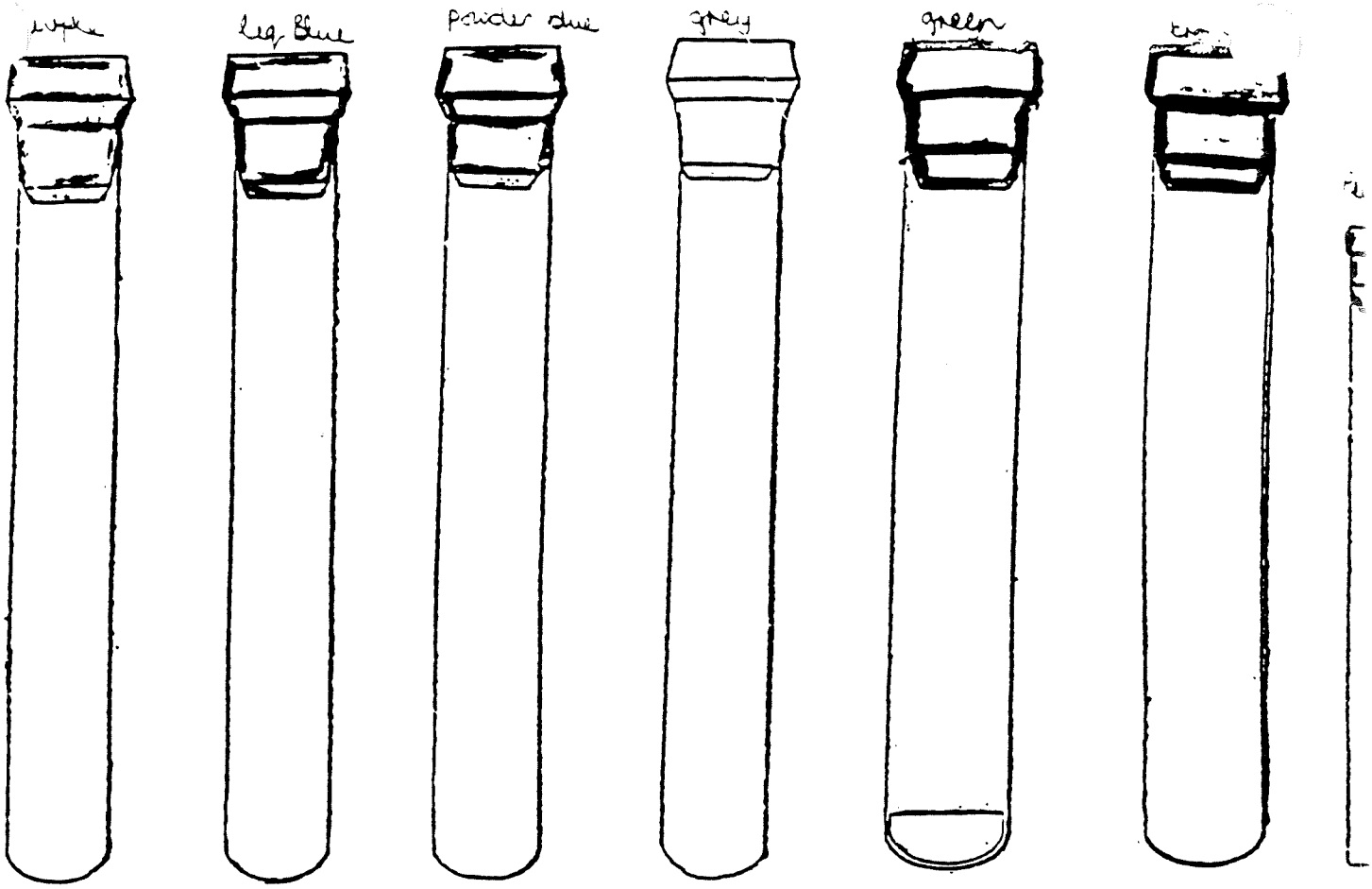

CHARACTERISTICS

1. Produce plasma or whole blood
2. Contain additives
3. Blood does not form a clot
4. Must be inverted (Do not shake)

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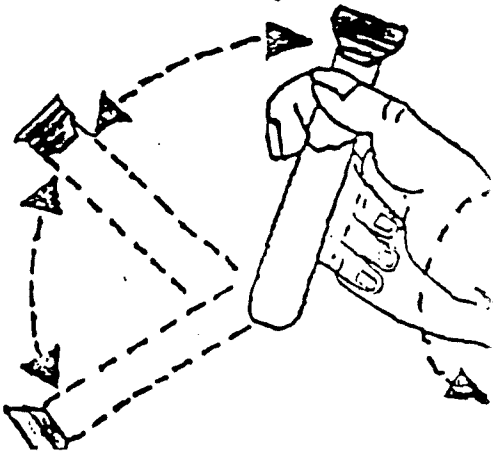
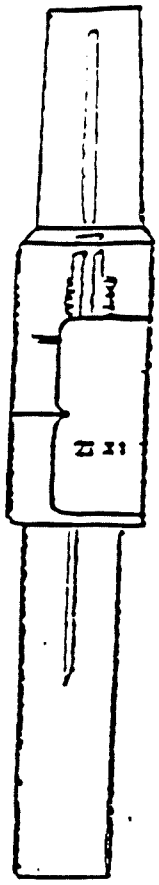
ADDITIVES

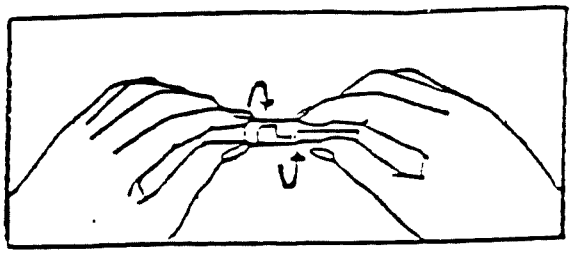
Lavender - EDTA
Liq. Blue - Citrate
Powder blue - oxalate
Gray - floride
Green - Heprin
Brown - sodium heprin (lead free)

Always invert tub

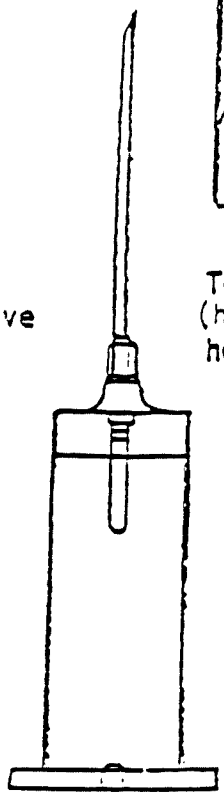


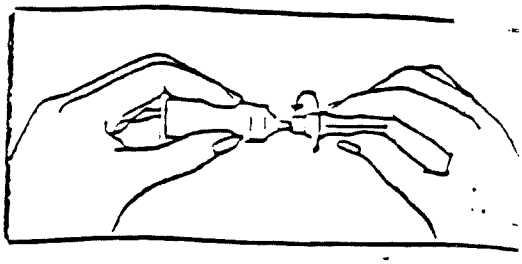
MULTISAMPLE NEEDLE





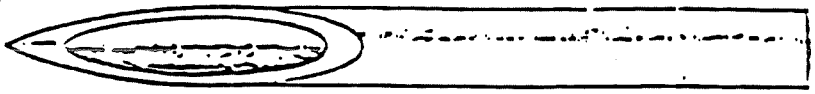
To open needle cartridge, twist until paper seal is broken. Remove cap, exposing latex casing and threaded hub. Do not remove front needle cover.



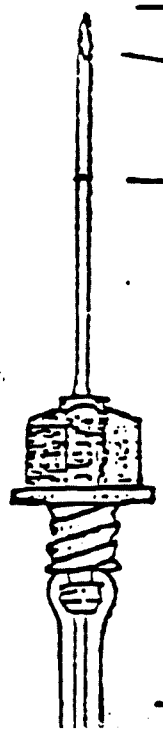


To assemble needle into adapter (holder) thread the needle into holder until firmly seated.

Enlarged View



Construction:



Point

Bevel

Shaft

Hub

latex casing

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VENIPUNCTURE PROCEDURE

Venipuncture Procedure--(Vacutainer Equipment)

1. All equipment should be properly prepared and set-up before preparation of the patient.

   A. Plastic Holder - (portion the needle attaches to-Non-Disposable)

   B. Sterile "Multi-draw" needle

   C. Tourniquet

   D. Alcohol Sponge - (squeezed dry)

   E. Band-aid

   F. Specimen Tubes - (proper colored stopper tubes, laid out in double the amount necessary for specimen collection.)

2. The patient should be placed in a semi-recumbent (seated), or supine (lying face-up) position for the procedure.

A. There are several types of patients that should always be placed in the supine position, on a high exam table.

   1. All patients that report Fainting Problems in the performance of this procedure.

   2. All patient's that report having Difficult Veins to draw from.

   3. All Pediatric Patients - Since children are unpredictable.

   4. All Elderly Patients - Since many elderly patient's veins have a tendency to roll away from the needle.

   5. All Obese Patient's that have extremely large upper arms.

   6. All Drug Addict patients--that hav abused their veins.

   7. All Very Sick, Weak, or Extremely Nervous patients, that sitting up could be a problem.

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B. Patients that report that they have very difficult veins to draw from, usually know what they are talking about. They dread this procedure since their experience has been that they have had to be punctured several times before a vein can be located. These patient's should always be placed on a high exam table, so the doctor will not have to lean over the patient, since the procedure could be lengthly. The doctor should take the time necessary to locate the vein accurately before any attempt is made to draw blood from the patient. Patients appreciate the doctor that takes the extra time and effort necessary to locate a vein before attempting to draw the specimen. These same patient's are very pleased and impressed with the doctor, whom after careful analysis locates the vein and obtains the specimen upon the first attempt without having to be punctured numerous times.

Patients with large upper arms should also be placed on a high exam table for the doctor's convenience, since finding a vein on these patient could also be very difficult. Usually these patients' veins are deep and can only be detected by feeling for a pulse rather than the vein itself. The doctor's thumbs are never used since the doctor's own pulse may be felt instead of the patient's.

Another type of patient that presents a challenge, are the patient's that have abused their veins in drug abuse by injection. These patient's through their abuse have developed heavy scar tissue or the veins collapse after entry and a specimen is extremely difficult to obtain. These patients usually know what veins can and cannot be used in this procedure. Do not be afraid to listen to these patients guidance in the selection of a vein; - however; still only attempt to obtain that specimen from the antecubital space of the patient's arm and be sure the vein is large enough that suction within the tube, after entry, doesn't collapse the vein.

C. <u>Procedures to use when encountering any of the above difficult veins to draw from</u>:

<u>Never</u> attempt these following procedures without the <u>assistance</u> of a second person present, to assist.

1. <u>Patient supine</u> on high exam table.

2. <u>Use hot moist packs - well padded</u> - on both arms - antecubital space for 10 minutes.

3. Instead of using a tourniquet--apply a <u>blood pressure cuff</u> around the upper arm of the patient, and <u>have the assistant</u> [illegible] <u>the B.P.</u> cuff [illegible] Hold the [illegible]

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4. Check both arms by careful palpation, feeling for the patient's vein and pulse before attempting to draw.

5. After taking the necessary time to select the proper vein then proceed with regular drawing procedure.

6. When the specimen has been obtained, <u>have the assistant lower the pressure on the blood pressure cuff slowly</u>, until all air has been removed. Squeeze the cuff to assure all the pressure on the arm has been removed, before the needle is removed from the patient's arm.

7. After the needle is withdrawn, proceed with the normal blood drawing procedure.

3. <u>Briefly explain the procedure to the patient, especially if they have never had blood drawn before.</u>

4. <u>Inspect and palpate the anticubital space on both arms, for the most prospective vein, before tourniquet application</u>.

1. Use Index finger of either hand for palpation

2. Visual observation for a vein

5. <u>A tourniquet is then placed about the upper arm, so that it can be pulled free with one hand</u>.

1. Place the tourniquet behind the patient's arm, equally dividing the length of the tourniquet during placement.

2. The doctor should move both hands towards the center of the tourniquet, grasping the tourniquet on both sides at this point.

3. Stretch the tourniquet as it is brought up around both sides of the patient's arm and cross the two ends over each other in front of the patient's arm.

4. It doesn't make any difference which side is crossed over the other, but which ever is the <u>underneath tie</u> (after the two sides have been crossed over each other) - is pulled a little tighter and brought up, over and down through the hole, create by both ties as the doctor pulls the tourniquet slightly out away from the patient's arm. This side of the tie (underneath tab) is not pulled completely through (as you would in tying a shoelace) but a portion of the tie is tucked down through the hole with the remaining portion of the tie

this tab to release the tourniquet with one hand when the procedure is complete.

6. The doctor now demonstrates and instructs the patient to repeatedly open and close the hand, three times making a tight fist each time, and then to finally hold the tightened fist closed, which the patient will maintain throughout the procedure.

   1. The doctor should make sure the patient is making a good, firm, tight fist each time, squeezing the hand firmly.

   2. It does not do any good if the patient is only "flapping" the hand or fingers without squeezing the fist tightly.

   3. We ask the patient to only make three tight fists and then to hold that fist tight throughout introduction of the needle into the vein, filling completely the first tube of blood. After the second tube has been placed into the holder if there is a good flow of blood into that tube, the patient can be instructed to release the fist and the tourniquet is removed for the filing of the remaining tubes for the specimens required.

   4. The patient is only asked to squeeze the fist three times. Otherwise continued pumping of the fist, under pressure of the tourniquet, could cause the red blood cells to be disrupted causing hemolysis. When this happens the specimen is worthless and cannot be sent in for analysis.

7. Within a couple seconds of the tourniquets application, the doctor quickly palpates and makes his decision as to the best vein to obtain his specimen.

   1. The doctor uses the index finger (never the thumb) for palpation.

   2. Selection of a vein must be done quickly since a tourniquet is on the patient's arm, for two reasons:

      a. The tourniquet is uncomfortable for the patient as it is applying pressure to the venous system, (which if too tight the patient's arm will start turning dark blue or purple). It also is applying pressure on the nerve supply to the arm and if left on too long or is placed too tightly on the patient's arm, it will quickly cause numbness, tingling and coldness of the extremity.

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b. Second reason for quick selection of a vein under pressure of a tourniquet - is: the longer the tourniquet is in place the more chance there is of hemolyzing the red blood cells while still within the patient's arm.

SELECTING A VEIN

There are preferred areas in relation to vein selection. The primary area is the antecubital fossa (crook of the arm). The optimal veins in this area, in order of their selection are:

* Median cubital
* Median cephalic
* Median basilic

These three veins are found to be the best for blood withdrawl for the following reasons:

* They are usually larger
* They are closer to the surface
* They have less tendency to roll
* They are easily accessible
* There is minimized pain

If the selection of any of the three veins mentioned is impossible, try their accessory branches. These accessory veins branch out either a little above or below the antecubital fossa.

The secondary areas of vein selection are the back of the forearm and hand.

The tridary areas are the lower leg (below the knee) and the foot.

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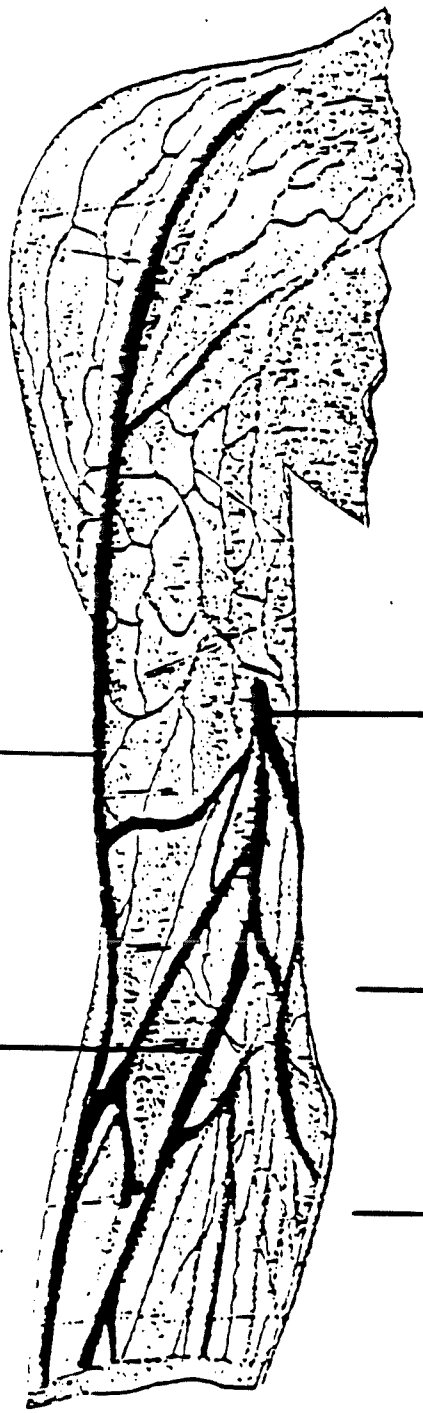
Superficial veins of the arm

Anterior View:



The primary area used for venipuncture is the antecubital fossa. The veins in this area, in order of selection are:

1. Median cubital
2. Median cephalic
3. Median basilic

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8. The skin over the vein is gently pressed inward, sometimes using a soft tapping with the index finger, and the vein is felt as a soft but slightly elastic cord.

   1. A vein when located is soft and bouncy; tendons must be identified and avoided. Tendons will feel hard to the touch and unyielding.

9. When a vein is located, a careful analysis and mental picture is formed as to it's estimated depth and direction.

   1. Veins vary, and are located differently on each patient. We want to locate the most central (middle of the antecubital space) vein possible.

   2. Veins that start from the lateral aspect of the arm (either side) and diverge into the center of the arm are also acceptable, providing there isn't a suitable vein in the center of the antecubital space of the patient's arm.

   3. Veins that start towards the center of the arm and diverge outward toward the lateral or outside edges of the arm are not acceptable and should be avoided unless there isn't any other vein available on either of the patient's arm.

   4. Veins as described above (#3) are much less desirable in that they usually roll away from the needle, are smaller - therefore there is less chance of obtaining a reliable specimen without hemolysis, and is much more painful to the patient.

   5. The depth and direction the vein is lying is also extremely important. The depth and direction can be determined by palpation and visual observation. The more shallow the vein is the more visable the vein is; the depth of the vein can usually only be determined by palpation. The direction the vein is lying is very important. Therefore careful palpation and visual observation (if possible) is important. After locating a vein by palpation, the doctor would palpate both directions (up and down) to determine the direction the vein is going--this is called palpating for the long axis of the vein which will be discussed next.

10. The skin over the vein is now punctured, with the needle bevel up, directly over the vessel and guided in the direction of it's long axis.

    1. Needle bevel up, - means the opening - or the hole at the end of the needle is always up toward the doctor.

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2. When this bevel or opening of the needle is up toward the doctor, then the sharpest point of the needle is what will be introduced first into the patient's arm. This important factor along with a fast entry into the vein, makes it less painful to the patient.

3. Entry guided in the direction of it's long axis, means introducing and inserting the needle so that it's going the same direction as the vein. We never attempt to enter a vein from the side of the vein.

4. It should be remembered that any movement of the needle while in the vein is painful to the patient, and all necessary precautions should be taken in preventing any unnecessary movement after entry has been made into the vein.

11. Piercing of the skin is achieved rapidly, since it is painful.

1. A number 20-21 gauge-one inch needle is always used for blood drawing. Any smaller needle size would cause hemolysis of the blood as it passed through the needle into the tube, and the sample of blood would not be acceptable for analysis.

2. The doctor holds the vacutainer equipment (holder) with the thumb of the right hand on top and in the center of the holder, (from the side of the holder), with the index and third fingers placed under the holder. The other fingers of the hand are kept out of the way. The doctor also holds the hand up or above the holder, never allowing the hand to drop or be below the holder.

3. The doctor's other hand is open, flat and supports the side of the patient's arm, so as to have the thumb of that hand available to traction the skin and vein downward, to stretch the vein tight.

4. After selection of the proper vein, the area of injection, is wiped off carefully with one alcohol sponge. With the doctor's free hand and thumb, the vein is then tractioned towards the doctor slightly, and held in that position, being careful not to touch over the area that has been prepared and cleansed with the alcohol. The tractioning of the vein is important to help prevent the vein from rolling or slipping away from the needle during insertion of the needle.

5. Using the one-inch needle, half of the needle, will be inserted into the vein quickly all in the same motion of entry, and in the direction of the long axis of the vein. The doctor's body must also be standing so that he is directly in front of the vein and the direction of it's long axis

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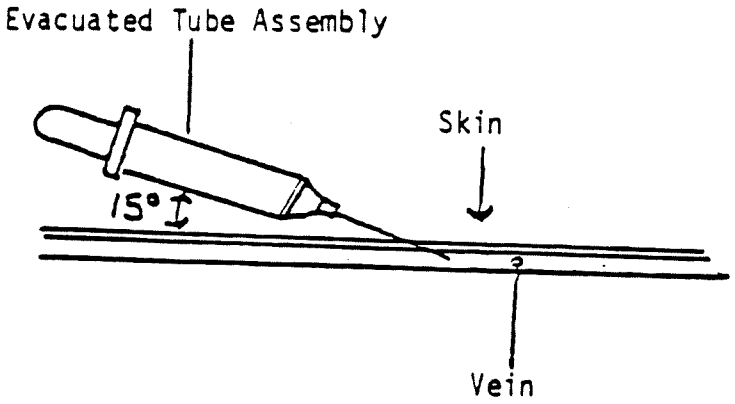
6. Since most patient's are seated for this procedure, the arm is bending at the antecubital space. Therefore in determining the entry point of the needle into the patient's arm, entry is always made one-half inch below the point where we want the opening of the needle to end, before the vein begins transversing up the arm. If made higher than this point, the needle would go through the posterior wall of the vein and blood could not be obtained from the patient's arm.

7. Entry into the vein sometimes may be felt as a slight but definite "give."

PERFORMING THE VEINPUNCTURE

The needle should be introduced, bevel up with the adapter held so that it makes a 15 degree angle with the patient's arm.

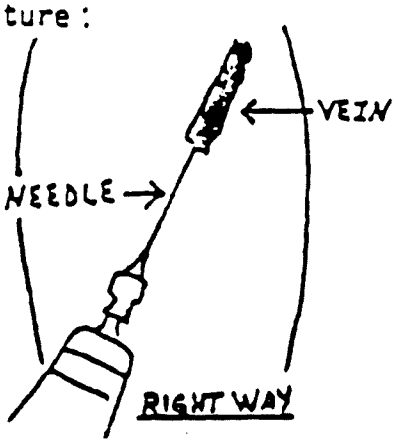


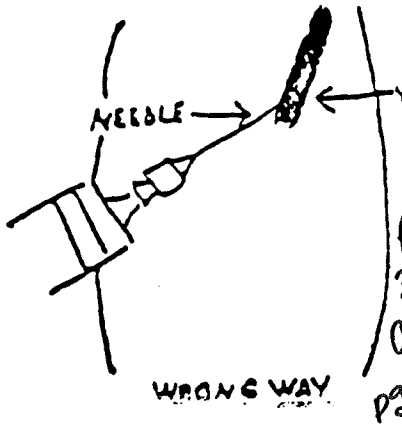
The proper method of pointing the needle prior to the venipuncture is very important. The needle is held in line with the vein for two reasons:

1. It keeps the presure on the vein in one direction - downward
2. It enables the vein to be entered from above rather than from the side, this gives the phlebotomist more "hitting" area.

NOTE: Needle positions for any venipuncture:

1. BEVEL UP
2. IN LINE WITH THE VEIN





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12. <u>After it is estimated the needle should be within the vein, the vacutainer tube is pressed fully into needle holder</u>.

1. All vacutainer needles for the vacutainer equipment are double-backed needles. One side is the patient side needle, the other needle side is the side that is attached to the holder. This side of the needle that goes into the holder of the vacutainer equipment may or may not have a rubber sheath over the end of the needle. If it does not have the rubber sheath then it is called a "Single-Draw Needle," and these are used when only one tube of blood is needed and cannot be used if multiple tubes of blood are drawn. The needles containing the rubber sheath are called "Multi-Draw" needles and are used when two or more tubes of blood are to be drawn. As the specimen tube is pushed fully into the holder the rubber sheath is pushed back allowing the needle to be open into the tube. When that tube is pulled off and out of the holder, the rubber sheath again covers the end of the needle preventing the continuation of the blood flow into the holder.

2. To push the tube up within the holder, the doctor uses the hand that was supporting the patient's arm, gently removing his hand from the arm and using the index finger on the lip at the end of the holder and using the thumb at the end of the tube, the doctor pushes the end of the tube, <u>while using a equal pulling action with the index finger on the holder</u>, and pushes the tube completely within the holder so the needle within the holder is now fully inside of the tube placed into the holder.

3. While the tube is being pushed up into the holder, the doctor's hand and fingers holding the equipment (holder with needle) should be placed down firmly against the patient's arm. Without this stability of the hand holding the needle and holder, the forcible action of insertion of the tube would continue to allow the needle deeper penetration into the patient's arm. This is not only painful to the patient but could cause damage to the vein resulting in a hematoma.

4. If the needle is within the vein, after the tube has been pushed into the holder, the blood will immediately flow into the tube, due to the vacuum within the vacutainer tubes suctioning the blood into the tube.

5. <u>The flow of blood into the tube when first starting will appear as a sharp, jet stream flow of blood</u>. If correct entry into the vein has been obtained, the tube should fill quickly. If the blood is coming into the tube slowly or hardly at all, then entry, is not correct and must be corrected immediately. This causes gross hemolysis of the blood within the tube and again the

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specimen is not acceptable for testing. Once the flow of blood into the tube has been corrected (by correcting the position of the needle within the vein,) then, the tube must be pulled off and thrown and away and a new tube replaced to obtain the specimen to be sent in for analysis.

6. The tubes must be allowed to fill completely, premature removal of the tube from the holder before it has completely filled, will cause a rush of air into the tube replacing the vacuum left and causing gross hemolysis to the specimen. The specimen then is not acceptable for analysis.

13. Procedure to follow when the vein "apparently" has not been located.

Possible Causes:

1. Needle has been introduced too deep into the vein.

   a. Pull the needle back out slowly until blood appears in the tube.

2. Needle is not in vein far enough.

   a. Traction patient's skin and vein down tight again and quickly try to go into the vein again.

3. If it is felt the needle has to be in the vein, but blood is still not coming into the tube, change the tube, the vacuum may have been lost either in manufacturing of the tubes or the doctor may have placed the tube into the the holder too far and lost the vacuum in the tube before introduction into the patient's vein.

4. Needle opening may be up against wall of vein preventing the flow of blood into the tube. Correct by raising the back side of holder and the tube.

5. Needle is not within the vein at all:

   a. Palpate the vein again in this area and palpate for the end of the needle under the skin, (being careful not to touch any of the exposed portion of the needle, since this exposed portion may still have to be introduced into the arm)-- to determine the relationship of the needle under the skin to the position of the palpated vein.

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b. Decide at this point which way the needle will need to be turned to be able to be introduced into the vein and make that correction carefully, turning the needle and holder, (and doctor if necessary) in the proper direction.

c. Traction the skin and vein down tight with the free hand and thumb, pull the needle back slightly (without pulling it out) and quickly try to introduce the needle into the vein. This probing for the vein must be done quickly.

d. It is always preferable to attempt, or probe for the vein once the needle has been introduced than to remove the needle and have to stick the patient again with a new sterile set-up. Therefore, it is imperative that the doctor palpates carefully to know how, where, and in what direction to make their correction, without just sticking in all directions hoping to hit something.

6. If all of the above efforts have failed to correct the situation then proceed with proper needle removal procedure--set-up with a new sterile, set-up, select another vein and proceed again with proper venipuncture technique.

14. Multiple tubes of blood procedure.

1. All Red Stopper tubes or large tubes are drawn first, then all anticoagulate tubes are drawn. Each tube that contains anticoagulate must be mixed gently 2-3 times as soon as it is pulled from the holder, before the next tube is placed into the holder.

2. To remove a tube from the holder, the doctor uses the free hand, palm side up, wrapping the fingers entirely around the tube, with the thumb up against the holder, and while using a pulling motion with the fingers around the tube, the thumb is pushing against the holder, the tube is removed very easily. While the tube is being removed from the holder, the doctor's hand and fingers holding the equipment (holder with needle) should be placed down firmly against the patient's arm. Without this stability of the hand against the patient's arm, the pulling action on removal of the tube, could pull the needle completely out of the patient's vein and arm.

3. Each tube in succession, is then placed into the holder, until all tubes for the tests desired have been filled.

15. When all samples of blood have been obtained, the doctor follows these procedures:

1. Instruct the patient to release and open his clenched fist slowly.

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2. Remove the tourniquet, using one hand.

3. Place the alcohol sponge over the needle and venotomy site;

4. Remove the needle swiftly and apply immediate pressure through the alcohol sponge to the venotomy site, and continue to apply pressure until all bleeding has stopped. -- Light pressure or no pressure allows continued bleeding which leads to the formation of a hematoma under the skin. If the patient has tolerated the procedure well they could be instructed to continue maintaining this pressure for approximately one minute.

5. Do not have the patient, or allow the patient to bend his arm up at the elbow, as this will often partially obstruct the vein above the site of entry and will thus favor the formation of a hematoma.

6. After firm pressure has been applied a sufficient time to prevent bleeding, then the venotomy site is cleaned off, if necessary, with an alcohol sponge to remove any blood from the arm and a band-aid is placed over the venotomy site.

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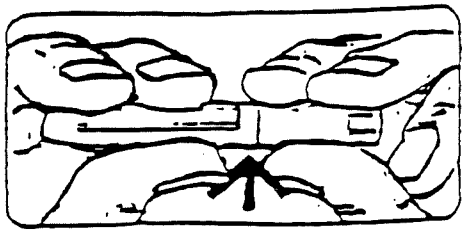
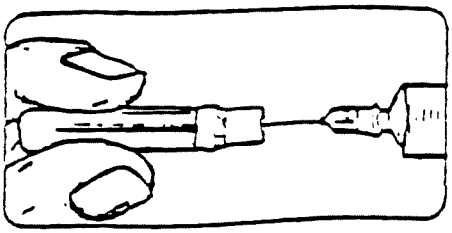
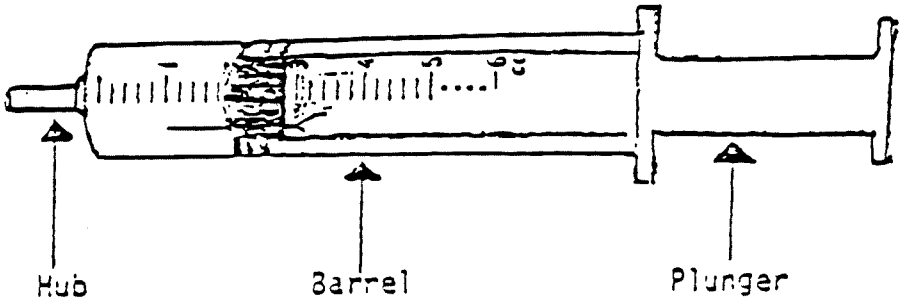
SYRINGE NEEDLE AND SYRINGE

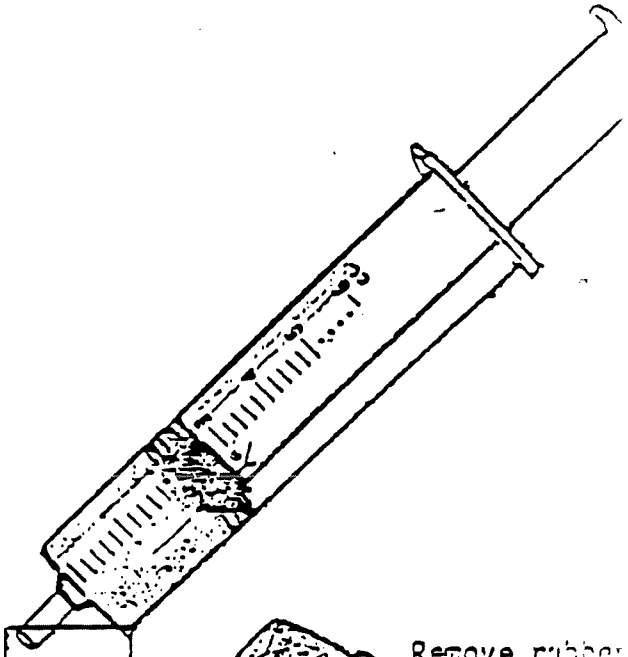


To open, break the tamperproof seal with a "snap" and remove the cap. The sterility cannot be assured if seal has been previously broken.



To seat needle on syringe, push needle straight on and pull the cartridge straight off. When necessary to remove needle, needle cartridge may serve as a wrench. THE NEEDLE NEED NEVER BE TOUCHED.





Remove rubber stopper

Transferring a blood specimen from a syringe.

PROCEDURE:

a) Remove syringe needle.

b) Remove rubber stopper

c) Angle syringe by placing end of hub near inner side of tube.

d) Gently push syringe plunger to expel blood. (maintain even flow)

Note:
Always replace rubber stopper

NOTE:
Specimens left in the syringe too long will clot.

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16. PROCEDURE FOR DRAWING BLOOD WITH A SYRINGE:

1. Syringe and needle are used when the patient's veins are too small and collapse with the suction of the vacutainer system.

2. A minimum of a 20 cc disposable syringe and either a 20 or 21 gauge (1) inch needle are used.

3. In setting the equipment up, care must be taken to maintain the sterility of both the needle and tip of the syringe.

4. The patient preparation is the same as stated for the venipuncture technique using the vacutainer equipment.

5. Introduction of the needle into the patient's vein is completed as stated before in the vacutainer procedure.

6. If the needle is within the vein, a small amount of blood will be visible in the hub of the needle.

7. The doctor now pulls on the plunger of the syringe with a constant, steady pulling force to bring the blood into the syringe.

8. The blood is aspirated slowly to prevent collapsing the vein, but fast enough to prevent clotting of blood within the needle.

9. When the desired amount of blood has been obtained within the syringe, withdrawal procedure of the needle is the same as the vacutainer system, with one exception; the syringe and needle must be held in the upright position (needle up) immediately as soon as the needle is withdrawn from the patient's arm to prevent dripping blood.

10. Transfer of the blood from the syringe must be done in one of two ways:

   a. If vacutainer tubes are available--select the proper colored stopper tube and inject the needle of the syringe down into the rubber stopper and allow the blood to be suctioned down into the tubes.

   b. If vacutainer tubes are not available, then remove the needle hub from the syringe (after cutting the needle off,) and remove the rubber stopper from a transfer tube, insert the tip end of the syringe down inside the side of the tube and very slowly and gently let the blood trickle down the inside of the tube. DO NOT express the blood into the tube forcibly, or with the needle or hub of the needle

in place. DO NOT shake the tube containing the specimen. Foaming or bubbling of blood causes gross hemolysis.

c. If vacutainer tubes are not available, then the proper ratio of anticoagulate must be added to the tube in direct ratio to the volume of blood within the tube for any specimen requiring whole plasma, rather than serum. Gentle mixing of the blood with the anticoagulate would be performed as with the vacutainer tubes.

17. All tubes of blood are labeled correctly with:

1. The patient's name, last name first, then first name and middle initial, are placed on the first line of the label.

2. On the second line of the label, place the current date and following the date, on the same line write-CCC-for Cleveland Chiropractic College.

3. On the third line of the label--place the name of the test you wish to have performed on that tube of blood. (Ex)--CBC/Diff.

18. Requisitions should be completed with all the proper information and the desired tests designated clearly, and lab requisition should be signed by the clinician observing the draw.

1. Approval for requested lab work, new physical, is placed on the upper right hand corner of the History form.

2. Re-Exam requested lab work must be completed on the progress notes, stating the patient's problem fully, and the desired follow-up lab work requested. The patient's problem must then be discussed with a clinician. If the clinician approves the need for the lab work, the clinician must write the order for the lab work, in red ink on the progress notes--unless this procedure is followed, credit for the lab work will not be given.

19. All lab work ordered and performed in the clinic will be entered on the Laboratory Control Board as to the following:

1. - Date

2. - Patient's name

3. - Doctor's name

4. - Lab work specimen ordered

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5. - Justification or reason for obtaining sample

6. - Approval and signature of a clinician.

20. The samples of blood, along with the lab requisition, are taken to the clinical lab, next to the x-ray room.

1. The samples of blood in the purple stopper tubes, and urine samples in tubes, and the requisition is placed into the plastic sack and placed in the refrigerator.

2. The samples of blood in the Red Stopper tubes, do not have anticoagulant added, and this blood must first clot for thirty minutes (thirty minutes from the time it was drawn) and then placed in the centrifuge to be spun down for 10 minutes. This separates the serum from the cells. The serum is then removed, using a pipette, placed in a transfer tube, labeled and placed in the plastic sack in the refrigerator.

21. The clinical lab is the working area of the laboratory.

1. The cabinet where the centrifuge are is considered the "Clean" Working Area--do not sit urine specimens on this cabinet.

2. Set all urine samples on the cabinet where the sink is.

3. Wait for your patient when asking them to provide you with a urine sample. Otherwise, the patient will place the specimen in the wrong area, or will carry the specimen with them into the clinic area looking for their intern.

22. No students will be allowed to draw blood on out-patients until after having completed the course for this procedure successfully and then only under the direct supervision of a Clinician qualified for direction of the procedure.

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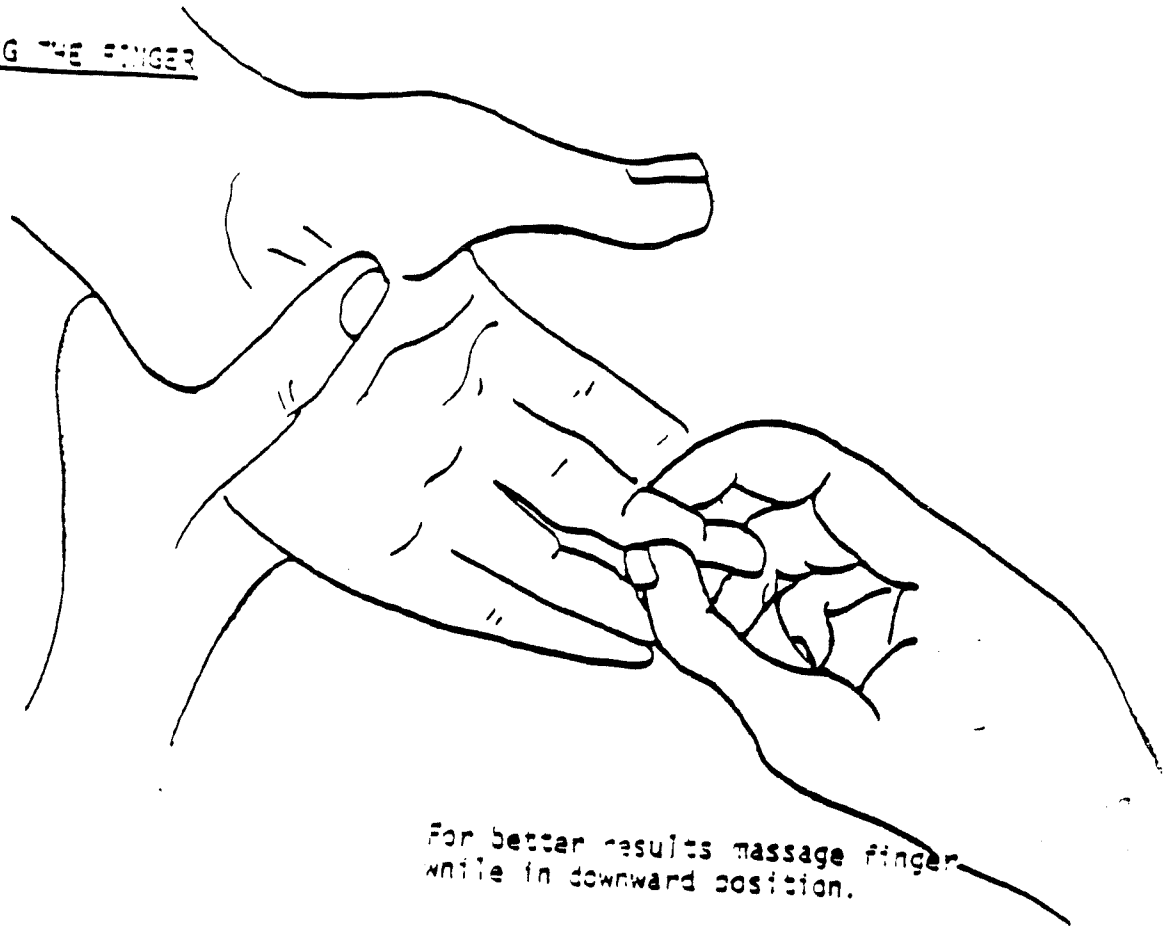
MICROSAMPLING

PREPARING THE FINGER



For better results massage finger while in downward position.

1. Choose a finger that is not cold, cyanotic (blue) or swollen, usually the middle finger or ring finger.
2. With your left hand grasp the patients hand, with your thumb across the patients palm.
3. With your right thumb and index finger apply massaging motion from the base toward the tip of the patients finger.
4. Repeat this massaging process 5 or 6 times, you will notice the finger tip get reddish in color.
5. Cleanse with alcohol and dry with cotton.

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FINGER PUNCTURE (STICK) METHOD

The finger stick or finger puncture method is used when only a small amount of blood is needed for glass slide studies. The blood is obtained by sticking the end of the third finger of the patient's hand with a sterile lancet made for this purpose. The procedure is as follows:

1. The 3rd finger of the patient's hand is selected.

2. The ball of the patient's finger is then taken between the thumb and index finger of the doctor's hand and squeezed firmly. This is designed to not only help numb the patient's finger somewhat, but also helps to bring the blood to the surface of the finger.

3. The ball of the patient's finger is then wiped off well with an alcohol sponge.

4. The doctor then takes hold of the patient's finger by placing his index finger and thumb below the ball of the finger (and below the area that he has cleaned off with an alcohol sponge) and holds this area very firmly applying pressure toward the end of the finger.

5. With the other hand the doctor holds the sterile lancet and the patient's finger is stuck <u>very quickly</u> with the sterile lancet.

6. The doctor then wipes the patient's finger off with an alcohol sponge. (The first blood from the finger stick is never used.)

7. After wiping off the first amount of blood formed after the initial finger stick, the doctor then proceeds to squeeze the finger to produce more blood from the pierced area. After a large drop of blood has been produced by squeezing the finger, the doctor would then place the finger (with the drop of blood) near the end of a glass slide and let the drop of blood just touch the glass slide. One or two drops of blood toward the end of the slide should be sufficient.

8. After the drops of blood are on the slide the end of the patient's finger is covered with an alcohol sponge and the patient is instructed to hold that alcohol sponge, using pressure, between the thumb and the finger having been pierced.

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PUNCTURING THE FINGER:

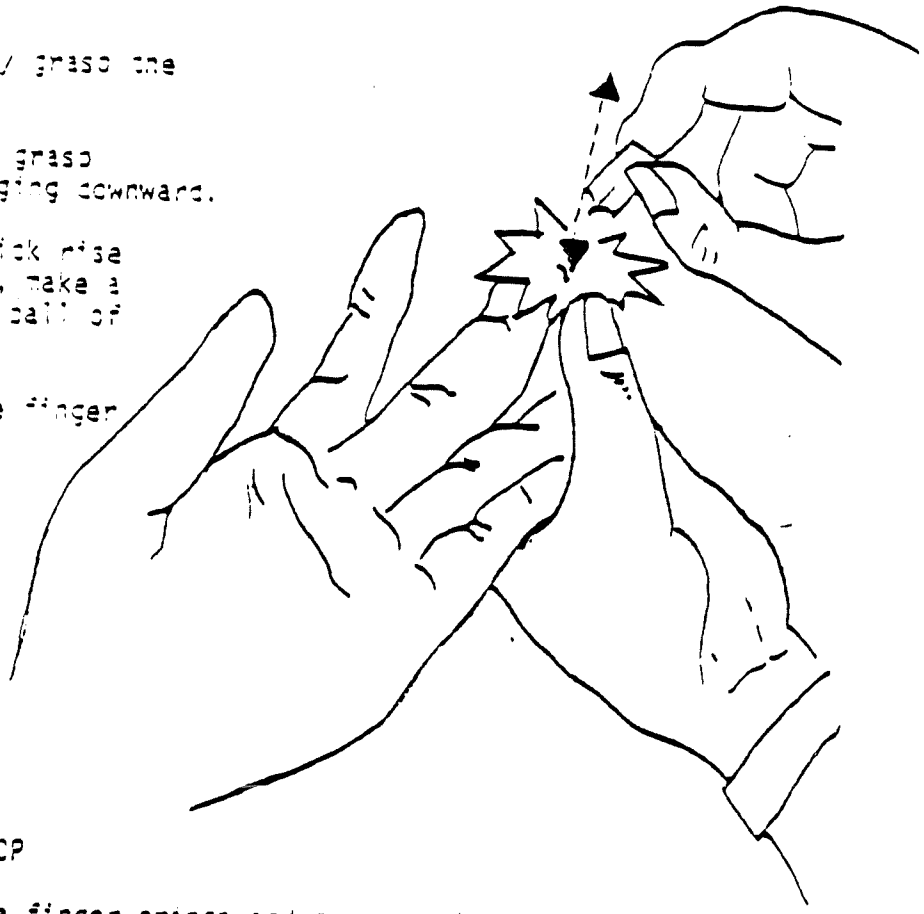
Pick up a sterile blood lancet and remove the lancet from its container without touching the sharp tip.

With your right hand, firmly grasp the sterile blood lancet.

With your left hand, firmly grasp the patients' finger, massaging downward.

With a quick drop and a quick rise of the sterile blood lancet, make a DEEP cut on the side of the ball of the finger.

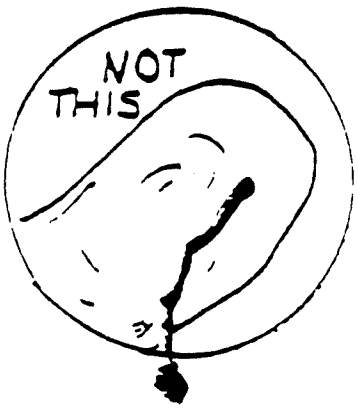
The cut should be <u>across</u> the finger prints.

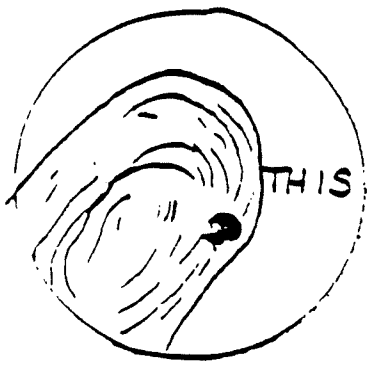


PRODUCING A LARGE ROUNDED DROP

If the cut is made across the finger prints and the area has been wiped dry, the blood should well up into a large rounded drop.

If the cut is made along the lines of the finger print, the blood will stream down the finger.





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9. The doctor then takes another glass slide and placing the end of the glass slide against the end of the slide containing the blood drops slides the second slide across the glass slide with the blood so as to make a fine blood smear across the bottom slide. The procedure is completed at this point and after the slide has dried the slide is labeled with the proper information being careful not to touch any part of the slide where the blood smear has been performed.

COMMON FINGERSTICK ERRORS

1) The lancet puncture not made deep enough.

2) Careless and messy collection techniques causing a waste of excess blood.

3) Executing the procedure too slow, allotting more time for the puncture site to clot.

4) Not holding the extremity in a downward position.

5) Not massaging with enough pressure.

6) Massaging with intense presure.

7) Not checking anticoagulant containers for clots as they are being mixed.

8) Sliding the pipet across the site during collection, rather than allowing the pipet to fill via capillary action.

9) Applying too much pressure on the unopette when attempting to dilute the blood with the solution.

10) Not checking for the accumulation of air bubles within the pipets during the collection procedure.

HOW TO TAKE A URINE SAMPLE FOR CULTURING

1. WASH YOUR HANDS with soap and water.

2. Sit on toilet. Hold PREMOISTENED TOWELETTE in your right hand.

3. SPREAD APART large flaps of skin on either side of your urethra (opening from which urine leaves) with middle and index fingers of your other hand.

4. Keep these flaps of skin apart until FINISHED at toilet.

5. Using towelette, WIPE YOURSELF ONCE--FRONT TO BACK. Fold towelette and use clean side to wipe once more from front to back. Discard into toilet.

6. Allow several drops of urine (a small stream) to spill directly INTO TOILET. Hold some back for your culture.

7. With STERILE CUP in free hand, urinate directly into cup, taking care not to touch rim of cup to pubic hair or skin.

8. Take sample to your intern.

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FASTING TESTS

Some lab tests require the patient to fast and/or eliminate certain foods from their diets prior to the time of blood drawing. Diet restrictions vary according to the test ordered. Such restrictions are necessary to ensure accurate test results. Fasting does not imply that the patient cannot drink water. The phlebotomist must become familiarized with these tests requiring a fasting period. The supervisor usually checks to verify a patient's fasting time but the phlebotomist should always double check with the patient directly before drawing the blood sample.

FASTING LIST

Ammonia	4 hours
Cholesterol	12 hours
Folate	14 hours
2 Hour pp Glucose	overnight
7 AM Glucose	overnight
4 PM Glucose	4 hours
Glucose Tolerance	overnight
Glucose, Fasting	overnight
Iron/IBC	12 hours
Lactose Tolerance	4 hours
Lipoprotein Electrophoresis	14 hours
Magnesium	4 hours
Prolactin	4 hours
Renin	physician instructs as to diet, activity and medications prior to eating and testing. Overnight fasting.
Triglycerides	14 hours
Vitamin B_{12}	14 hours

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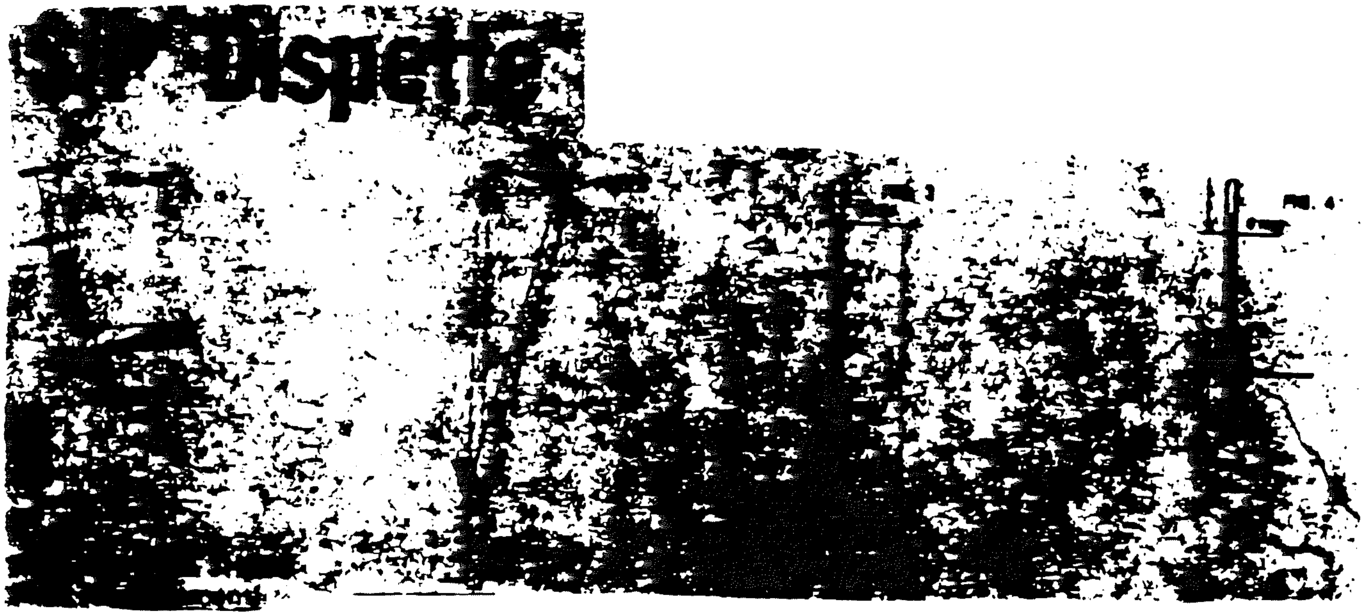

ERYTHROCYTE SEDIMENTATION RATE

Tube used: [illegible]

[illegible]

1. [illegible] vac with well mixed, (room temperature) blood to the [illegible].

2. [illegible] ESR tube into the vac and GENTLY [illegible] until the blood [illegible].

3. Place ESR tube into the rack making sure that the tube is perfectly vertical.

4. Read the level [illegible] the RBCs have [illegible] in EXACTLY 1 hour.

5. [illegible] results [illegible] request slip.

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TOLERANCE TESTS

There are several tolerance tests (to determine the ability to endure without ill effect):

Glucose

Glucose and insulin

Lactose

GLUCOSE TOLERANCE TEST (GTT).

This test is designed to gauge the ability of the body to metabolize glucose (sugar). The glucose level present in the patient's blood and urine is determined from specimens obtained every hour for the duration of the test, which can be ordered to run the minimum of two hours to the maximum of six hours. The doctor or qualified assistant is responsible for collecting the blood and urine specimens.

Procedure:

1. Notify the patient that they are to fast overnight except for water.
2. On day of test explain in detail what you are going to do.
3. A fasting blood specimen is drawn then the patient is given glucola (a sugary, sweet liquid, containing 100 grams of glucose) to drink.
4. Hourly blood and urine specimens are then taken for the duration of test.
5. Specimens are labeled and timed and sent for analysis.

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GLUCOSE-TWO HOUR POST PRANDIAL

This sugar test is not as long or involved as a glucose tolerance test. There are no urine specimens required. This particular test

is designed to determine if a GTT is needed for further glucose analysis.

Two hour pp's can be run after a meal, breakfast, lunch or dinner. Sometimes this test is run after administering glucola to the patient. In nearly all cases 2 pp means draw blood for glucose determinations two hours after the patient has finished a meal.

Procedure:

1. Explain to the parient that the blood must be drawn 2 hours after a meal and should eat the meal 2 hours prior to their appointment.
2. When the patient arrives draw blood immediately.
3. Label and time and send to lab for analysis.

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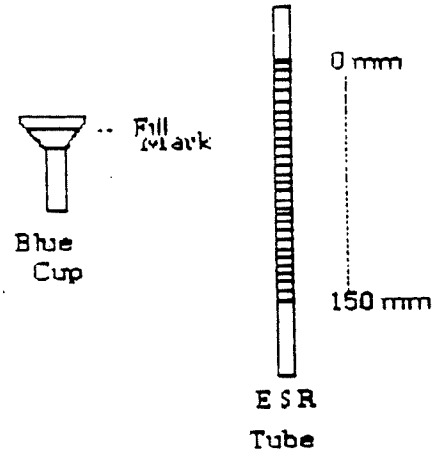
Erythrocyte Sedimentation Rate



1. Blood is drawn in a purple top tube and mixed as usual. The ESR should be set up as soon as possible. If delay is unavoidable, blood should be refrigerated, but must be warmed to room temperature and mixed before using. The test must be performed within 2 hours of drawing the blood.

2. Fill the blue cup to the mark with well-mixed whole blood.

3. Push ESR tube into cup (carefully) and allow to fill to the 0 mm mark. (If you overfill the ESR tube, raise gently until blood is at the 0 mm mark.)

4. Place ESR tube and cup in rack, away from vibration, for one hour.

5. Label ESR tube with patient's name and the time the test is to be read.

5. Read level of RBCs at one hour <u>exactly</u>.

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Course Number: 674

Course Title: Neuromusculo-Skeletal Diagnosis II

Trimester: 1992 Fall

Lecture HoursPer Week: 2

Laboratory Hours Per Week: 1

Trimester Contact Hours: 45

Course Instructor: Raymond A. Maucere, B.A., D.C.

Office Location: Clinic

Office Hours: By Appointment

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Course Syllabus for 664/674

Course Prerequisites:

Successful completion of Anatomy 341 is required prior to admission to Diagnosis 664.

Successful completion of Diagnosis 664 and 651 is required prior to admission to Diagnosis 674.

Description:

This course will cover common conditions of the human neuromusculo-skeletal complex, and promote an understanding and clinical application of this information. The purpose of this course is to help the student develop his and her ability in formulating differentials in the typical neuromusculo-skeletal diagnosis.

This course will focus on neuromusculo-skeletal conditions of the spine, pelvis, and thorax.

Class discussion will include the case history, subjective findings, objective findings, special procedural findings, treatment and prognosis for each topic covered.

Texts Required:

Lecture Text: Practical Orthopedics, Lonnie R. Mercier (664)
Functional Soft Tissue Exam., W.Hammer (674)

Lab Text: Photographic Manual of Regional Orthopaedic and Neuro. Tests., Joseph Cipriano

Reference Texts:

Recommended Texts for Additional Reading and Reference:

Turek, Samuel; Orthopedics
Hoppenfeld, Stanley; Physical Examination of the Spine and Extremities.

Cyriax, James; Textbook of Orthopedic Medicine Vol. 1 and 2.

Culliet, Rene; Scoliosis

Cailliet, Rene; Cailliet Pain Series.

Zohn/Mennell Diagnosis and Treatment of Musculoskeletal pain.

Magee; Orthopedic Physical Assessment.

Foreman and Croft:

White, Panjabi, Clinical Biomechanics of the Spine Management of Low Back Pain.

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Tardiness and Absenteeism:

.l will be taken promptly at the start of each class period. Any student who comes to class late must make a personal effort at the end of class that day to get credit for the portion of class attended. Credit will only be given if corrected on the same day as the time missed.

The instructor reserves the right to enforce the rules for attendance requirement, as set forth by this institution, which are as follows:

Attendance in all classes is mandatory. The student is expected to be in class, on time, for each session. If a student is not in class during roll class, he/she will be considered absent.

Since all absences (excused or unexcused) interrupt the student's learning process, the following minimum guidelines will be used by the College in determining the effect of student absences on grades.

10-15% absences--lowering of final grade 1 full grade
15-20% absences--lowering of final grade 2 full grades
more than 20% absences--the student will be subject to automatic withdrawal.

Note: Students on an irregular schedule must verify their schedule with the instructor, and the allowable absences will be calculated ·ased on the actual class hours required by the special schedule.

600, 700, and 800 level course grades

The following policy is to appear in all syllabi for clinical science courses:

Cleveland Chiropractic College requires that all 600, 700, and 800 level required courses be completed with a grade of "C" or better to be admitted to clinic and to graduate. Students receiving a grade of D or F in these courses are required to repeat the entire course.

Grades

Grades will be based on the accumulative points the student has earned on the course examinations and laboratory practical examinations. Grades are based on a 90, 80, 70, 60 percentage basis. Grading based on a curved scale is an option reserved by the instructor.

Exams

There will be (a minimum of two) exams during the course of the trimester. Exam number one will be scheduled with at least two weeks advance notice to the students. The final exam will be given at the time scheduled by the administration. Lab practicals will be given at the end of the lower extremity units and again at the end of the upper extremity units. Unannounced quizzes may be given.

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All exams must be taken on the day scheduled. Any other arrangements must be discussed with the instructor at least two weeks in advance of the exam date. Only conditions that constitute an emergency (as determined by the instructor) will be considered as grounds for missing any exam. No exceptions will be made.

Points

Exam 1 points to be determined later

Final Exam = 200 points

Lab Practical 1 = 50 points
Lab Practical 2 = 50 points

Total points available = Depend on total of exams.

A grade of C or better is required for a satisfactory completion of this course.

Make-Up Examinations:

A student will be allowed to take a make-up only when the excuse for missing a regularly scheduled exam meets the requirement as stated before in this syllabus. The time and place of the make-up exam will be arranged by a meeting between the course instructor and the student. final exam make-ups will be given on the day designated for such exam by the administration and will be changed only when prior arrangements have been made with the course instructor and administration.

Academic Policies:

The college policies regarding course withdrawals, course incompletes, etc. will be followed.

Standards of Conduct:

As a future Doctor of Chiropractic, you are expected to adhere to the highest professional, ethical, and personal standards of conduct. Any activities that violate the standards of student conduct specified in the college catalog will form the basis of disciplinary action towards those involved.

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Recommended Texts for additional reading and reference:

Turek, Samuel; Orthopaedics
Hoppenfeld, Stanley; Physical Examination Spine and Extremities
Cyriax, James; Textbook of Orthopaedic Medicine Vol. 1 & 2
Cailliet, Rene; Scoliosis
Cailliet, Rene; Cailliet Pain Series
Zohn/Mennell; Diagnosis and Treatment of Musculoskeletal Pian
Magee; Orthopedic Physical Assessment

Outline of Course Objectives for Lecture Portion of N.M.S.D. II

A. Joint Arthrology
B. Joint Neurology
C. Assessment of Musculoskeletal Disorders
D. Strains
E. Sprains
F. Hip
    1. Biomechanics
    2. Snapping hip syndrome
    3. Bursitis in the area of the hip
        a. Trochanteric (Gluteal)
        b. Superficial trochanteric
        c. Deep trochanteric
        d. Iliopactineal (Iliopsoas)
        e. Ischial Gluteal
    4. Osteoarthritis of the hip
    5. Hip joint dislocations
        a. Traumatic
        b. Congenital
    6. Fracture in the hip region
    7. Coxa Vara
    8. Coxa Valga
    9. Legs-Perthes disease
    10. Adult form avascular necrosis
    11. Transient Synovitis of the hip
G. Knee
    1. Biomechanics
    2. Soft tissue contusion
    3. Strain in region of the knee
    4. Osgood Schlatters disease
    5. Villous Synovitis
    6. Traumatic Effusion of knee joint
    7. Knee sprains
        a. Medial Collateral
        b. Lateral Collateral
        c. Medial Meniscus
        d. Cruciate Sprains
    8. Chondritis of the knee
    9. Osteoarthritis of the knee
    10. Bursitis in the knee region
        a. Prepatellar bursitis
            1) Acute
            2) Chronic
        b. Infrapatellar bursitis
            1) Deep

2) Superficial
c. Anserine bursitis
d. Semimembranosis Bursitis
e. Biceps bursitis
11. Knee dislocations
12. Fractures around the knee
13. Injuries and Condition of the Patella
a. Fractures
b. Dislocations
c. Osteochondritis

H. Injuries to the leg
1. Contusions
2. Volkman's Contractures
3. Acute Compartment Syndromes
4. Chronic Compartment Syndromes

Exam # 1

I. Foot and Ankle
1. Biomechanics
2. Hallux Rigidus
3. Hallux Valgus
4. Club Foot
5. Metatarsalgia
6. Calcaneal Spurs
7. Bursitis
8. Strains of the Ankle
9. Tenosynovitis
10. Ankle sprains

J. Shoulder
1. Biomechanics
2. Muscle Strains
3. Tenosynovitis
4. Bursitis in shoulder region
5. Frozen Shoulder syndrome
6. Shoulder Sprain
7. Shoulder Subluxation
8. Dislocations of the Shoulder
9. Contusion of shoulder
10. Fractures of the shoulder area
11. Referred Shoulder pain
12. Calcific Tendonitis
13. Rotator cuff strains

Exam # 2

K. Elbow
1. Biomechanics
2. Fractures of the elbow
3. Dislocations of the elbow
4. Volkman's Ischemic Contractures
5. Contusions
6. Elbow strains
7. Elbow sprains
8. Bursitis in the elbow region

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9. Tennis elbow
10. Injuries to the forearm
    a. Contusion
    b. Strains
    c. Fractures

L. Wrist and Hand
1. Contusions to the region of the hand
2. Hand strains
3. Osteoarthritis
4. Trigger finger
5. DeQuervain's Disease
6. Hand sprains
7. Carpal tunnel syndrome

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Outline for Laboratory Objectives of NMSD II

A. Use of Diagnostic equipment
   1. Dynamometry
      a. Jamar type
      b. Spring type
   2. ROM testing
      a. Goniometry
      b. Inclinometry
   3. Postural Analysis
      a. AP weight bearing
      b. Lateral weight bearing

B. Orthopedic testing of the Hip
   1. Patrick Fabere test
   2. Anvil test
   3. Thomas test
   4. Rotation comparison test
   5. Hibbs Hip test
   6. Yeomans test
   7. Obers test
   8. Modified Obers test

C. Orthopedic testing of the Knee
   1. Medial and lateral (valgus/varus) stress test
   2. Drawers sign (anterior and posterior)
   3. Lackman's test
   4. McMurray's test
   5. Patellar apprehension
   6. Patellar grinding
   7. Patellar Gallotment

D. Orthopedic testing of the ankle and foot
   1. Medial and lateral stress test
   2. Ankle Drawers test
   3. Tinel's sign

Schedule Practical Exam #1 Date _____

E. Orthopedic testing of the Shoulder
   1. Thoracic outlet tests
      a. Allen's test
      b. Wright's test
      c. Adson's test
      d. Eden's test
   2. Yergason's test
   3. Codman's test
   4. Dugas test
   5. Shoulder Apprehension test
   6. Shoulder Depression test
   7. Shoulder Compression test
   8. Dawborn's test

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Course Number: 681

Course Title: Obstetrics and Gynecology

Trimester: Winter, 1993

Lecture Hours Per Week: 5

Lecture Hours Per Trimester: 75

Course Instructor: Ruth Sandefur, D.C., Ph.D.

Office Location: Clinical Research Laboratory

Office Telephone: 333-8230 X233

Office Hours: By appointment

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Course Syllabus

Course Prerequisites: Diagnosis 651

Course Description: A study of normal physiological events occurring during the reproductive years of women. Abnormalities and disease states of the female are reviewed. The normal pregnancy, labor, delivery and postpartum state are discussed, and chiropractic management of the patient during pregnancy is considered.

Text Required: Obstetrics & Gynecology for Medical Students, Beckmann et. al., Williams & Wilkins, 1992.

Attendance, Tardiness and Absenteeism: The attendance policy for this class is in keeping with the policies as outlined by Cleveland Chiropractic College as appears in the current catalog. Attendance will be taken at each class period and reported weekly to the Administrative Offices. Instructor may elect to use attendance for grade considerations.

Evaluations: Examinations will be scheduled as needed and announced at least 1 week in advance. Testable material includes class lectures, presentations and reading assignments. A comprehensive final will be given during the regular scheduled Finals Week time.

Make-up examinations will be given for emergency or illness. It is the student's responsibility to schedule the make-up examination. The make-up will cover the same material and have the same number of points possible as the regular exam, however, it will be in an essay format.

Students will be expected to be present during scheduled pelvic examination procedures and to competently perform all required tasks. It is the student's responsibility to arrange to make up any missed exams.

From the total possible points, the following grades can be earned:

A - 90%
B - 80%
C - 70%
D or lower - repeat course.

Grade Requirements Cleveland Chiropractic College requires that all 600-700 and 800 level courses be completed with a grade of C or better to be admitted to clinic and to graduate. Students who receive a D or F in these courses will be required to repeat the entire course.

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Academic Policies The college policies regarding course withdrawals, course incompletes, etc. will be followed.

Standards of Conduct As a future Doctor of Chiropractic, you are expected to adhere to the highest professional, ethical, and personal standards of conduct. Any activites that violate the standards of student conduct specified in the college catalog will form the basis of disciplinary action towards those involved.

Course Objectives:

I. The student will be able to demonstrate knowledge of the anatomical and physiological processes occurring in pregnancy; the signs and symptoms of pregnancy; possible pathological problems involved; recognition of the condition of the pregnant patient; and instruction for the care and safety of the pregnant patient.

II. The student will be able to demonstrate knowledge of female physiology, hormone regulation of the menstrual cycle, life changes and diseases that are peculiar to women.

III. The student must demonstrate proficiency in the technique of pelvic examination. Expected skills include vaginal speculum insertion, cytological technique and bi-manual exam. The student will be expected to identify a normal and abnormal uterus, normal ovaries and ovarian tumors.

IV. The student will be instructed in the implications of pregnancy upon diagnosis and treatment of the chiropractic patient.

V. The student will be able to demonstrate knowledge of nutritional requirements of the pregnant patient.

VI. The student will be able to discuss the potential toxic insult to maternal and fetal organism from drugs, cigarettes and alcohol.

VII. The student must demonstrate a knowledge of the stages of normal development of fetus and expected changes in maternal physiology.

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VIII. The student will be able to answer questions regarding the signs of onset of labor, stages and mechanisms of normal labor and demonstrate awareness of signs of approaching difficulties with labor and fetal or maternal distress.

IX. The student will demonstrate knowledge of the diagnosis and treatment of breast disease.

X. The student will demonstrate proficiency in the breast examination and the ability to accurately make recommendations to patients based on findings. They will be able to teach a patient how to perform a monthly self-exam.

General Course Outline		Chapter
Week 1	Normal Anatomy Ob/Gyn Evaluation	2, 3
Week 2	Normal Menstrual Cycle Dysmenorrhea and PMS Pelvic Exam	24, 25, 34
Week 3	Breast Disease Breast Exam	21
Week 4	Ovulation, Fertilization and Implantation Pelvic Exam	4
Week 5	Placentation, Fetal Circulation, Teratology Pelvic Exam	4, 6
Week 6	Maternal Physiology Pelvimetry Ectopic Pregnancy/Abortion Pelvic Exam	4 29, 30
Week 7	Normal Labor and Delivery Pelvic Exam	15
Week 8	Dystocia/Breech Birth/Assisted Delivery Pelvic Exam	16
Week 9	Complications of Pregnancy Bleeding in Late Pregnancy	9, 19

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Week 10	Amenorrhea/Abnormal Uterine Bleeding Infertility Pelvic Exam	24, 36
Week 11	Vulvar/Vaginal Infections Pelvic Exam	27, 28
Week 12	Benign and Malignant Cervical Lesions Pelvic Exam	31, 42
Week 13	Benign and Malignant Tumors of the Uterus Pelvic Exam	32
Week 14	Benign and Malignant Tumors of the Ovaries and Tubes	43, 44, 45
Week 15	Final Exam	

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Co Number: 682
Course Title: Infectious Disease

Trimester: Winter 1993
Lecture Hours Per Week: 3
Lecture Hours Per Trimester: 45

Course Instructor: Dr. Linda Haynes
Office Location: by Lab
Office Telephone: 333-8230 ext. 252
Office Hours: By Appointment

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ourse Prerequisites:	Successful completion of all courses as s forth in the Cleveland Chiropractic Colleg of Kansas City catalog. These courses include, but are not lamented to: Diagnosis 651
Course Description:	In this course signs, symptoms and diagnostic characteristics of infectious diseases are presented.
Texts, Required:	Cecils Textbook of Medicine The Merck Manual of Diagnosis and Therapy by Robert Berkow, M.D. (fifteenth edition).
Texts, References:	Textbook of Internal Medicine by Wm. Kelly, M.D.
Attendance, Tardiness, and Absenteeism:	Attendance is required at all times, attendance is taken at every class session and students are responsible for all assignments and requirements whether or not they are in attendance.
Evaluation:	Your final course grade will be determined by your performance in lecture and presentation. (A term paper and oral presentation to the class may be required at the instructor's discretion). Three written tests will be given and must be passed to complete this course; the test will be a midterm and comprehensive final and a pop quiz examination. Any special arrangements for testing (make-ups, etc.) must be cleared with the instructor before the scheduled exam date. Each exam will consist of 100 points. If a term paper is assigned it will be graded on 100 possible points. The college grading scale will apply to individual examinations and course grades: 300-250 = A 249-200 = B 199-150 = C 149-100 = D 100-0 = F
Academic Policies:	The college policies regarding course withdrawals, course incompletes, etc. will be followed.

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dards of Conduct:	As a future Doctor of Chiropractic, you are expected to adhere to the highest professional, ethical, and personal standards of conduct. Any activities that violate the standards of student conduct specified in the college catalog will form the basis of disciplinary action towards those involved.
Course Objectives:	To familiarize the future doctor of chiropractic with various diseases (including signs, symptoms, treatment and prognosis) involving public health and infective processes. Various audio-visual materials will be used to supplement the lectures throughout the course.
General course outline:	The following schedule is intended to be a guide for students so that they my anticipate upcoming lecture topics and examinations. This schedule is not absolutely rigid and may be changed at the instructors discretion. Further, the reading list is included. The student is responsible for all of the materials stated even if it is not covered in class times.

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k	Topic	Reading Kelly	Merck	Cecil
1	Intro. to Inf. Dis.	pg. 9-16	pg. 4-54	pg. 2-11
2-6	Viral Diseases			
	measles	1642-44 1726	1624, 2022 2024, 15+ 1401, 2023 2041, 2026 1828	1825-1827
	Rubella	1644-46	2027, 1624 2024+	1827-1829
	Varicella	1658-61 1794&1727	2030, 2024 1624, 12+	1840-1842
2-6	Herpes Zoster	--	162+, 168 2187, 169 2225, 15+ 1353+	1801, 2308, 1945, 2124, 2184, 1840
	Variola	1034&1496	--	1843-1844
	Mumps	1644	160+, 2039 1825+, 1828& 2041	1829-1831, 638, 57-58, 1595
	Poliomyelitis	1662-62 1814 2031-32	2036, 2033+ 2038, 1827 1825, 264	1851, 2181-2182
	Viral Encephalitis	2409-14	1401	1798-1886
	Lymphatic Chorio	2410-11	167+, 191+ 195	--
	Dengue Fever	1633	--	1867-1868
	Colorado Tick Fever	1630&1633	166+, 190+	1871-1872
	Rabies	1666-68 1729-30 1667 1815-16 1830-31	166+ 183 185+ 17+	2186-2187, 59- 60, 1594-1596
	Yellow Fever	1632	165+ 189 191+	1879-1881, 59- 61, 1595
	Influenza	1638-39	160+ 171 16+	1815-1819, 58, 60, 1964, 1652, 1803

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-6	Reye's Syndrome	1639, 580 1779	2047	2194-2195 19
	Infectious Mononucleosis	1654 1740-41 1656	182 2126 160+ 2024+	1838-1840, 1836, 1990
	Chronic Epstein Barr Virus	1740-41 1654 1656	182 2126 160+ 2024+	1838-1840
	Cytomegalovirus Disease	1652-54	182 163+	1835-1837
	African Trypanosomiasis	1683-86	210	1975-1978
	American Trypanosomiasis	1686-88	210	--
6-8	Leishmaniasis	1680-83	209	1982-1987, 1983+
	Cutaneous Leishmaniasis	1681-83	209	1982-1987, 1983+
	Mucocutaneous Leishmaniasis	1681-83	209	1982-1987, 1983+
	Giardiasis	558 1673-75	204 218+	1752+, 1983
	Toxoplasmosis	1690-94	211	1987-1991, 1951, 19
	Pneumocystosis	1694-96	16+ 671 291-2	1932-1942
Mid Term Test				
9-10	Sexually Transmitted Diseases			
	Aids	1789-96 1656 1789-90	288 1136 1167 2310 291 1405 290 1586	1908-1970, 1856, 1924
	Syphilis	1584-92 1496 1729 1869	236 234 1137 239, 242 237+ 1918 241, 132	1761-1771, 2078 1947, 2318+, 2326

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			232, 239 242, 243 1321+ 1919 238, 240, 2229	
	Gonorrhea	1519-24 1719-23	232 234, 1253 2220 233, 1645 1614, 1897	1755-1759, 1520-1521
11-12	Schistosomiasis	1710-12	220+ 227 858+	2001-2006
	Cestode Infections	1706-8	216+ 229	1997-2001, 1997+ 779, 779+
	Echinosoccosis	1709-10	218+ 231 1620	1997+, 1999- 2000
	Alveolar Hydatid Disease	1709-10	231	1999-2001
	Ascariasis	1699-1701	215 216+	2010-2011
	Cutaneous Larva Migrans	1701	2274	2012
	Enterobiasis	1699-1700	13+ 216+ 2051	2011
	Hookworm Disease	1699-1701	215 216+ 2274	2010
	Trichinosis	1702-3	222	2013, 1595
13	Coccidioodomycosis	1605-6 2080-81 1912+	140 1621	1890-1892
	Histoplasmosis	1603-04 2001 2080-81 2085	139	1886+, 1887-1890
	Actinomycosis	1601 1601F 2005 1599	83 12+	1723-1725
	Candidiasis	1607-8	284	1898-1901

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		578 1786 1793-94 1034-35 1608 1787 2001	2271 291 244 2270 2268 1707-08 2324 68 144	
	Cryptococcosis	1602	141	1894-1897
	Nocardiosis	1598-1601	82	1725-1727, 1602
	Aspergillosis	1608-09	144	1901-1903. 1910+
14	Infective Endocarditis	214-15 217	532 537	1638-1647, 1642
	Acute Epiglottitis	1739-40	2020	1669, 1610
	Acute Otitis Media	1865-66 1738	2180	1669-1670, 1656, 1665, 1458, 1825 1675, 1610, 1629 2107
	Viral Hepatitis	603-612	857	763-771, 1800+
		607-610	858+ 164+	
	Fever of Unknown Origin	1780-81	6	1567+, 1567-1568, 1581
	Nosocomial Inf.	1797-1829	68, 1891 1895 & 1896	1589
	CNS Infection	1730-36	1395 1397 1402	2078, 1873+, 2179, 2187+
	Gram Neg Bacteremia	1796-99 1497-99 1824 1503 1505-6 1508	64	1656-1658+, 1708-1709, 1669
	Sepsis	2023 2041 2024 2025 2044+	64 5+	1708, 1584, 1584-1588, 1586+
	Kawasaki Syndrome	1024-25 1671 1726 1088	2050	2301, 2302+, 98
15	Review and Final			

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Course Number: Diagnosis 683

Course Title: Geriatrics

Trimester: Winter 93
Lecture Hours Per Week: 3
Lecture Hours Per Trimester: 45
Trimester Credit Hours: 3

Instructor: C.W. SmithBurton, D.C.
Office Location: Clinic
Ofice Hours: By Appointment

Course Prerequisite: Diagnosis 651 Physical Diagnosis

Course Description: This course is a study of the disorders and health problems affecting the elderly. Particular emphasis is placed on conditions commonly seen in the practice of chiropractic and those factors associated with age that relate to the chiropractic treatment and management of the geriatric patient.

Text Required:

The Merck Manual of Geriatrics: Abrams W.B., Berkow R. : 2nd edition, Merck & Co., Inc., Rahway, N.J., 1990.

Attendance: Attendance in all classes is mandatory. The student is expected to be in class, on time for each class. If the student is not in class during roll call, he or she, will be counted absent. The student is responsible for all missed assignments.

Evaluation: Two examinations are given during the trimester. The examinations may be of any format the instructor decides and/or is desired to use for evaluation of the student prior to the examination.

The College grading scale will apply to individuals and final course grades.

90-100	A
80-89	B
70-79	C
60-69	D
0-59	F

Cleveland Chiropractic College requires that all 600, 700, and 800 level required courses be complete with a grade of "C" or better to be admitted into Clinic and to graduate. Students receiving a grade of "D" or "F" in these courses are required to repeat the entire course.

Additional considerations: No make-up examinations will be given. It is strongly recommended that you read the material in the required text. Some of the assigned material may not be covered during lecture. However, you are responsible for the material on the examinations.

Academic Policies: The college policies regarding course withdrawals, course incompletes, etc. will be followed.

Standard of Conduct: As a future Doctor of Chiropractic, you are expected to adhere to the highest professional, ethical, and personal standards of conduct. Any activities that violate the standards of student conduct specified in the college catalog will form the basis for disciplinary action towards those involved.

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Course Objective:

1. To provide the student with a basis for recognition and differentiation of diseases in the Geriatric patient.

2. To emphasize their clinical manifestation of the disease processes, the correlation (of the radiological aspects and laboratory data with follow up procedures necessary for their evaluation).

3. To review history taking and physical examination procedures as they relate to the Geriatric patient.

4. To present the role of the chiropractic as a primary health care provider in the treatment and management of Geriatric disorders. Also, medical management will be discussed.

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I. Introduction

   A. Epidemiology of Aging

II. Theories of Aging

   A. Biological (Organic)
   B. Machine (Mechanistic)

III. Specific Approaches (Merck 153-167)

   A. The History
   B. Phyical Exam
   C. Unusual Presentations of Illness
   D. Comprehensive functional assessment
   E. A problem oriented approach

IV. System Review and Associated Pathology

   A. Cardio
   B. Gastro
   C. Pulmonary
   D. GI and Hematology
   E. Musculoskeletal
   F. Metabolic, Endocrine
   G. Infectious Diseases
   H. Neurological and Psychiatric
   I. Skin
   J. Eye, Ear, Nose and Throat

V. Case Presentations in Clinical Geriatric Medicine

   A. Case Presentation
   B. Aperant lab values in the elderly

VI. Services for the Elderly

   A. Medicare
   B. Social Services and Voluntary
   C. Care of the dying

DIAGNOSIS 664
EYES, EARS, NOSE, AND THROAT
WINTER 1993

LECTURE HOURS PER WEEK: 3
LECTURE HOURS PER TRIMESTER: 45
TRIMESTER CREDIT HOURS: 3
TRIMESTER CONTACT HOURS: 45

Instructor:
Dr. Kenneth R. Sorrels

OFFICE LOCATION:
THE CLINICIAN OFFICES COMPLEX

OFFICE TELEPHONE: EXT 258

OFFICE HOURS:
AS PER MY SCHEDULE AND BY APPOINTMENT

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E.E.N.T.

COURSE PREREQUISITES: Successful completion of Diagnosis 55. (Physical Diagnosis)

COURSE DESCRIPTION: This course is a comprehensive survey of the disorders of the eye, ear, nose, and throat, with special emphasis on those disorders as applied to the chiropractic practice.

COURSE TEXT (REQUIRED TEXT):

General Ophthalmology, by D. Vaughn & T. Asbury

Merck Manual

Physical Examination, by Mosby

NOTE:

Every portion of the course text is testable. However, if the instructor uses a supplemental text, only those portions of the text actually used in class will be testable. No student will be required to purchase any supplemental textbooks.

REFERENCE TEXT: Current Medical Diagnosis & Treatment by Schroeder, Krupp, and Tierney

A Guide to Physical Examination by Bates

ATTENDANCE:

Regular attendance is required. Therefore, roll will be called at the beginning of each class period. If a student is not present for roll call, that student will be counted absent.

Only 4 of the 5 tests will be averaged for the final grade. Therefore, the lowest score of the first 4 tests will be

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dropped. The grade on the final test covering the throat CAN NOT be dropped.

EXAMINATIONS:

There will be 5 major tests given during the course. These will consist of written examinations over the eye, ears, nose and throat and a slide examination over the eye. When possible, slides of the other areas will be shown in class and the student will be tested over them as part of their written examination in that area. Pop quizzes may be given throughout the course. The test format will be any of the following:
multiple choice, true-false, fill-in-the-blank, matching, and essay. All missed examinations will be made-up by a short answer or fill-in-the-blank test. All 5 examinations must be taken in order to pass the course.

GRADES:

Grading will be on a point system as follows:

100 - 90 = A

89 - 80 = B

79 - 70 = C

69 - 60 = D

59 - 0 = F

Test-Taking Behaviors

Certain behaviors are considered inappropriate during the administration of an instrument meant to evaluate student

progress (examination, test, quiz, practical, study, etc.). The following are specifically prohibited and are violations of the standards of conduct.

1. Having personal belongings other than writing implements in the vicinity of the test; examples of personal belongings include: Briefcases, backpacks, purses, notebooks, textbooks, etc. These materials may be left at the front of the room.
2. Placing one's test booklet and/or answer key so that another student may see it.
3. Eyes wandering toward anyone else's paper.
4. "Crib" notes of any kind.
5. Wearing hats.
6. Unauthorized use of headphones.
7. Unauthorized exit from the room; ANYONE WHO LEAVES THE ROOM MAY NOT RETURN.
8. Eating or drinking during the test.
9. Talking, tapping fingers, feet, or making other distracting noises or gestures that may be interpreted as signalling.
10. Distracting others when entering or leaving the test area.

ALL TESTS SHOULD BE SELF EXPLANATORY. THE INSTRUCTOR WILL NOT ANSWER ANY QUESTIONS DURING THE TEST, SO DO NOT ASK ANY.

If the instructor is satisfied that a misconduct has occurred he will terminate the test for that individual(s) involved, record a test grade of zero, and report the names of the individual(s) to the Vice President of Academic Affairs, The

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Chairman of the Department, and the Director of Student Services. Other sanctions may follow depending on the circumstances.

ALL GRADES WILL BE POSTED BY A NUMBER PROVIDED BY THE STUDENT. IF YOU DO NOT PROVIDE THE INSTRUCTOR WITH A NUMBER TO USE IN POSTING GRADES, YOUR GRADE WILL NOT BE POSTED.

NOTE:

It is required that all 600, 700, and 800 level required courses be completed with a grade of C or better to be admitted to the clinic and to graduate. Students receiving a grade of D or F in any of these courses are required to repeat the entire course.

ACADEMIC POLICIES: The College policies regarding course withdrawals, course incomplete, etc. will be followed.

STANDARDS OF CONDUCT: As a future Doctor of Chiropractic, you are expected to adhere to the highest professional, ethical, and personal standards of conduct. Any activities that violate the standards of student conduct specified in the College catalog will form the basis of disciplinary action towards those involved.

COURSE OBJECTIVES: This course is intended to accomplish the following goals: Expose the student to medical terminology unique to the areas covered by this course, Present to the student the signs and symptoms of the diseases that affect the areas covered by this course, Utilize audiovisual aids to demonstrate to the student the clinical presentation of

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these disease entities, and To equip the student to diagnose, treat, or refer conditions of these areas in a manner consistent with the initial practice of Chiropractic.

GENERAL COURSE OUTLINE:

Week	Topic
1	Cover Growth & Development, and Examination of the Eye
2	Cover Special Eye Examinations and the Ophthalmoscopic Examination
3	Cover General Ocular Disorders (including trauma and ocular emergencies) and a diagnostic systems review of the eye beginning with the Lids
4	Review continues with the Tears, Conjunctiva, Cornea, Sclera, and Uveal Tract, First test over eye
5	Review continues with the Lens, Vitreous, and Retina
6	System review ends and start on Glaucoma
7	Finish Glaucoma and cover Strabismus
8	Second test over eye and begin ear with Vertigo
9	Cover Imbalance, Hearing Loss Without Otoscopic Abnormalities, and Hearing Loss With Otoscopic Abnormalities
10	Cover Tinnitus and Ear Pressure, Otalgia, Otorrhea Pruritus, and Peripheral Facial Paralysis

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11 Test on ear and begin nose with Nasal Obstruction Due to Mucosal Changes, Nasal Obstruction Due to Structural Changes, and Other Local Symptoms of Nose and Sinus Disease

12 Cover Sinusitis and Regional and Systemic Symptoms of Nasal and Paranasal Sinus Disease; Test over nose

13 Begin Throat with Sore Throats, A Lump in the Throat, Difficulty in Swallowing, Hoarseness and Disorders of the Voice, and Airway Obstruction

14 Finish the Throat with A lump in the Neck, Upper Respiratory Tract Causes of Cough and Hemoptysis, Oral Diagnosis and Treatment, Salivary Gland Disorders, and Injuries to the Head and Neck

15 Test over Throat

To maintain course flexibility, the instructor reserves the right to change or alter any and all parts of this course at any time during the trimester.

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COURSE SYLLABUS

Course Number: 690

Course Title: Senior Seminar

Trimester: Winter 1993

Lecture Hours Per Week: 4

Lecture Hours Per Trimester: 32

Laboratory Hours Per Week: 0

Laboratory Hours Per Trimester: 0

Trimester Credit Hours: 2

Trimester Contact Hours: 32

Course Instructor: Ray N. Conley, D.C., D.A.C.B.R.

Office location: Room 111

Office Telephone: EXT 241

Office Hours: By appointment only

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urse Prerequisites:

Successful completion of chiropractic 889.

Course Description:

Group discussions and individual student presentations of clinically related experiences and their chiropractic evaluation and management.

Texts:

None Required

Suggested Readings:

Firooznia, MRI and CT of the Musculoskeletal System. C.V. Mosby Company

Stark, Bradley, Magnetic Resonance Imaging. C.V. Mosby Company

Attendance Policy:

Attendance in all classes is mandatory. The student is expected to be in class, on time, for each class. If a student is not in class during roll call, he or she will be counted absent.

Since all absences (excused or unexcused) interrupt the student's learning process, the following minimum guidelines will be used by this instructor and the college in determining the effect of student's absences on grades.

10-15% absences - will be reflected in the lowering of the final grade 1 full grade.

15-20% absences - will be reflected in the lowering of the final grade 2 full grades.

Evaluation:

A typed written paper discussing the radiological aspects of any condition is required. The body of the paper must be a minimum of five typed pages, double spaced. There must be at least five references. There are no restrictions on the topics, however, the topic should be relevant to a typical chiropractic practice. The paper is due the last day of classes. The papers will not be accepted before this date.

An oral case presentation during the trimester is required. The case for the presentation should come from the Intern's clinic experience. The talk should last from five to ten minutes.

The student's final grade is determined by the typed report, oral presentation, and attendance. There is no written final exam.

The student must attain a "C" or better to graduate from this college.

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..e college grading scale will apply to individual examinations and final course grades:

90-100 - A
80-89 - B
70-79 - C
60-69 - D
0-59 - F

Academic Policies:

The college policies regarding course withdrawals, course incompletes, etc. will be followed.

Standards of Conduct:

As a future doctor of chiropractic, you are expected to adhere to the highest professional, ethical, and personal standards of conduct. Any activities that violate the standards of student conduct specified in the college catalog will form the basis of disciplinary action towards those involved.

Course Objectives:

1. Familiarize student with X-Ray equipment in terms of purchasing equipment for their practice.

2. Introduces student to insurance company relations as it pertains to radiology.

3. Introduces student to special imaging procedures and how to order these studies.

4. Introduces student to special imaging and its relationship to chiropractic practice and research.

Class Format:

Week 1-2 I. Practice
- A. Equipment
- B. Technique Review
- C. Insurance

Week 3-5 II. Special Imaging: How to Order.
- A. M.R.
- B. C.T.
- C. Nuclear
- D. Ultrasound
- E. B.E.A.M.
- F. P.E.T.

Week 5-8 III. Special Imaging
- A. Case Studies
- B. Research

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EMERGENCY METHODS
686

B.S. WILLITS D.C.

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Course Syllabus for EMERGENCY METHODS 686

Course Prerequisites: See Cleveland Chiropractic College catalog.

Course Description: This course is designed to prepare the future doctor to identify and properly handle emergency situations pertaining to the health of a patient. The student will be taught emergency examination procedures. Along with diagnosis and treatments of varrious acute conditions.

Text: EMERGENCY CARE, by Grant and Murray, Fifth edition

READING ASSIGNMENT

Pages 61-109; Patient Assessment
Pages 235-293; Fracture Management

Attendance: is required at all times, attendance is taken at every class session. Excessive absences may effect you grade.

Evaluation:

Midterm	50 points
Final	50 points
Quizzes (unannounced, points will vary)	

Courses 600 and above must have a "C" grade (70%) to pass. Students with a "D" or "F" are required to repeat the course. The standard 90, 80, 70, grading scale will be used.

IMPORTANT: A missed exam can be made up at my office during a mutually convenient time. However, make-up exams are SA and short answer test. Quizzes can not be made up. NO EXCEPTIONS

Academic Policies: The college policies regarding course withdrawals, course imcompletes, etc. will be followed.

Standards of Conduct: As a future Doctor of Chiropractic, you are expected to adhere to the highest professional, ethical, and personal standards of conduct. Any activities that violate the standards of student conduct specified in the college catalog will form the basis of disciplinary action towards those involved.

Course Objectives: See Course description.

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GENERAL COURSE OUTLINE:

SECTION 1 AND 2

INTRODUCTION, THE LAW,& DETERMINING THE EXTENT OF INJURY

OBJECTIVES:

Upon completion of this unit the student will understand the basic laws and responsabilities of providing emergency care, demonstrate knowledge of how to conduct a patient assessment, and to interpert the findings, also be familiar with triage and how to apply it to emergency situations.

CONTENTS:

A. Introduction

1. definition of first aid
2. Golden hour

B. The Law

1. Goodsamaritan law
2. Abandonment
3. Consent
   a. Actual
   b. Implied

C. Patient Assessment

1. Primary
2. Secondary
3. Vitals

D. 9 diagnostic signs

E. Triage and Extrication

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SECTION 3

BASIC LIFE SUPPORT

OBJECTIVES: Upon completion of this unit the student will understand how to classify soft tissue injuries and the knowledge to treat them effectively, also a review of CPR will be presented (optional).

A. CPR (option of the instructor)

1. 1 person CPR
2. 2 person CPR
3. Obstructed airway

B. Soft tissue injuries

1. classifications

C. Bleeding control

1. classifications
2. treatment
   a. external
   b. internal
3. Special situations
   a. flap avulsions
   b. impaled objects
   c. amputations

D. Shock

1. mechanisms of shock
2. types
3. symptoms
4. treatment

SECTION 4

INJURIES AND ILLNESSESS

OBJECTIVES: This section deals with specific injuries to the body and their related treatment. The student should learn to recognize and treat these types of injuries, which they may encounter as a doctor.

A. Musculareskeletal Injuries

1. Strain
2. Sprain
   a. classifications
3. Dislocations
4. Fractures
   a. complications
   b. priority for treatment
   c. reasons for splinting
   d. treatment for fractures
   e. splints
   f. specific injuries & treatment for the upper and lower extremities.

B. Spine and cord injuries
   1. signs and symptoms
   2. treatment

C. Head (skull) injuries

D. Brain injuries

E. Convulsive disorders

F. Cerebro-vascular accidents

G. Specific soft tissue injuries to the face and neck\

H. Chest injuries
   1. type of mechanism
   2. classifications
   3. flail chest
   4. pneumothorax
   5. hemothorax
   6. traumatic asphyxia
   7. pericardial tamponade
   8. traumatic emphysema
   9. subcutaneous emphysema

I. Abdominal injuries
   1. evisceration

J. Injuries to the groin

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SECTION 5

ENVIROMENTAL EMERGENCIES

OBJECTIVES: This section deals with injuries that can result from the environment, the student will become familiar with the potenial hazards and how to effectively deal with them.

A. Burns
   1. types
   2. classifications
   3. evaluation of the patient
   4. treatment

B. Enviromental temperature emergency
   1. heat cramps
   2. heat exhaustion
   3. heat stroke

C. Cold related emergency
   1. systemic hypothermia
   2. frostbite

D. Near drownings
   1. fresh water
   2. salt water

E. Poisonings

F. Snake bites
   1. classifications of snakes
   2. signs and symptoms
   3. treatment for pit viper
   4. treatment for coral snake

G. Spider bites
   1. black widow
   2. brown relcuse

SECTION 6

MEDICAL EMERGENCIES

OBJECTIVES: In this section of study the student should understand medical emergencies and how to deal with them, also be able to distinquish between Angina Pectoris and Acute Myocardial Infarctions. The student should also be familiar with the differences between Diabetic coma and Insulin shock. Basic procedures for child birth will be reviewed.

A. Heart disorders

1. angina pectorie
2. acute myocardial infarction
3. differential diagnosis and care

B. Diabetic states

1. diabetic coma
2. insulin shock
3. differential diagnosis and care

C. Drug abuse

D. Special care situations

E. Childbirth

1. stages of labor
2. evaluation of the mother
3. equipment
4. delivering the baby

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Course Syllabus

Chiropractic 861

Physical Examination I

Winter 1993

1 Lecture Hour Per Week

1 Laboratory Hour Per Week

1.5 Credit Hours

30 Contact Hours

Instructor: Dr. Tom Nichols

Office Location: Clinicians Office

Office Hours: By Appointment

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Course Syllabus for Chiropractic 861

Course Prerequisites: Successful completion of Diagnosis 651

Course Description: This is a practical course in physical examination. The student learns the function and use of diagnostic instruments and procedures. Physical and neurological examination procedures are included, along with an understanding of the results of each test and their use in chiropractic practice.

Required Text: Mosby's Guide to Physical Examination, 2nd Ed

Attendance, Tardiness and Absenteeism: Attendance is required at all times, attendance is taken at every class session, and students are responsible for all assignments and requirements whether or not they are in attendance. Since all absences (excused or unexcused) interrupt the student's learning process, the following minimum guidelines will be used in determining the effect of student absences on grades:

10 - 15% absences-- lowers final grade 1 full grade
15 - 20% absences-- lowers final grade 2 full grades
More than 20% absences-- final grade will be a W and student will repeat the course.

Evaluation: Your final course grade will be determined by your performance in this course as follows:

1 - Mid-term Practical Examination	-	33 1/3%
1 - Final Practical Examination	-	66 2/3%
Total	-	100%

The student must receive a passing grade on both the mid-term and final examinations.

As in all upper level courses, passing, is considered to be work of a "C" level and above.

All examinations must be completed by the designated time. If you are unable to be present for an examination, arrangements must be made in advance of the examination date. No make-up examinations will be given unless arrangements are made prior to the examination date.

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Course Syllabus for Chiropractic 861

The College grading scale will apply to individual examinations and the final course grades:

90 - 100 - A

80 - 89 - B

70 - 79 - C

0 - 69 - F

Additional Credits: Each student will be required to demonstrate proficiency in the ability to perform two (2) prostate examinations on a mannequin. These procedures will be supervised by the instructor and upon successful completion the student will receive credit toward the required number of these examinations for certification and state licensure requirements.

Academic Policies: The College policies regarding course withdrawls, course incompletes, etc. will be followed.

Standards of Conduct: As a future Doctor of Chiropractic, you are expected to adhere to the highest professional, ethical, and personal standards of conduct. Any activities that violate the standards of student conduct specified in the College catalog will form the basis of disciplinary action towards those involved.

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Course Syllabus for Chiropractic 861

Course Objectives:

1. To review the major physical examination procedures, with emphasis on the use of diagnostic instruments and procedures.

2. To acquaint the student with the various methods of diagnosing and monitoring functions and disorders of the human body.

3. To present the student with a logical, algorithmic approach to the diagnosis of various conditions.

4. To review history taking and physical examination procedures as they relate to the practice of chiropractic.

5. To allow the student an opportunity to demonstrate a proficiency in performing and interpreting physical examination procedures.

6. To present the role of the chiropractor as a primary health care provider in the treatment and management of health and disease.

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Course Syllabus for Chiropractic 861

Course Outline:

Week	Topic
1	Introduction, Vital Signs and Blood Pressure
2	Examination of Head and E.E.N.T.
3	Examination of Head and E.E.N.T. (cont'd)
4	Abdominal, G.U. and Hernia
5	Examination of Lungs and Chest
6	Mid-term Practical Examination
7	Examination of Cardiovascular System
8	Examination of Cardiovascular System (cont'd)
9	Neurological Examination
10	Neurological Examination (cont'd)
11	Breast Examination
12	Prostate Examination
	Final Practical Examination

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Chiropractic 871

Physical Examination II

Fall Trimester 1992

Lecture hours per week	1
Lecture hours per trimester	15
Laboratory hours per week	2
Laboratory hours per trimester	30
Trimester credit hours	2
Trimester contact hours	45

Course Instructor: Dr. Perillat
Office location : Suite 104
Office telephone: (816) 333-8230 extension 238

Office hours by appointment (sign in on appointment schedule posted on Dr. Perillat's office door).

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Course syllabus for Chiropractic 871 - Physical Examination II

Course Prerequisites

Successful completion of Chiropractic 861 Physical Examination I.

Course Description

This course is divided in three activities:

-A lecture portion during which clinic procedures, patient record keeping and correlations of all gathered information will be discussed.
-A laboratory portion during which students will refine their physical examination skills and develop an efficient procedure flow.
-A student clinic portion during which students adjust and keep appropriate records.
Students can also use the student clinic time to practice their skills in physical examination procedure.

Another activity included in Chiropractic 871 is the participation in the weekly intern/clinician meetings. During those meetings senior interns will present some clinical cases and clinic matters will be discussed between interns and clinicians. By attending those meetings, 871 students will become more familiar with the clinic procedures and will be exposed to clinical chiropractic cases.

Attendance to those meetings is required except on days of visiting lecture series.

At the end of this course a student will have performed two physical examinations on classmates with appropriate record keeping and will have delivered a minimum of 15 chiropractic treatments on student patients.

Those are minimum requirements. Students are encouraged to spend as much time as possible in student clinic activities thus enhancing their preparation to the clinic experience.

Course Participation

A student is expected to be present for all laboratory sessions and to participate as a patient and as a doctor.

Students will perform a physical examination on each other twice during this course under the direct supervision of the course instructor or the student clinic supervisor. If a student believes that health matters prevent certain examination procedures, the student must indicate those reasons to the course instructor immediately.

Texts Required

A current edition of the Clinic Manual as well the following listed texts:

651 Mosby's Guide to Physical Examination

Authors: Seidel - Ball - Dains - Benedict
Publisher: Mosby Year Book

861 Mosby's Guide to Physical Examination

Authors: Seidel - Ball - Dains - Benedict
Publisher: Mosby Year Book

664 Photographic Manual of Regional, Orthopedic and Neurological Tests

Author: Joseph Cipriano
Publisher: Williams and Wilkins

Practical Orthopedics

Author: Lonny Mercier
Publisher: Mosby Year Book

674 Functional Soft Tissue Examination & Treatment by Manual Methods

Author: Warren T. Hammer
Publisher: Aspen

671 Clinical Neurology

Authors: Roger P. Simon
Michael J. Aminoff
David A. Greenberg
Publisher: Appleton & Lange

Essential Neurology

Authors: William Pryse-Phillips, M.D.
T.J. Murray, M.D.
Publisher: Medical Examination Publishing Company

Attendance, Tardiness and Absenteeism

Attendance is required at all times and is taken at every session. Students will keep track of their student clinic times by signing in and out on the sign in sheet available in the student clinic.

Since each student is assigned a partner in the laboratory, absence from any lab session will not only compromise his/her own learning and progression, it will also interfere with his/her partner's progression. At this effect students should be very careful not to miss any session and should be considerate of his/her partner's schedule if make up time is necessary.

Students are responsible for all assignments and requirements whether or not they are in attendance. Any missed laboratory session must be made up during the week in the student clinic.

Excessive absenteeism will reflect on the course grade according to the scale below:

Absenteeism for 15% to 20% of the lecture and laboratory sessions (5 to 6 hours) will result in lowering the course grade one full letter grade.

Absenteeism for 21% to 30% of the lecture and laboratory sessions (7 to 9 hours) will result in lowering the course grade two full letter grades.

Absenteeism in excess of 30% (10 hours or more) will result in failure of the course.

Equipment Required

Students are required to observe the clinic dress code during the laboratory sessions and student clinic activities.

Each student is required to have a doctor's bag with all diagnostic equipment, in good working order, when coming to a laboratory session.

Course Requirements

Chiropractic 871 is designed to prepare a student to start his/her clinic experience in the public patient clinic.

In order to complete this course a student must have successfully completed the following requirements:

- Perform 2 physical examinations on classmates, with proper record keeping, in a timely manner.
- Perform a minimum of 15 chiropractic treatments on students.
- Take and pass the clinic procedure examination.
- Attend the weekly intern/clinician meetings.

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General Course Outline

The following schedule is intended to be a guide for students so that they may anticipate and prepare for upcoming activities. This schedule is not absolutely rigid and may be altered as deemed appropriate. Such alteration will be communicated to the class as soon as they are known.

Week 1	Lecture	- Introduction to course and requirements - Clinician assignment - pair up students for first physical exam - week assignment Student Clinic Procedures
	Lab	The flow of a physical examination
Week 2	Lecture:	The Case History - Clinic procedures Record Keeping Preliminary Diagnosis
	Lab	The examination of the sitting patient
Week 3	Lecture	The clinic forms, record keeping, clinician approval.
	Lab	The examination of the recumbent patient.
Week 4	Lecture	Lab and X-ray requests. Documentation and reports.
	Lab	The examination of the prone patient.
Week 5	Lecture	The narrative report.
	Lab	The examination of the standing patient.
Week 6	Lecture	Diagnosis, treatment plan and patient management.
	Lab	Guest lecturer in diagnosis.
October 21		First exam must be submitted to clinician for approval.
Week 7	Lecture	Diagnosis, treatment plan and patient management.
	Lab	Guest lecturer in diagnosis.
Week 8	Lecture	Pair up students for the second physical examination. Week assignment.
	Lab	Sitting and recumbent examination.
Week 9	Lecture	Discussion about OSCE
	Lab	Prone and standing examinations.
Week 10	Lecture	Regional - re-examination, update examination
	Lab	Review of sequences of the examination.
Week 11	Lecture	The report of findings
	Lab	Case studies

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Evaluations

Once a student has completed a physical examination he/she turns the records in for grading to his/her clinician. The average of the grades obtained on these 2 physical examinations constitutes the course grade.

The file must be completed and submitted for review by a date determined at the beginning of the trimester. Any late work will be penalized by lowering the grade one letter grade per week late.

The College grading scale will apply to the final course grade.

90-100	A
80- 89	B
70- 79	C
60- 69	D
0- 59	F

Academic Policies

The College policies regarding course withdrawal, course incomplete, etc. will be followed.

Standard of Conduct

As a future Doctor of Chiropractic, a student is expected to adhere to the highest professional, ethical, and personal standards of conduct. Any activities that violate the standards of student conduct specified in the College catalogue and student handbook will form the basis of disciplinary action towards those involved.

Course Objective

This course prepares the student for the public patient clinic experience. At this effect a student will:

-develop practical skill in physical examination procedures with appropriate time management.

-learn proper record keeping procedures.

-learn to correlate all information collected during the examination to develop a diagnosis and treatment/management plan.

-become familiar with all clinic procedures.

-reinforce his/her technical skills by adjusting in the student clinic.

The students will develop clinical competencies delineated in the CCE Clinical Competency Document, October 1, 1984.
Refer to the document in the Clinic Manual.

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Week 12	Lecture	Special requests (EKG, Foot Levelers, PT - Supports)
	Lab	Case studies
December 1		2nd physical must be submitted to clinician for review.
Week 13	Lecture	Progress examinations - SOAP notes
	Lab	Case studies

CLINIC PRIVILEGES FOR STUDENTS ENROLLED IN 871

PHYSICAL EXAMINATION CLASS

I. For the first 7 weeks of the trimester.

All activities are performed in the student clinic, during the open hours.

1. Adjustment of students patients who have a file already established in the clinic.
   This includes taking progress notes and revising the diagnosis/treatment sheet as necessary.
2. Adjustment of student's own family but not other student family patients.
3. Performance of base line lab work on first physical examination done as classroom activity.

NOTE: At this time students cannot start a new file or perform a regional, re-examination or update examination on a current student patient.

II. When the first physical exam is completed and approved. (8th week and after)

1. Same adjusting privileges as above.
2. Performance of regional/re-examination on current student patients with appropriate lab and X-ray procedure (if those are required).

NOTE: A base line lab work will not be performed on the second physical examination unless the results of the first one were abnormal and require a follow up.
The results of the first one will be given to the intern to enter in the narrative report.

III. When the 2nd physical exam is completed and approved.

1. Same privileges as above (II) extended to all student family patients.
2. Full physical examination on new student or student family patients.

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IV. Student clinic privileges in the main clinic.

After having completed the first required student physical examination, a student is eligible to take the clinic procedure examination (given every week from the 7th week to the end of the trimester).
When a student has passed this examination and has completed a minimum of 20 adjustments in the student clinic, he/she is allowed to treat his/her patients in the regular clinic, allowing greater flexibility of hours.

NOTE: Every student enrolled in 871 must pass the clinic procedure examination before the end of the trimester.

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CHIROPRACTIC 889
Clinical Practicum I

Winter Trimester 1993

Clinic hours per week: 10
Meeting hours per week:
- with Clinic Director 1
- with Clinicians 1

Trimester credit hours: 6.0
Trimester contact hours: 180

Course Instructor: Dr. Perillat, Clinic Director
Clinic Faculty

Office Locations: Suite 104

Office telephone: (816)333-8230
ext. 290 Clinic Secretary
ext. 238 Clinic Director
ext. 258 Clinic Faculty

Office hours by appointment
(Sign up on the schedule posted on Dr. Perillat's office door.)

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adm #4.154
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Course Syllabus for 889 Clinic I

Course prerequisites

Satisfactory completion of the clinic entrance examination, the clinic procedure examination, and all trimester I - VII course work of the 9 trimester curriculum.

Course description

The course is designed to allow the transition between the classroom activities and the professional practice. The intern examines and treats patients under the supervision and guidance of licensed chiropractors, refers patients to other professionals as deemed necessary, and keeps complete patient records.

In addition to the patient management activities, the student meets weekly with the Clinic Director and with the Clinic Business Manager to discuss clinic procedures, insurance practice, and other clinic business related activities. Groups of interns meet weekly with their clinicians to present and discuss clinic patient cases. This exposes the intern to a large variety of clinical conditions and teaches the intern not only to present patient's cases but also to use critical thinking in the discussion of those cases with professional peers.

Text required

Current edition of the college Clinic Manual.

Text reference

As appropriate.

ATTENDANCE

The student must spend a minimum of 12 hours per week in clinic related activities (resulting in a minimum of 180 hours during the trimester). These minimum 12 hours include 10 hours in patient care and record keeping, and 2 hours in meetings.

The student is free to schedule his/her clinic activity during the clinic hours (9:30 AM to 6:30 PM week days, 8 AM to 12 PM on Saturday). The time is recorded on a sign in sheet kept at the clinic reception desk.

The student is responsible for entering his/her clinic times daily. All absences must be made up during the trimester. No final course grade can be calculated until the hour requirement is met.

Evaluations

The student's clinical competency is evaluation by three methods following the guidelines of the CCE clinical competency document (October 1, 1984).

1. Continuous "on the floor" evaluation by clinical staff (40% of the final grade). Each step of the patient management and treatment is evaluated and graded by the floor clinicians on a regular basis. It is the intern's responsibility to be evaluated. Each missed evaluation is entered as a zero.

2. Record audit (30% of the final grade). All files must be reviewed and graded.

3. Clinic interim examination at the end of the trimester (30% of the final clinic grade). It follows and OSCE format and the grade is in direct proportion to the number of stations passed. A student must pass the clinic interim examination in order to pass 889 course.

If a student fails the interim examination (failure of 4 or more stations) he/she may appeal his/her performance to the Clinic Director. If the appeal is granted the will be retested in the areas of failure in order for him/her to demonstrate adequate knowledge and proficiency. Failure of 4 or more stations after the appeal retest constitutes failure of the examination and consequently failure of the corresponding clinic courses.

The grade earned on the first OSCE testing stands as part of the intern's clinic grade.

A two (2) point bonus is given to any student performing more than 150 adjustments (students and/or outpatients) during the trimester.

A clinic grade is calculated with the following formula:

GRADE 1 - (floor evaluation) x 4 = a

GRADE 2 - (file evaluation) x 3 = b

GRADE 3 - (clinic interim exam) x 3 = c

Final grade (a+b+c) divided by 10 (+ bonus points is applicable).

COURSE REQUIREMENTS

The requirements for 889 are 25% of the total clinic requirements.

A. Total clinic requirements (Performed in trimester 7, 8, & 9.)

Eighty percent (80%) of the total clinic requirements must be performed on public patients. The other 20% may be performed on student family patients.

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The college grading scale will apply to the final course grade.

90-100 A

80- 89 B

70- 79 C

60- 69 D

0 - 59 F

Academic Policies

The college policies regarding course withdrawal, incompletes, etc., will be followed.

Standard of Conduct

As a future Doctor of Chiropractic an intern is expected to adhere to the highest professional, ethical and personal standards of conduct. Any activities that violate the standards of student conduct specified in the college catalog and clinic manual will form the basis of disciplinary action towards those involved.

Course Objectives

The general objective of this course is to give the intern experience in all phases of the practice of chiropractic in order to prepare him/her for the role of primary health care provider. The specific objectives are to develop the cognitive, affective, and psychomotor aspects of all clinical competencies indexed in the CCE clinic competency document dated October 1, 1984, (see clinic manual Appendix A).

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250 Chiropractic Adjustments----------Minimum 200 on public patients

25 Physical Examinations----------Minimum 20 on public patients

30 Individual area X-ray views-------Minimum 24 on public patients

25 Urinalysis----------Minimum 20 on public patients

20 Complete Blood Count (CBC)--------Minimum 16 on public patients

10 Blood Chemistries----------Minimum 8 on public patients

Ten of the twenty public patient physical examinations required must be part of an integrated case management and must be performed on ten different public patients.
No more than 5 group physicals (special olympic or sport physical exams) and 5 pediatrics (group or regular clinic patients) will be applied towards meeting the above minimum requirements.

B. 889 Clinic Requirements

The requirements for 889 are 25% of the total clinic requirements and must be completed by the last day of course work (April 15, 1993). A student who does not complete Clinic I requirements will receive an F or an I for the course according to the following guidelines:

- If by the end of the 8th trimester classes (April 15, 1993) a student does not have a minimum of 70% of the Clinic I requirements (17.5% of the total clinic requirements), he/she will receive an "F" for the course and will have to repeat this course. The clinic requirements remain credited.

- If by the end of the 8th trimester classes a student has completed between 70% and 100% of the Clinic I requirements (17.5 to 25% of the total clinic requirements), he/she will receive an "I" for the course. The student then has four (4) weeks to complete the remaining Clinic I requirements (until May 22, 1993). For each week beyond April 15, 1992, that the requirements have not been completed, the course grade will be lowered by two (2) points. If the requirements have not been completed by May 22, 1993, the grade of "I" will be converted to an "F", and the student must repeat Clinic I. The clinic requirements remain credited.

SCALE:	PHYSICAL (any category)	CBC	UA	BC	X-RAY	TREATMENTS
Failure	0-3	0-2	0-3	0-1	0-4	0-39
Incomplete	4-5	3-4	4-5	2	5-7	40-42
Passing	6-25	5-20	6-25	3-10	8-30	63-250

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CHIROPRACTIC 899
Clinical Practicum II

Winter Trimester 1993

Clinic hours per week:	26
Meeting hours per week:	
- with Clinic Director	1
- with Clinicians	1
Trimester credit hours:	14
Trimester contact hours:	420

Course Instructor: Dr. Perillat, Clinic Director
Clinic Faculty

Office Locations: Suite 104

Office telephone: (816)333-8230
ext. 290 Clinic Secretary
ext. 238 Clinic Director
ext. 258 Clinic Faculty

Office hours by appointment
(Sign up on the schedule posted on Dr. Perillat's office door.)

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actm #4-159
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Course Syllabus for 899 Clinic II

Course prerequisites

Satisfactory completion of the chiropractic 889 (Clinic I).

Course description

The course is designed to prepare the intern for private practice. The intern examines and treats patients under the supervision and guidance of licensed chiropractors, refers patients to other professionals as deemed necessary, and keeps complete patient records.

In addition to the patient management activities, the student meets weekly with the Clinic Director and with the Clinic Business Manager to discuss clinic procedures,insurance practice, and other clinic business related activities.

Groups of interns meet weekly with their clinicians to present and discuss clinic patient cases. This exposes the intern to a large variety of clinical conditions and teaches the intern not only to present patient's cases but also to use critical thinking in the discussion of those cases with professional peers.

Text required

Current edition of the college Clinic Manual.

Text reference

As appropriate.

ATTENDANCE

The student must spend a minimum of 28 hours per week in clinic related activities (resulting in a minimum of 420 hours during the trimester). These minimum 28 hours include 26 hours in patient care and record keeping, and 2 hours in meetings.

The student is free to schedule his/her clinic activity during the clinic hours (9:30 AM to 6:30 PM week days, 8 AM to 12 PM on Saturday). The time is recorded on a sign in sheet kept at the clinic reception desk.

The student is responsible for entering his/her clinic times daily. All absences must be made up during the trimester. No final course grade can be calculated until the hour requirement is met.

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VALUATIONS

The student's clinical competency is evaluated by five methods following the guidelines of the CCE clinical competency document (October 1, 1984).

1. Continuous "on the floor" evaluation by clinical staff (40% of the final grade). Each step of the patient management and treatment is evaluated and graded by the floor clinicians on a regular basis. It is the intern's responsibility to be evaluated. Each missed evaluation is entered as a zero.

2. Record audit (20% of the final grade). All files must be reviewed and graded.

3. During the trimester each intern makes a case presentation in the intern/clinician meetings. These presentation are graded (10% of the final grade).

4. Clinic exit examination (20% of the final grade). The clinic exit examination is given one week after the end of course work. It follows an OSCE format. A student failing any station(s) must take tutoring studies in that/those area(s) and be certified competent on that/those area(s) by the course instructor. The grade is in direct proportion to the number of station(s) passed.

5. Amount of clinic work (10% of the final grade). This portion of the grade reflects the student activity in the clinic:

   250 to 309 treatments (students and public patients) - represents minimal work: C grade

   310 to 369 treatments (students and public patients) - represents above average work: B grade
   370 or more treatments (students and public patients) - represents an excellent amount of work: A grade

   NOTE: A student who completes the minimum requirements in 8 weeks,and proceeds with the preceptorship program will get, for this portion of the clinic grade, the average between an A for clinic activity and the grade attributed by the preceptor.

GRADE:

The grade is calculated with the following format:

GRADE 1:	(FLOOR EVALUATION)	X 4	= a
GRADE 2:	(FILE EVALUATION)	X 2	= b
GRADE 3:	(CASE PRESENTATION)	X 1	= c
GRADE 4:	(CLINIC EXIT EXAMINATION)	X 2	= d
GRADE 5:	(AMOUNT OF WORK)	X 1	= e

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bonus of 1 to 5 points will be attributed based on the Inte participation in community programs (health fair, group physicals, , if such programs need to be done during the trimester.

FINAL GRADE = (A+B+C+D+E) divided by 10 + bonus points if applicable.

The college grading scale will apply to the final course grade.

90-100 A

80- 89 B

70- 79 C

60- 69 D

0- 59 F

COURSE REQUIREMENTS

During the 899 trimester a student must complete all clinic requirements.

A. Total clinic requirements (Performed in clinic courses 871, 889 and 899.)

Eighty percent (80%) of the total clinic requirements must be performed on public patients. The other 20% may be performed on student family patients.

250 Chiropractic Adjustments ------Minimum 200 on public patients

25 Physical Examinations ---------Minimum 20 on public patients

30 Individual area X-ray views ---Minimum 24 on public patients

25 Urinalysis --------------------Minimum 20 on public patients

20 Complete Blood Count (CBC)-----Minimum 16 on public patients

10 Blood Chemistries -------------Minimum 8 on public patients

Ten of the twenty public patient physical examinations required must be part of an integrated case management and must be performed on ten different public patients.
No more than 5 group physicals (special olympic or sport physical exams) and 5 pediatrics (group or regular clinic patients) will be applied towards meeting the above minimum requirements.

B. Time for completion of requirements

The minimum requirements for 899 must be completed by the last day of the trimester, (April 24, 1993). A student who does not complete Clinic II requirements will receive and F or an I for the course according to the following guidelines:

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- If by the end of the 9th trimester (April 24,1993) a student does not have a minimum of 70% of the total Clinic requirements, he/she will receive an "F" for the course and will have to repeat this course. The clinic requirements remain credited and a minimum clinic requirement will be set for this class.

- If by the end of the trimester a student has completed between 70% and 100% of the total clinic requirements, he/she will receive an "I" for the course. The student then has four (4) weeks to complete the remaining clinic requirements (until May 22, 1993). For each week beyond April 24, 1993 that the requirements have not been completed, the course grade will be lowered by (2) points. If the requirements have not been completed by May 22, 1993, the grade of "I" will be converted to an "F", and the student must repeat Clinic II. The clinic requirements remain credited and a minimum clinic requirement will be set for this class.

SCALE:	PHYS.	CBC	UA	BC	X-RAY	ADJ
Failure	4-16	3-13	4-16	2-6	5-20	40-174
Incomplete	17-24	14-19	17-24	7-9	21-29	175-249
Passing	25/20PP	20/16PP	25/20PP	10/8PP	30/24PP	250/200PP

NOTE: Any student who has not checked out from the clinic by May 1st, 1993 will be charged malpractice fee.

Academic Policies

The college policies regarding course withdrawal, incompletes, etc., will be followed.

Standard of Conduct

As a future Doctor of Chiropractic an intern is expected to adhere to the highest professional, ethical and personal standards of conduct. Any activities that violate the standards of student conduct specified in the college catalog and clinic manual will form the basis of disciplinary action towards those involved.

Course Objectives

The general objective of this course is to further enhance the intern experience in all phases of the practice of chiropractic in order to prepare him/her for the role of primary health care provider. The specific objectives are to develop the cognitive, affective, and psychomotor aspects of all clinical competencies indexed in the CCE clinic competency document dated October 1, 1984, (see clinic manual Appendix A).

KSNA
the voice of Nursing in Kansas

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You
A Powerful Match

For Further Information Contact:
Terri Roberts J.D., R.N.
Executive Director
Kansas State Nurses Association
700 SW Jackson, Suite 601
Topeka, Kansas 66603-3731
(913) 233-8638

March 14, 1994

S.B. 520 CHILD HEALTH ASSESSMENT AT SCHOOL ENTRY

Representative Flowers, and members of the House Public Health and Welfare Committee, my name is Mary Kopp M.N., R.N. and I represent the Kansas State Nurses Association.

The Kansas State Nurses Association supported S.B. 520 in the Senate, with some recommendations for amendments to bring the health assessment schedule in line with the Academy of Pediatrics timelines. We are dissappointed that the bill that you have in front of you today, in no way resembles the bill that was heard and amended by the Senate Public Health and Welfare Committee. We support that a uniform system for assuring health assessments for school age children be adopted by the state. The "guidelines for child health assessments" referenced in the revised S.B. 520 should be adopted in conjunction with consultation from the Kansas Department of Health and Environment.

Our rationale for supporting S.B. 520 was not only the promotion of preventive health care services for children but to provide school personnel with the earliest possible opportunity for baseline health data on children. Health data, other than immunizations, is often not available on children until they reach the age for participation in secondary level athletics. The health data obtained, especially if on children of pre-school and kindergarten ages, can assist families and school personnel in appropriate health and educational interventions that, in some cases, may have considerable long range impact on positive educational outcomes. Data provided prior to school entry for kindergartners and, assuming appropriate interventions are obtained, better prepare children as they begin their academic career.

The Kansas Commission on Education Restructuring and Accountability **as well as the America 2000** educational objectives provide strong argument for ensuring that children come to school ready to learn. The earlier that health barriers are addressed in a child's life the better we prepare them to learn. Early health assessment and intervention can facilitate readiness to learn.

PHHW
3-14-94
Attm #5

Because all children need someone who cares...

Kansas Action for Children, Inc.

A non-profit, tax-exempt organization.

715 SW 10th Suite 215
PO Box 463
Topeka, Kansas 66601-0463
Phone: (913) 232-0550
Fax: (913) 232-0699

Johannah Bryant
Executive Director

TESTIMONY TO: HOUSE PUBLIC HEALTH AND WELFARE COMMITTEE

RE: S.B. 520

BY: SYDNEY HARDMAN

MARCH 14, 1994

I am Sydney Hardman, Advocacy Coordinator with Kansas Action for Children. KAC is a statewide non-profit advocacy organization. We provide no direct services, but advocate for changes in systems to benefit children and families.

KAC has advocated for better health care for children — especially primary and preventive care — for many years. In 1991, we supported the recommendation of the Children's Initiative Committee to institute a program of health assessments upon entering school. Such health assessments assure that basic health needs are met and children are physically able to take full advantage of the education offered in school.

However, we are also aware that the original law on health assessments, from the 1992 session, had flaws which had to be addressed. S.B. 520 puts the specifics of a health assessment program in the hands of local school boards, so it is very consistent with the stated goals of the Blueprint for Children and Families to keep the emphasis on local control.

Kansas Action for Children is very pleased to support this wholeheartedly.

PHEW
3-14-94
Attm # 6

Christian Science Committee on Publication For Kansas

820 Quincy Suite K
Topeka, Kansas 66612

Office Phone
913/233-7483

March 14, 1994

To: House Committee on Public Health and Welfare

Re: SB 520

The Kansas Legislature has been very kind over the years in accommodating our religious views. This is a request that you continue that tradition.

SB 520, as originally proposed, included an alternative to health assessments for those with religious objections to the assessments.

The Senate, in rewriting the bill by floor amendment, did not include the alternative.

It is our request that the intent of the stricken language in lines 25-29 of page 2 be included in the bill. Perhaps the new language could read:

> "As an alternative to the required health assessment, a pupil shall present a written statement signed by one parent that the child is an adherent of a religious denomination whose religious teachings are opposed to such assessments."

We provide forms to our members for their use in requesting accommodation to our religious teachings. School personnel have become accustomed to our requests and our forms. I do not believe this would cause them problems as they establish and implement their local assessment programs.

Your consideration of this request is appreciated.

Keith R. Landis
Committee on Publication
for Kansas

PHWW
3-14-94
Attm #7

KANSAS ASSOCIATION OF SCHOOL BOARDS

1420 S.W. Arrowhead Rd, Topeka, Kansas 66604
913-273-3600

Testimony on S.B. 520
before the
House Committee on Public Health and Welfare

by

Karen Lowery, Coordinator of Governmental Relations
Kansas Association of School Boards

March 14, 1994

Madam Chairperson, Members of the Committee:

Thank you for the opportunity to comment on S.B. 520. KASB appears today as a proponent of this bill. In the past, KASB has testified in favor of the concept of health assessments prior to school entrance. We believe health assessments are a useful tool in helping students enter school ready to learn.

KASB also supported the changes made to the original 1992 legislation. We strongly supported, and continue to do so, the change that lessens the burden placed on school districts to cover the cost of the assessment, and request this section remained unchanged.

Finally, the Association is willing to work cooperatively with the State Board of Education in the development of guidelines for the health assessments.

Thank you for your consideration.

PH&W
3-14-94
Attach #8

KSNA
the voice of Nursing in Kansas

S.B. 575 Schoolage Children's Required Immunizations

Chairperson Flower and members of the House Public Health and Welfare committee, my name is Mary Kopp M.N.R.N. and I represent the Kansas State Nurses Association. I am here today as a Proponent for Senate Bill 575.

I would like to preface my remarks by saying that the recommended amendments to K.S.A. 72-5209 are a step in the right direction towards preventing the senseless spread of childhood diseases. Health care providers must be given the means with which to enforce necessary and prudent public health principles.

I must let you know that KSNA supported the original bill's mandatory language change from shall to may. However, we recognized the outcome of the Senate committee discussion did not support this change.

That aside, we must support health care providers (e.g. school nurses) as they "work smart" with immunization notifications. I am speaking of a clerical exercise that will move the 90 day notification up, earlier in the year (e.g. May) instead of September. Recently a school in the southwest part of the state decided to "work smarter" earlier. That meant that the parent was notified earlier in the year and by August 15th the child should have been in compliance. Rather than going 90 days into the school year or November 15th. The school experienced a rapid and drastic reduction in noncompliance, a drop from 250 noncompliance to less than a dozen. This is a savings of both nursing and clerical time not to mention the health savings of the children .

Under the current system, once the child is in school the fear of expulsion is not as great. In theory, this is done to eliminate the pointless and needless risk of exposure to contagious yet preventable childhood diseases while school is in session.

I spoke earlier of supporting schools to "working smart". Through enacting of this bill we will be one step closer to doing the same.

PH&W
3-14-94
Attm # 9

Kansas State Nurses Association Constituent of The American Nurses Association

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Carolyn Middendorf, M.N., R.N. -- *President* * Terri Roberts, J.D., R.N. -- *Executive Director*

KANSAS ASSOCIATION OF SCHOOL BOARDS

1420 S.W. Arrowhead Rd, Topeka, Kansas 66604
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Testimony on SB 575
before the
House Committee on Public Health & Welfare
by
Karen Lowery
Coordinator of Governmental Relations
Kansas Association of School Boards

March 14, 1994

Madam chairperson, committee members, thank you for the opportunity to appear on behalf of Boards of Education of Kansas school districts.

Kansas school districts ardently support universal immunization for all children in this state, and, we support SB 575 as amended.

Currently, Kansas schools may exclude students who are not immunized and many, by policy, do so. Schools have a long history of working with parents, health care providers and health departments to ensure protection through immunization.

The current law allows each school district to deal with unique circumstances which may occur. Transfer students, foster children, and unique family situations all call for flexibility. The local school officials are in the best position to respond.

As originally drafted, this bill required a mandatory exclusion of pupils who had not received proper inoculations. This provision was deleted by the Senate committee and we urge you not to re-instate the concept.

PH&W
3-14-94
Attm #10

School improvement efforts and especially attention to at-risk students needs mitigate against punishment of students for the failure of their parents or guardians to seek appropriate health care. We are concerned that parents who do not ensure immunizations may not always ensure school attendance if that is not required by law.

We are willing to work with local and state health officials to improve immunization rates but do not think mandatory exclusion from school is the proper path to improvement.

We ask that you recommend S.B. 575 as amended favorably and I thank you for your consideration.

PHCW
3-14-94
Attm #10-2
9232

State of Kansas
Joan Finney, *Governor*

Department of Health and Environment
Robert C. Harder, *Secretary*

Testimony presented to

House Public Health and Welfare Committee

by

The Kansas Department of Health and Environment

Senate Bill 575

Senate Bill 575, as amended, affects the Kansas School Immunization Statute, 72-5209, which states immunization requirements and standards of actions.

Instead of the 90 day immunization notification beginning at the start of school each year, the 90 day notice would be required to be sent from the school board on or before May 15th for notification of immunization requirements for the proceeding school year.

The revision would also mandate the transfer of immunization records with the pupil's transcripts when the child transfers from school to school to prevent immunization records being left behind in the prior school system or lost. The bill revision states that the immunization record shall be maintained and examined for required immunization compliance.

The revision of the bill also eliminates the term "personal grounds" for not receiving required immunizations; updated medical and religious exemptions are still honored.

The county, city-county or multi-county health departments may charge for immunizations on a sliding fee scale for administrative compensation with the exception that no child may be refused immunization for inability to pay an administrative fee.

The Kansas Department of Health and Environment supports SB 575 as amended.

Testimony presented by: Steven R. Potsic, M.D., M.P.H.
Director of Health
Kansas Department of Health and Environment
March 14, 1994

PHEW
3-14-94
Attm # 11