Allied Health Studies

Cardiopulmonary Sciences
Polysomnography
Respiratory Care
Physician Assistant
Emergency Medical Care

Clinical Laboratory Science
Phlebotomy
Cytotechnology
Clinical Laboratory Science (formerly Medical Technology)

Health Information Management
Health Information Systems
Health Information Administration
Coding Specialist

utrition and ietetics
Dietetic Technology
Nutrition and Dietetics

ccupational herapy
Occupational Therapy Assistant
Occupational Therapy

hysical herapy
Physical Therapist Assistant
Physical Therapy

adiation echnology
Medical Radiography
Radiation Sciences
Radiation Therapy Technology
Radiologist Assistant
Diagnostic Medical Sonography
Medical Dosimetry
Nuclear Medicine Technology
Special Imaging Technology: CT/MRI

Speech Language athology and Audiology
Speech-Language Pathology
Speech-Language Pathology Assistant
Speech-Language Pathology and Audiology

Loma Linda University
School of Allied Health rofessions
Bulletin 2004-2005

Loma Linda, California
http://www.llu.edu/llu/sahp/

Cover: The Good Samaritan sculpture, located on the campus mall, is a representation of the parable told by Jesus and recorded in Luke 10:30-37.

This BULLETIN is the definitive statement of the School of Allied Health Professions on the requirements for admission, enrollment, curriculum, and graduation. The School of Allied Health Professions reserves the right to change the requirements and policies set forth in this BULLETIN at any time upon reasonable notice. In the event of conflict between the statements of this BULLETIN and any other statements by faculty or administration, the provisions of this BULLETIN shall control, unless express notice is given that the BULLETIN is being modified.

The information in this BULLETIN is made as accurate as is possible at the time of publication. Students are responsible for informing themselves of and satisfactorily meeting all requirements pertinent to their relationship with the University. The University reserves the right to make such changes as circumstances demand with reference to admissions, registration, tuition and fees, attendance, curriculum requirements, conduct, academic standing, candidacy, and graduation.

BULLETIN OF
LOMA LINDA UNIVERSITY
Volume 92, Number 1, November 15, 2003

Published twice a month November 15, 2003;
once a month December 30, 2003;
once a month June 30, 2004.

Loma Linda, CA 92350
LLUPS PS27075

printed on recycled paper

Bulletin of the

School of Allied Health Professions

2004-2005

This is a one-year BULLETIN,
effective beginning Summer Quarter 2004.

Loma Linda University
Loma Linda, CA 92350

a health-sciences university

C S

I

L MA LI A I SI

II

H SCH L ALLI H AL H SSI S

III

H A M S

Welcome to Loma Linda University School of Allied Health Professions,
housed in Nichol Hall
(formerly Loma Linda Sanitarium).

I

LOMA LINDA UNIV I

University Foundations

Our Mission

Nondiscrimination Policy

Affirmative Action

The Calendar

ni ersity oundations

HIS

Loma Linda University has grown out of the institution founded at Loma Linda, California, by the Seventh-day Adventist Church in 1905. The original schools—Nursing and Medicine—have been joined by Allied Health Professions, Dentistry, Public Health, School of Pharmacy, the Graduate School, and the Faculty of Religion.

The University, operated by the Seventh-day Adventist Church, is committed to the vision of its founders and is sustained by its close association with the church.

Loma Linda University is a Seventh-day Adventist coeducational, health-sciences institution located in inland southern California. It is part of the Seventh-day Adventist system of higher education. Professional curricula are offered by the Schools of Allied Health Professions, Dentistry, Public Health, Medicine, Pharmacy, and Nursing. Graduate programs in various biomedical sciences are offered by departments of the schools. The professional curricula of the University are approved by their respective professional organizations.

The most current campus census figures (July 1, 2003) indicate that the core of the combined faculties consists of 1,071 full-time teachers. Part-time and voluntary teachers, largely clinicians in the professional curricula, bring the total to 2,565. As of Autumn Quarter 2002, students from 93 countries are represented in the enrollment of 3,520.

HIL S H

As implied by its motto, “TO MAKE MAN WHOLE,” the University affirms these tenets as central to its view of education:

God is the creator and sustainer of the universe.

Mankind’s fullest development entails a growing understanding of the individual in relation both to God and society.

The quest for truth and professional expertise, in an environment permeated by religious values, benefits the individual and society and advances the ministry of the Seventh-day Adventist Church.

ACADEMIC EXCELLENCE

We respect our faculty, staff, and administration who through education, research, and service create a stimulating learning environment for our students. They contribute to the development of new understandings in their chosen fields. They demonstrate both Christian values and competence in their scholarship and professions.

HUMANITARIAN SERVICE

We provide humanitarian service through people, programs, and facilities. We promote healthful living and respond to the therapeutic and rehabilitative needs of people. We seek to enhance the quality of life for individuals in local, regional, national, and world communities.

CHRISTIAN MISSION

We believe all persons are called to friendship with a loving God both now and throughout eternity. We support the global mission of the Seventh-day Adventist Church by responding to the need for skilled Christian health professionals and scholars. We seek to honor God and to uphold the values of the Seventh-day Adventist Church and its commitment to awakening inquiry. We are drawn by love to share the good news of God expressed through the life and gospel of Jesus Christ and to hasten His return.

ondiscrimination olicy

The University was established by the Seventh-day Adventist Church as an integral part of its teaching ministry. It is committed to equal education and employment opportunities for men and women of all races and does not discriminate on the basis of handicap, gender, race, color, or national origin in its educational or admissions policies, financial affairs, employment programs, student life and services, or any University-administered program.

Any student with a documented disability (e.g., physical, learning, or psychological) who needs to arrange reasonable accommodation must contact the dean, or designee, of the School of Allied Health Professions. All discussions will remain confidential.

To this end, the University is in compliance with Titles VI and VII of the Civil Rights Act of 1964 as amended, and in substantial compliance with Title IX of the Education Amendments of 1972 (34 CFR 106 et seq.), Sections 503 and 504 of the Rehabilitation Discrimination in Employment Act of 1967, and Section 402 of the Vietnam Era Veterans Adjustment Act of 1974; and does not discriminate against any employees or applicants for employment on the basis of age or because they are disabled veterans or veterans of the Vietnam era. In addition, the University administers student programs without dis-

Affirmative Action

The University routinely monitors its educational and employment practices regarding women, minorities, and the handicapped to ensure compliance with the law and University policy. The University's affirmative action policy is to provide

he Calendar

’2[illegible]
MA

he Calendar

'2 0

S M

S	M					S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30		

3	Summer Quarter ends
6	Labor Day recess

PO T S ON 2004

7	Instruction begins (unless otherwise noted in class schedule)
3–20	Fourteen-day session: Nutrition and Dietetics
7-17	Nine-day session

C

S	M					S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

M

S	M					S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				

he Calendar

2004

DEC MBER

S	M					S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

1–24	Registration for Winter Quarter
3	Christmas tree lighting
6–10	Final examinations
10	Autumn Quarter ends
11–JAN 2	Christmas recess: 23 days
15	Grades due from faculty
20	Instruction begins for Radiation Technology–Medical Radiography (A.S. degree, 2nd year); Radiation Therapy Technology; Diagnostic Medical Sonography; Nuclear Medicine Technology; Special Imaging Technology

2005

JANUARY

S	M					S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

WINTER QUARTER 2005

3–MAR 18	Winter Quarter total days (including examinations): 53
3	Instruction begins (all schools, unless otherwise noted)
3	Instruction begins for Radiation Technology B.S. degree; and for Medical Radiography A.S. degree, 1st year
3	Last day to obtain financial clearance
3-Mar 25	PA Program, 2nd year Winter Quarter clerkships
10–15	Mission Emphasis Week
11	Last day to enter a course or change from audit to credit/credit to audit
12	Martin Luther King, Jr., Symposium for Diversity in Health Care
17	Martin Luther King, Jr., Day recess
18	Last day to withdraw with no record of course registration on transcript
18-21	Student Week of Spiritual Emphasis

FEBRUARY

S	M					S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28					

1–28	Black History Month
2	BHPSA chapel
14	Instruction begins for Cytotechnology
17	Registration for Cytotechnology
21	Presidents' Day recess
26	BALL Banquet
28	Last day to withdraw with a W grade or to submit S/U petition
TBA	SAHP, GS, SN Job Fair

MARCH

S	M					S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

1–25	Registration for Spring Quarter
8	Term III practicum begins for Clinical Laboratory Science **Seniors**
14–18	Final examinations
18	Winter Quarter ends
19–27	Spring recess: 9 days
23	Grades due from faculty
24	PTA Winter Quarter ends
26-APR 3	PA program, 2nd year Spring recess

SPRING QUARTER 2005

28–JUN 10	Spring Quarter total days (including examinations): 54
29	Last day to obtain financial clearance
29	Instruction begins (unless otherwise noted in class schedule)

he Calendar

[illegible]

A IL

S	M					S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

4-Jun 3	PA Program 2nd year Spring Quarter clinical rotations
4–8	Spring Week of Devotion
5	Last day to enter a course or change from audit to credit/credit to audit
12	Last day to withdraw with no record of course registration on transcript record
24	SAHP alumni weekend

MA

S	M					S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

15	Diversity Consecration Service
24	Registration for Cytotechnology certificate
23	Instruction begins for Cytotechnology certificate
23	Last day to withdraw with a W grade or to submit S/U petition
26	SAHP MOT Research Colloquiam
30	Memorial Day recess

S	M					S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30		

1–17	Registration for summer session
6–10	Final examinations
6-AUG 26	PA program, 2nd year clinical rotations
10	*Focus on Graduates* Vespers: AH, GS, PH, SN
10	Spring Quarter ends
11	Baccalaureate: AH, GS, PH, SN
11	Dietetics Pinning Service
12	Occupational Therapy and OT Assistant Pinning Service
12	Conferring of Degrees: AH, GS, PH, SN
15	Grades due from faculty

S ON 2005

13–SEP 23	Nutrition and Dietetics Summer Practicum
20–JUL 26	First five-week summer session
20–SEP 23	PA program, 1st year summer session
21–SEP 3o aud27j8	Registration summer session ... SEP 23 Last dIndepj-enJ-cess

L

S	M					S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

A S

S	M					S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

S S MM S SSI S 2[illegible]

5 Labor Day recess

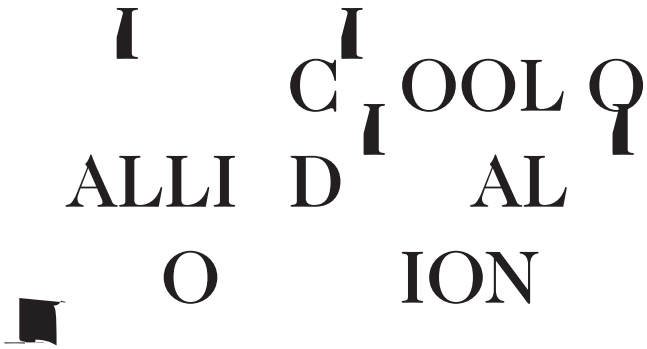
6-16 Total days of instruction: 9

A M A 2[illegible]

21-DEC

Welcome!
Emmalein Dharmaraj speaks for everyone here
at the School of Allied Health Professions.
We are very pleased, indeed, that you are considering
a career in the allied health professions.
The faculty, administrative personnel, and staff
are here to help in the decisions for your future
in whatever way we can.

II



Welcome to the School of Allied Health Professions at Loma Linda University. Here you will receive a quality education from a committed faculty and staff. Regardless of the discipline you have chosen to study, we believe we offer an environment that fosters academic excellence, professional competence, and spiritual development.

Our close and effective connection with Loma Linda University Medical Center enables both students and faculty to stay on the cutting edge of health care practice. The School's more than 1,300 clinical affiliations throughout the United States offer a wide variety of experience options designed to develop a well-rounded health care professional.

In the School of Allied Health Professions, we are committed to your education and professional development and believe that it is more than just clinical competence—it is our emphasis on the development of the caring and compassionate professional—that sets us apart.

Craig R. Jackson, J.D., M.S.W.
Dean

3. Demonstrate compassion for others in the manner of Christ.
4. Clarify his/her values and attitudes of human worth in relationship to his/her understanding of God.
5. Perform effectively within a team setting.
6. Communicate effectively with peers, supervisors, patients, family, and the community—orally and in writing—with sensitivity to nonverbal communication.
7. Analyze and respond to the changing field of health care.
8. Critically analyze data.
9. Read and interpret research papers.
10. Contribute to the chosen health profession through participation in professional organizations.
11. Utilize a theoretical foundation as a basis for treatment or management.
12. Incorporate wholeness into all aspects of personal and professional life.
13. Use sensitivity to accommodate diversity among individuals.
14. Commit to lifelong personal and professional learning.

eneral Information

ACC _ _I A I

The programs are approved by the appropriate accrediting agencies, and graduates are eligible to take the qualifying examinations of the respective state and national licensing or registration bodies and to join the professional organizations. Details of accreditations are given in the individual sections and in the accreditation sections of division VI of this BULLETIN.

A_MI IS A I

The dean, the chief administrative officer of the School, presides over the Administrative Council, which meets regularly during the school year. The chairs of the departments direct the teaching of the programs. Advisory committees of outstanding professionals in the fields of education and the allied health professions assist the department chairs in the continuing study of the curricula and in the preparation of recommendations.

I S C I AL ACILI I S

The academic resources and the affiliated clinical facilities of the University constitute a rich educational environment for the health-professions student, both in classroom instruction and in guided experience in hospitals and clinics. Major facilities utilized for clinical affiliations and internships include the University Medical Center; the Jerry L. Pettis Memorial Veterans Medical Center; and other hospitals and community agencies located in the Redlands, San Bernardino, Riverside, and Los Angeles areas, as well as throughout the United States.

A LICA I A _ACC A C

here to rite

Correspondence about admission to all programs and requests for application information should be addressed to:

Office of Admissions and Records
School of Allied Health Professions
Loma Linda University
Loma Linda, CA 92350

Applications are available on line at <http://www.llu.edu>. (Click on "apply" under Loma Linda University.)

Apply early

One class is admitted annually to most of the professional programs. Most programs begin with the Autumn Quarter. Exceptions are noted in the respective departmental sections of this BULLETIN.

Late applications are considered as long as space is available. Notifications generally are sent between January 1 and May 15, depending on the completeness of information provided and the date of application. Applicants should inquire at the Office of Admissions and Records if notice of action is not

Applicant s records

The application and all records submitted in support of the application become the property of the University.

A C I M S

Sub ect, diploma re uirements

High school and college subject requirements for each program are outlined in the respective departmental sections of this BULLETIN. Students are required to furnish evidence of completion (official transcript) of high school to be granted admission to undergraduate programs in schools of the University. A high school diploma or its equivalent, the GED, is required.

rade re uirement

Eligibility for consideration by the Admissions Committee is based on a grade-point average of at least 2.0 (on a 4.0 scale) for all course work (science and nonscience subjects computed separately) presented in fulfillment of entrance requirements for all programs in the School. A grade-point average considerably higher than the minimum is expected because of the nature of the studies in many professional programs and the competition for the limited number of openings. In general, grade-point averages between 2.5 and 3.0 are considered minimal, depending on the program. A minimum grade of C (2.0) is required for all college transfer courses.

ranscripts

Transcripts (the documents by which institutions officially convey the grades and credits earned in specific subjects and the stage of completion of curriculum requirements) are accepted only when sent directly to the University by the issuing institution. Transcripts received by the University become the property of the University and will not be released to the student or forwarded to any other institution upon request of the student.

est re uirement

Upon acceptance, a self-study syllabus will be sent to the student in preparation for a mathematics screening examination that will be given immediately following registration. Those scoring below the acceptable minimum will be required to do remedial work and retake the test.

A writing skills pretest is also administered. The scores for the Wholistic Grading Rubric (WGR) are shown below. Any student scoring less than 4 will be required to do remedial work during the program and retake the test. The pretest is graded on the following criteria:

6= Demonstrates clear competence in writing on both the rhetorical and syntactic levels, though the essay may have occasional errors.

5= Demonstrates competence in writing on both the rhetorical and syntactic levels, though the essay will probably have occasional errors.

4= Demonstrates minimal competence in writing on both the rhetorical and syntactic levels.

3= Demonstrates some developing competence in writing, but the essay remains flawed on either the rhetorical or syntactic level, or both.

Student Life

T

H L S H AL H

The University regards the student from a cosmopolitan and comprehensive point of view—

- cosmopolitan, in that historically the University's global mission has promoted bonds and opportunities in education and service without regard to gender, national or racial origin, or geographical origin; and
- comprehensive, in that the University's concern for the welfare of the student traditionally has been an integrated concern for assisting the student in balanced development.

Loma Linda University offers opportunities for students to complement their formal learning through participation in a wide variety of recreational, cultural, and other activities which can enrich their group interaction and leadership experiences, increase their interests in fields outside their profession, develop their talents, and enhance wholesome and memorable association with others.

Students from all schools of Loma Linda University may congregate and participate in the multifaceted programs offered that involve the wholistic concept of social, intellectual, physical, emotional, and spiritual wellness. These programs support Loma Linda University's motto, "To make man whole."

S I I AL H AL H

Opportunities for personal development and spiritual enrichment are provided in the regular schedule of religious exercises and activities and in informal association with others who cherish spiritual values.

Through the Faculty of Religion, required and elective classes are offered—in foundational studies (biblical, theological, historical, and mission); in personal, professional, and social ethics; and in relational studies (applied theology, clinical ministry, and psychology of religion).

I SI S AMIL C S LI C

The University Counseling Center offers a variety of confidential services to students and their families, including: individual, premarital, marital, family, and group counseling regarding issues of adjustment, anxiety, depression, etc.; skills in time management, studying, and test-taking; and 24-hour emergency crisis intervention. The center is located at 11374 Mountain View Avenue, Loma Linda. Full-time students may receive up to nine free visits. Call 909/558-4505 (or, on campus: 66028) to schedule an appointment or for more information.

S ASSIS A C AM

The Loma Linda Student Assistance Program (LLSAP) provides professional and caring assessment and treatment for a variety of personal, family, work, and school-related issues. Student Assistance Program clinicians will develop a treatment plan that may include free short-term counseling, up to eight sessions. If more extensive treatment is appropriate, clients are referred to a community therapist who specializes in the student's area of concern and who is covered by the student's health plan. All information is confidential. Clinicians in the program will not release information without the written consent of the student, with the exception of matters that fall under mandatory reporting laws.

Loma Linda Student Assistance Program, the only nationally accredited student assistance program in California, has provided state-of-the-art services to students since it was established in 1990.

Appointments may be scheduled during office hours (on-campus extension—66050; off-campus telephone—558-6050): Monday through Wednesday 8 a.m.-5 p.m.; Thursday 8 a.m.-8 p.m.; Friday 8 a.m.-1 p.m. Additional appointment times may be available upon request. All LLSAP services are free of charge. The program is located at:

11360 Mountain View Avenue
Hartford Building, Suite A
Loma Linda, CA 92354.

S AL HA ASSM

Sexual harassment is reprehensible and will not be tolerated by the University. It subverts the mission of the University and threatens the careers, educational experience, and well-being of students, faculty, employees, and patients.

Because of the sensitive nature of situations involving sexual harassment and to assure speedy and confidential resolution of these issues, students should contact one of the School's designatand d to assur

ersonal appearance

Students in the classroom or clinical environment must exhibit personal grooming consistent with expectations of the health care institution, the profession, the School, and the University. Specific guidelines regarding grooming and attire are provided by the School; in the *Student Handbook*; and in this BULLETIN in the section **oli ies and eneral e ulations**, under PROFESSIONAL STANDARDS.

ersonal property

The School assumes no responsibility for the loss of the student's personal property, instruments, or other items by theft, fire, or unknown causes. The student is expected to assume responsibility for the safekeeping of personal belongings.

Cars and transportation

Students are responsible for transportation arrangements and costs for off-campus assignments and clinical affiliations. All vehicles used to transport fellow students for off-campus assignments must be registered with Campus Safety and must have adequate public liability insurance—a minimum of $100,000 bodily injury and property damage liability.

The University enforces traffic rules and regulations as provided for by the State of California Vehicle Code. It is the sole responsibility of the driver of any vehicle on University property to become familiar with these regulations. Drivers are held responsible for any infraction of the regulations. Copies of the brochure entitled "Loma Linda University Traffic and Parking Regulations" are available at the University Department of Safety and Security. Vehicles used by students on campus must be registered with the University Department of Safety and Security. Returning students must go to the University Department of Safety and Security to renew registration each quarter.

le for aacccccccccccccccde It is are a ai ings f 2020il \ 20i 1 ions fto i erets

ACADEMIC AUTHORITY

The Office of the Dean is the final authority in all academic matters, with the exception of General Education requirements, and is charged with the interpretation and enforcement of academic requirements. Any exceptions or changes in academic requirements, graduation requirements, or grades are not valid unless approved by the dean. Any actions taken by individual faculty members with regard to these matters are advisory only and are not binding on the School or the University unless approved by the dean.

ACADEMIC INTEGRITY

Acts of dishonesty—such as but not limited to theft; plagiarism; knowingly giving, obtaining, or falsifying information during examinations or other academic or professional practice assignments—can be cause for dismissal from the School. Instructors and students are charged with the responsibility of reporting instances of such behavior to the department chair for investigation. Substantiated violations are to be brought before the dean for disciplinary action.

The minimum disciplinary actions to be taken for plagiarism include:

first offense—a failing grade on the assignment;

second offense—failure in the course without possibility of withdrawal.

Cheating will result in failure in the course without possibility of withdrawal and may result in dismissal from the program.

Financial Aid) will the course(s) count on the student's total load as eligible for financial-aid and loan-deferment purposes.

A person who is not enrolled in regular classes but who is occupied in research, dissertation, or thesis, is classified as a student. By filing an Academic Load Validation form every quarter at registration, the academic load may be validated for loan-deferment and immigration purposes. The student must be carrying IP (in progress) units or registered for a minimum of 1 new unit of research, dissertation, or thesis for the quarter. The academic work load is counted as follows:

full load—minimum of 36 clock hours/week

three-quarter load—minimum of 27 clock hours/week

one-half load—minimum of 18 clock hours/week

one-quarter load—minimum of 9 clock hours/week.

A student may simultaneously earn more than one baccalaureate degree, provided there is a minimum of 20 units unique to each degree and provided all other degree requirements are met.

raduate le el courses

Seniors who meet prerequisites may, with approval of the instructor and consent of the dean of the School of Allied Health Professions and the dean of the school offering the course, enroll for a limited number of graduate-level courses (500-level or above). Only with special permission may credit be applied to the undergraduate degree, in which case the credit will not apply toward a graduate degree.

Attendance

Regular attendance at all appointments (class, clinical, laboratory, special assignment, chapel) is required beginning with the first day of each term. Voluntary absences from laboratory assignments are not permitted.

Special e amination

It is expected that the student will take quizzes and examinations at the regularly scheduled time. To take an examination at a time other than when it is scheduled, the student must secure the consent of the instructor and the chair of the department and must file with the instructor a permit obtained from the Office of the Dean. A fee is charged for a special examination. (See the Schedule of Charges in the Financial Information section of this BULLETIN.)

Academic residence

In order to graduate from Loma Linda University with a bachelor's degree, a student must complete at least 32 of the last 48 units, or a minimum of 45 total units of course work, at this University. A minimum grade of C (2.0) or better is required for all B.S. and postbaccalaureate degrees.

Lea e of absence

A student who requires a temporary discontinuance of studies must request in writing a leave of absence after one quarter's absence. The maximum term for a leave is one year. A student who is not registered after one quarter's absence (summer excluded in most cases) and has not requested a leave of absence will be considered no longer in the program. In this case the student who seeks re-entry must meet the entrance requirements in force at the time of re-entrance and will enter under the new BULLETIN.

SSI AL S A A S

It is important that students portray a professional image to those with whom they come in contact. Inappropriate dress, grooming, or conduct often detracts from patients' confidence in the quality of their care. In addition, Loma Linda University's affiliating hospitals have standards that are reflected in the guidelines below. For these reasons the following standards are provided. Students are required to adhere to these standards while enrolled in the program.

A student failing to observe these dress and grooming codes may be dismissed by a faculty member from a class or building. Students will be allowed to return to the class/building when the problem is eliminated.

ersonal grooming

Good taste indicates that haircuts, hairstyling, and personal grooming be neat, and conservative rather than ostentatious. Grooming and style should also be practical, so that the student can perform assigned duties without embarrassment or inconvenience. Specifically:

- Men's hair must be neatly trimmed and not fall below the collar. Ponytails, spikes, and dreadlocks are not acceptable.
- Mustaches and beards, if worn, must be neat and closely trimmed.
-

Audit

Certain courses (excluding laboratory courses) may be audited. Consent for enrollment as an auditor is granted by the department, with the endorsement of the dean, and is subject to classroom space. Change of classification from audit to credit or from credit to audit may be done only during the first seven calendar days of the quarter for courses following the general University calendar. For other courses, the change may be made with the consent of the dean. (For tuition rates, see the Schedule of Charges in the Financial Information section of this BULLETIN.)

Academic standing

A student's standing in the School is classified either as regular standing or academic probation, depending on his/her scholastic performance.

Student level

Students enrolled in a professional program in which they are classified as freshman, sophomore, junior, or senior will be classified according to the level of the course work they are taking (e.g., a student with a previous baccalaureate degree pursuing another baccalaureate degree would be classified as a sophomore while taking sophomore-level courses, etc.).

Students enrolled in block programs are classified according to the level of the block in which they are enrolled (e.g., master's—1st, 2nd, or 3rd year; certificate—1st, 2nd, or 3rd year; as well as freshman, sophomore, junior

UW Unofficial Withdrawal—indicates that the student discontinued class attendance after the close of registration but failed to withdraw officially.

I Incomplete—given when the majority of the course work has been completed and circumstances beyond a student's control result in the student being unable to complete the quarter. An I notation may be changed to a grade only by the instructor before the end of the following term (excluding the summer session for those not in attendance during that term). Incomplete units are not calculated in the grade-point average.

By the use of the petition form, the student requests an I notation from the instructor, stating the reason for the request and obtaining the signatures of the instructor, the department chair, and the associate dean. The form is left with the instructor. The instructor then reports the I notation on the grade-report form, as well as the grade the student will receive if the deficiency is not removed within the time limit. The petition form is then filed with the Office of University Records, along with the grade-report form.

The notation I is not granted as a remedy for overload, failure on final examination, absence from final examination for other than an emergency situation, or a low grade to be raised with extra work.

IP In Progress—indicates that the course has a duration of more than a single term and will be completed by the student no later than the final term of the course, not to exceed five quarters for independent study and research courses (original quarter of registration plus four additional quarters). The student's final grade is reported on the instructor's grade report at the end of the term in which the course is completed. If the course work is not completed within the five-quarter time limit, a grade of U will be given.

AU Audit—indicates registration for attendance only, with 80 percent class attendance considered a requirement. A request to change a credit course to audit or an audit course to credit may be made no later than the fourteenth calendar day after the beginning of a quarter or the seventh calendar day after the beginning of the summer session. (This does not apply to short summer courses lasting only a week or two.)

AUW Audit Withdrawal—given for withdrawing from the course or to indicate that the 80 percent class attendance requirement was not observed.

epeating a course

A student who receives an unsatisfactory grade in a required course and is required by the faculty to do additional work may request of the faculty permission to pursue one of the following plans. In either plan the student must register and pay the applicable tuition.

1. Review the course work under supervision and take a make-up examination (usually not given before a minimum of two weeks of study). A passing grade resulting from a repeat examination will be limited to a C (2.0). (See the Schedule of Charges in the Financial Information section of this BULLETIN for the tuition rate for tutorial course work.)
2. Repeat the course, attend class and/or laboratory, and take the final course examination. Full tuition will be charged whether regular or occasional attendance is required. (See the Schedule of Charges in the Financial Information section of this BULLETIN for the tuition rate.)

A student who receives an unsatisfactory grade in a required clinical experience course and is required by the faculty to do additional work must reregister and pay the applicable fee. (See the Schedule of Charges in the Financial Infor-mation section of this BULLETIN for the fee for repeat of clinical experience.)

Both the original and repeat grades are entered in the student's permanent academic record, but only the repeat grade is computed in the grade-point average. A course may be repeated only one time.

romotion and probation

Each student's record is reviewed quarterly by the faculty. Promotion is contingent on satisfactory academic and professional performance and on factors related to aptitude, proficiency, and responsiveness to the established aims of the School and of the profession. As an indication of satisfactory academic performance, the student is expected to maintain the following grade-point average:

2.0	Associate and baccalaureate degree programs
2.5	Master's degree program
3.0	Doctoral degree program

A student whose grade-point average in any term falls below the minimum required for the degree, or who receives in any professional or required course a grade less than a C (2.0), or whose clinical performance is unsatisfactory is automatically placed on academic probation. Continued enrollment is subject to the recommendation of the department. If continued enrollment is not recommended, the case is referred to the Administrative Council of the School for final action.

If continued enrollment is recommended, the student will be required to institute a learning assistance plan within the first two weeks of the following quarter and meet regularly scheduled appointments with the academic adviser. The learning assistance plan should: identify the problem, identify and list the goals, state the time frame, and include student and adviser signatures and date.

A student who is on academic probation and fails to make the minimum required grade-point average the following quarter or fails to have an overall minimum grade-point average after two quarters will have disqualified him-/herself from the program.

Standard of student progress time frame or

Students must complete their degree programs within the following maximum time frameworks from their initial enrollment in the program:

A.S. degree	3 years
B.S. degree	5 years
Master's degree	5 years
Doctoral degree	7 years

ismissal, grie ance

A student who is involved in dismissal proceedings or who has an academic or clinical grievance may proceed as follows:

1. The student should first discuss the problem or grievance with the instructor. If, following discussion with the instructor, the student is not satisfied and continues to believe that s/he has not been dealt with fairly, the student may discuss the grievance with the chair of the department or with the program director involved.
2. If the matter is not resolved at this level, the student has recourse to the Office of the Dean.
3. As a final appeal, the student may request the dean to appoint a faculty review committee to evaluate the situation and make a recommendation to the dean. This request should be presented in writing and include pertinent information regarding the situation. The student may request to meet with the review committee for discussion of the case. The student must file for the grievance proceeding within one quarter following the alleged grievance. A grievance is ineligible for review if not filed within this time frame.

A A I I M S

A candidate for a degree shall have met the following conditions:

1. Completed all requirements for admission to the respective program, as well as all General Education requirements of the University.
2. Completed all requirements of the program, including specified attendance, level of scholarship, and number of credit units.
3. Completed a minimum of 96 quarter units for the associate degree or 192 quarter units for the baccalaureate degree, with a minimum grade-point average of 2.0 (2.5 for the Master of Occupational Therapy and the Master of Physical Therapy degree; 3.0 for the Doctor of Physical Therapy) and with no grade less than C (2.0).
4. Given evidence of moral character, of due regard for Christian citizenship, and of consistent responsiveness to the established aims of the University and of the respective discipline.
5. Discharged financial obligations to the University.

A A I C M I S

Graduation events include formal ceremonies identified as conferring of degrees, awarding of diplomas, and recognition of candidates for degrees. Other related graduation events include the baccalaureate and vesper services. The conferring of

dQhe assoSu/ assoSonfa62legrees 3sto the de[(D,l -1.111j0 -1ees,

The **athleen een olber Scholarship A ard** is given by the department to selected juniors in recognition of scholarship and promise of outstanding professional achievement.

The **Lydia Sonnenberg Scholarship A ard** is presented annually to selected junior students. Selection is based on academic performance as well as demonstrated skill and interest in publishing nutrition information for the public.

The **Martha Miller Scholarship A ard** is given annually to a sophomore or junior student based on scholarship, demonstrated financial need, and promise of outstanding professional achievement.

The **utrition and ietetics Alumni Associ ation Scholarship A ard** is given annually to a senior student who has demonstrated outstanding academic performance and promise of expertise in professional achievement.

The **utrition and ietetics aculty A ard**, presented to selected junior students, is based on scholarship, promise of professional achievement, and demonstrated financial need.

The **uth Little elson Scholarship A ard** is presented to selected students in the junior year. Selection is based on scholarship; leadership; financial need; and such personal attributes as integrity, dependability, and initiative.

The **inifred an elt Schmitt Scholarship ndo ment** provides scholarships to nutrition and dietetics students who have demonstrated financial need, satisfactory progress toward a degree, and professional progress.

CC A I AL H A

The **aniel Alan ibson Memorial Scholarship A ard** is given to MOT students based on financial need, and recognizes commitment to the practice of physical dysfunction/orthopedics in occupational therapy.

The **d inna Marshall Scholarship A ard** is given annually to MOT students based on financial need, and recognizes potential for leadership and education in the field of occupational therapy.

The **aculty A ard** is presented to a Master of Occupational Therapy degree student and to an occupational therapy assistant student who have shown promise of outstanding professional achievement and whose performance is in harmony with the objectives of the University.

The **Inland Counties ccupational herapy Association of California A ard** is presented to senior occupational therapy and occupational therapy assistant students in recognition of excellent academic and clinical performance.

The **Lynn Arrateig Memorial Scholarship A ard** is given annually to an OTA or MOT student based on financial need, and recognizes commitment to the practice of pediatrics or geriatrics in the field of occupational therapy.

The **ccupational herapy Alumni Associa tion A ard** recognizes outstanding scholastic and professional achievement in occupational therapy. The award is presented to a Master of Occupational Therapy degree student and an occupational therapy assistant student.

The **ccupational herapy ndo ment Scholarship A ard** is given annually to OTA and MOT students based on scholarship, financial need, and promise of professional achievement.

The **ose ucher Memorial Scholarship A ard** is given to MOT students based on financial need, and recognized commitment and creativity in the practice of occupational therapy.

The **Southern California Consultants Scholarship A ard**, presented annually to two occupational therapy assistant students, is based on scholastic achievement and financial need.

H SICAL H A

The **aculty A ard is** presented to a senior who has shown promise of outstanding professional achievement and whose performance is in harmony with the objectives and goals of the University.

The **red Moor A ard** is presented to a senior who has demonstrated exceptional clinical skills and knowledge in the care of physical therapy patients.

The **hysical herapy Alumni Association Achie ement A ard** recognizes outstanding scholastic attainment and active participation in physical therapy student activities and community involvement.

The **hysical herapy Alumni Association Scholarship A ard** recognizes the student with the highest scholastic attainment in professional studies.

The **on Hershey Student ndo ment** provides scholarship funds for students who demonstrate a financial need and exemplify the Christian qualities of love, patience, caring, humility, and a striving for excellence.

The **homas ur e Memorial Scholarship A ard** recognizes the outstanding student in the pursuit of and dedication to a second career.

A A I CH L

The **aculty A ard** is given by the department in recognition of superior scholarship.

he alter L Stilson A ard is given to a student in each clinical facility who has shown promise of outstanding professional achievement and whose performance is in harmony with the objectives of the University.

S CH LA A A H L A A L

The **elyn ritt romising Student A ard** is presented to students preparing for graduate work in speech-language pathology and audiology. It recognizes students who show promise of scholastic and professional achievement.

The **utstanding Senior A ard** is given to a student who has performed well academically, developed good clinical skills, and contributed to creating a positive learning environment within the department.

A SA A

The **ean s A ard** is made annually in recognition of academic excellence and commitment to the objectives of the School.

CHA C LL SA A

The Chancellor's Award, established in 1960 as the President's Award, is made annually in recognition of superior scholastic attainment and active participation in the student community, within the framework of Christian commitment. A recipient is selected from each school of the University.

International students

International students must be prepared to provide an advance deposit as required by the University and must provide documentation that additional funds will be forthcoming to meet school expenses. The deposit will be held by the University during the program of study and will be applied to the last quarter's tuition charge.

Scholarships and assistantships for international students are scarce, and employment is limited by regulations of the Immigration and Naturalization Service to no more than twenty hours per week. Unless special permission is given by immigration authorities, international students are restricted to employment on campus.

eteran s benefits

Under Title 38 of the U. S. Code, Loma Linda University is approved for the training of veterans and other eligible persons. Information regarding eligibility for any of these programs may be obtained by calling 1-888-GIBILL1 or 1-888-442-4551. Students receiving veteran's benefits, but who fail for three consecutive quarters to maintain the required cumulative grade-point average (G.P.A.) for graduation, will have their benefits interrupted; and the Veterans Administration (VA) office will be notified.

Application for benefits must be made directly to the VA and may be done via the web. The Office of University Records serves as the certifying official for Loma Linda University. Students should contact the certifying official prior to their first enrollment certification. For more information, open links to the VA web site ("Students" and "Prospective Students") on the LLU home web page at <http://www.llu.edu>.

Health ser ice

All full-time students taking at least 7 paid units who have enrolled in the Student Health Plan through Risk Management are automatically covered by health-service provisions. Students enrolled for fewer than 7 units per quarter may request and pay for health-service coverage. Hospital and medical expenses outlined in the *Student Health Plan* booklet are covered. Items not covered by the terms of the plan are payable by the student in all cases, and payment is expected at the time these services are given. Students may purchase family coverage through the Department of Risk Management. (See also Student Health Plan paragraphs in the Student Life section of this BULLETIN.)

SCH L CHA S 2011 2011
D u e, t to, han e y Board of rustees a, tion

NOTE: Tuition rates are effective Summer Quarter through the following Spring Quarter.

uition information by department

Column **1** a, ademi, year/, lass
Column **2** total units for a, ademi, year
Column **3** total tuition for a, ademi, year
Column **4** spe, ified de ree or , ertifi, ate, full-time or part-time status, or tra,

1	2	3	4
C I ALLI H AL H SSI S. A\ A SCH L			
ehabilitation Science, octor of hilosophy			
	24	$11,160	
CA L LM A SCI C S			
mergency Medical Care, rogression achelor of Science, achelor of Science			
JR	37	$13,764	
SR	37	$13,764	
C MS , Center for MS ducation and esearch (contact CEMSER department for instructor- and certificate-program tuition information)			
hysician Assistant, Master of hysician Assistant			
1	56	$26,040	
2	50	$23,250	
3	12	$ 5,580	
olysomnography, Certificate (contact department for tuition information)			
espiratory Care, Certificate			
1	45	$16,740	
2	36	$13,392	
espiratory Care, achelor of Science			
JR	52	$19,344	
SR	59	$21,948	
espiratory Care, ostprofessional achelor of Science			
New	50	$18,600	
Cont.	4	$ 1,488	
CLI ICAL LA A SCI C			
hlebotomy, Certificate			
AHCJ 105	5	$279 *per unit* ($1,395 *certificate*)	
AHCJ 107	2	$279 *per unit* ($558 *certificate*)	
Cytotechnology, Certificate, achelor of Science			
1	48	$17,856	Certificate
2	16	$ 5,952	Certificate
JR	48	$17,856	B.S.
SR	58	$21,576	B.S.
Clinical Laboratory Science Formerly Medi, al e, hnolo y, achelor of Science			
JR	60	$22,320	
SR	62	$23,064	Track A, B, C
H AL H I MA I MA A M			
Health Information Systems, Master of Health Information Systems			
1	37	$17,205	full-time
2	17	$ 7,905	full-time
1	18	$ 8,370	part-time
2	25	$11,625	part-time
3	11	$ 5,115	part-time
Health Information Systems, ost Master s Certificate Units and tuition vary depending upon units transferred into Loma Linda University			

1	2	3	4

Health Information Administration, Certificate
achelor of Science

JR	51	$18,972	
SR	48	$17,856	

Part-time: units and tuition vary.

Health Information Administration, Health Information echnology HI , rogression
achelor of Science

JR	Units and tuition vary depending upon units transferred into Loma Linda University
SR	Units and tuition vary depending upon units transferred into Loma Linda University

Coding Specialist, Certificate

1	10	$ 1,810	
2	13	$ 2,353	
3	6	$ 1,086	

I I A ICS
ietetic echnology, Associate in Science

Soph	52.5	$14,648	

ietetic echnology, Certificate

	Units and tuition vary depending upon units transferred into Loma Linda University

utrition and ietetics, rogression achelor of Science, achelor of Science, Certificate

JR	59.5	$22,134	B.S.
SR	45.5	$16,926	B.S.
Cert	Units and tuition vary depending upon units transferred into Loma Linda University		

CC A I AL H A
ccupational herapy Assistant, Associate in Arts

1	51	$14,229	
2	6	$ 1,674	

ccupational herapy,
ntry Le el Master of ccupational herapy, ostprofessional Master of ccupational herapy

ntry-Level M.O. .

JR	69	$25,668	
SR	44	$16,368	
Grad	36	$13,392	
JR	65	$24,180	Track
SR	42	$15,624	Track
Grad	36	$13,392	Track

Progression M.O.T.
(applies only to graduated LLU OTA students)
5 ,2 ,5

ostprofessional M.O. .

Cert	Units and tuition vary depending upon units transferred into Loma Linda University

1	2	3	4

H SICAL H A
hysical herapist Assistant, Associate in Science

1	57	$15,903	regular
2	6	$ 1,674	regular

hysical herapy,
ntry Le el Master of hysical herapy, ntry-Level M. . .

3	33.5	$12,462

rogression Master of hysical herapy, ostprofessional Master of hysical herapy

ro ression M. . .

1	81	$30,132
2	65.5	$24,366
3	8	$ 2,970

ostprofessional M. . .

1	36	$16,740
2	9	$ 4,180

hysical herapy,
ntry Le el octor of hysical herapy, ostprofessional octor of hysical herapy, ostprofessional octor of hysical herapy Science

ntry-Level D. . .

1	83	$32,453
2	66.5	$26,002
3	33.5	$13,099
4	5	$ 1,955

ostprofessional D. . .

1	36	$16,740
2	9	$ 4,185

ostprofessional D. . . .

1	36	$16,740

1	2	3	4

adiologist Assistant, achelor of Science
achelor of Science Certificate

New	Units and tuition vary depending upon units transferred into Loma Linda University		
Cont	Units and tuition vary depending upon units transferred into Loma Linda University		

iagnostic Medical Sonography, Certificate

New	17	$ 7,905	Track 1
Cont 1	19	$ 8,835	Track 1
Cont 2	3	$ 1,395	Track 1
New	22	$10,230	Track 2
Cont	1	$ 465	Track 2

Medical osimetry, Certificate

New	33	$ 15,345	Track A
Cont	4	$ 1,860	Track A
New	27	$ 12,555	Track B
Cont	3	$ 1,395	Track B

uclear Medicine echnology, Certificate

New	15	$ 6,975
Cont	3	$ 1,395

Special Imaging echnology- C M I Certificate

New	18	$ 8,370

S CH LA A A H L A
A L

Speech Language athology, ost achelor of Science Certificate

51	$18,972

Speech Language athology Assistant, Associate in Science
(contact department for tuition information)

peech Language athology and Audiology, achelor of Science

AMI A I A M M SHI S

ational and state fees

$ 80	California Interim Permit for Physician Assistants (initial application and fingerprint fees)
89	Clinical Laboratory Scientist License—California
145	Clinical Laboratory Scientist License—National Certifying Agency
145	Cytotechnology, ASCP Board of Registry
144	Cytotechnology License-California
80	Dietetic Technology, Registration Examination
125	Nutrition and Dietetics, Registration Examination
195	Health Information Management AHIMA Registry Examination (member)
245	Health Information Management, AHIMA Registry Examination (nonmember)
195	Health Information Management Certified Coding Associate (CCA)
250	Health Information Mangement Certified Coding Associate (CCA) through AHIMA (member)
275	Health Information Management Certified Coding Associate (CCA) through AHIMA (nonmember)
275	Health Information Management Certified Coding Specialist (CCS), through AHIMA (member)
320	Health Information Management Certified Coding Specialist (CCS), through AHIMA (nonmember)
275	Health Information Certified Coding Specialist Physician Based (CCS-P) through AHIMA (member)
320	Health Information Certified Coding Specialist Physician Based (CCS-P) through AHIMA (nonmember)
125	Medical Technology, ASCP Board of Registry—National
420	National Board for Certification in Occupational Therapy (NBCOT)
420	National Board for Certification in Occupational Therapy Assistant (NBCOT)
425	National Commission on Certification of Physician Assistant (NCCPA)
80	Phlebotomy Technician, ASCP Board of Registry National
54	Phlebotomy Technician License-California
687	Physical Therapist Assistant, California State Board and License
701	Physical Therapy, California State Board and License
125	Radiation Technology, American Registry
50	Radiation Technology, California License
190	Respiratory Therapy, NBRC National Certification
416	Respiratory Therapy, California State

arly application for financial aid

Applicants anticipating need of financial assistance should apply for aid early. It is not necessary to have received an accep5 695.TD0 Tced ee for aed . Priority]TJllTce gn anve rthosecation ftic whoseccr Sletedcation for fsTJ0ved an accby

We have a three-man team to insure that our operating systems support the SAHP--troubleshooter, Rajae Aree, works with Brandon Spurgeon who is responsible for the local area network (LAN). Both are under the supervison of Intithar Elias, Director of Computer Services.

adiation echnology

MEDICAL RADIOGRAPHY—Associate in Science
RADIATION SCIENCES—Bachelor of Science
RADIATION THERAPY TECHNOLOGY—Bachelor of Science; Certificate
RADIOLOGIST ASSISTANT—Bachelor of Science; Post-Bachelor of Science Certificate
DIAGNOSTIC MEDICAL SONOGRAPHY: GENERAL/VASCULAR; CARDIAC; OR VASCULAR— Certificate
MEDICAL DOSIMETRY—Certificate
NUCLEAR MEDICINE TECHNOLOGY—Certificate
SPECIAL IMAGING TECHNOLOGY: CT/MRI (COMPUTED TOMOGRAPHY / MAGNETIC RESONANCE IMAGING)—Certificate

Speech Language athology and Audiology

SPEECH-LANGUAGE PATHOLOGY—Certificate
SPEECH-LANGUAGE PATHOLOGY ASSISTANT—Associate in Science
SPEECH-LANGUAGE PATHOLOGY AND AUDIOLOGY—Bachelor of Science

A LI CA I AL I C S

The following terms—la oratory, pra ti um, and affiliation—are used to describe the applied educational experiences during the course of professional training.

Laboratory

A laboratory is an application of theory and principles to real-life situations to develop skill and proficiency and a deeper understanding of the workings of theory.

racticum

A practicum is a supervised practical application of theoretical studies to the clinical situation. Practica may occur concurrently with specific courses or may follow the completion of one or more theory courses.

Affiliation

An affiliation is a full-time experience in a clinical setting in which the student functions as a junior staff member with supervised, assigned responsibilities. The affiliation usually comes after the completion of all theoretical or preclinical studies; but in some instances, affiliations may also occur at the end of the junior year.

C I I CA I

The School of Allied Health Professions offers continuing education. Information is available from the appropriate department.

C I C S S

AHC rocedures in hlebotomy
Designed for individuals who are interested in laboratory medicine and would like to become certified phlebotomists. Students trained in venipuncture and skin puncture. Medical terminology, laboratory safety, CPR, basic anatomy and physiology, specimen-collection techniques, hazards/complications, quality-assurance methods, and medicolegal issues of phlebotomy. Clinical rotation arranged at Loma Linda University Medical Center. CPR training and certificate arranged for students who are not already certified.

Corequisite: Current CPR certificate.

AHC Ad anced hlebotomy
This course is designed for the working phlebotomist who needs to comply with California regulations. Topics include advanced techniques, complications, site selection, non-blood specimens, transport and processing, legal issues, and quality assurance. Program approved by the State of California, Department of Health Services-Laboratory Field Services.

AHC asic Communication S ills
Instruction in ESL communication skills necessary for successful engagement in college class discussions. Individual testing and interviews given to determine specific needs.

AHC Communication S ills
Advanced ESL oral communication designed to provide students with the opportunity to develop and practice oral communication techniques in professional and academic contexts, e.g., research and case presentations. Additionally, overall non-native speech patterns facilitated within these contexts to increase speech intelligibility. Course may be repeated up to four times.

AHC undamentals of Computer Systems
Fundamentals of computer technology: hardware, software, terminology, and concepts. Designed to give an understanding of how a computer works and the reasoning behind computer design. Lecture: 2 hrs per week. Lab: 1 hr per week.

AHC L ssentials of Human Anatomy and hysiology Lecture and Laboratory
Study of the structure and function of the human body, including organ systems. (Prerequisite to many certificate and associate degree programs, e.g., coding specialist/certificate, occupational therapy assistant/ A.A.). Lecture and laboratory required.

AHC Microbiology
Designed for students in the health sciences. History, classification, morphology, growth, control, transmission and pathology of selected bacteria, viruses, fungi, rickettsia, and parasites. Host defenses against microbial pathogens, including specific and nonspecific immunity. Lecture, thirty hours; laboratory, thirty hours2 TtD-1,1sW3 0 0 ies,ica[(classifica9 over4 hp284 -1.11765 TD(

AHC Medical erminology
Language of medicine, including word construction, word analysis, definitions, and the use of terms related to medical science. Course organized by body systems.

AHC ynamics of Communication
Survey of communication skills, including group dynamics, self-awareness, interpersonal relationships, learning styles, problem solving, listening skills, and body language. Systematic observation, patient-interviewing techniques, and objective medical documentation. Problem identification and goal setting in a multiperson health care-delivery system.

AHC sycho Social Models and Inter entions
Orientation to the major models in psychology and how they relate to medical care. Development of a psychological model for interpretation of needs of the person in crisis. Understanding the roles of psychiatrists, psychologists, social workers, and family therapists. Suicide intervention. Critical-incident debriefing. Support factors in providing temporary adequate psychological care for all involved in medical crisis.

AHC S Health Care eli ery System
Overview of U.S. health care delivery, including the history of health care institutions, government structure, accrediting bodies, organizations that provide health care, regulations and standards, reimbursement methods used and the professionals that provide services. Course is presented from a systems perspective and includes research into the future of health care.

AHC atient Care Methods
Foundation of basic patient-care information and skills for allied health professionals entering the clinical environment. Integrated basic-care knowledge and skills required by each profession.

AHC ortfolio racticum I ml ery system

AHC 420 Adult Learning Styles
Theories and styles of learning; personality factors related to learning; implications of effective intellectual, emotional, and social functioning included within the context of structuring education for the adult learner. Analysis of the teaching process, including setting of objectives, selection of content, and design of classroom and clinical teaching strategies, with emphasis on alternatives to lecturing.

AHC 4[illegible] Anatomy
Gross and microscopic anatomy of the human body. Lecture, laboratory, dissection, demonstration, and slides. Orientation to the structure of various systems of the body. Basic medical terminology. (Successful completion of this course is essential for continuation in the program.)

AHC 4[illegible] oundations of Health Information Systems
Survey course for students interested in pursuing a master's degree in health information systems, business majors, and others who anticipate working with databases and computer systems in health care settings. Course includes introduction to the vocabulary and the principles of health information systems, specifically, the value of information, reasons for adopting the systems approach, general systems theory, scope of a system, structure and classification of systems, and the systems life cycle.

Prerequisite: Introduction to computers.

AHC 4[illegible] ducational sychology for Health rofessionals
Psychological factors related to learning processes in professional and higher education. Emphasis on the role of communication skills in learning settings, gender influences on learning, objectives setting and course design, stimulation of higher-level thinking, motivation, and retention.

Prerequisite: AHCJ 409.

AHC 4[illegible] hysiology I
Physiology of the human body, including cellular, neuromuscular, cardiovascular, respiratory, gastrointestinal, renal, and endocrine physiology.

AHC 4[illegible] hysiology II
Detailed study of neuromuscular physiology.

Prerequisite: AHCJ 418.

AHC 4[illegible] sychology of hysical isability
Psychological reactions to illness or disability. Methods of dealing with these reactions considered with reference to the clinical situation. Seminar approach to professional responsibilities for health care.

AHC 4[illegible] Introduction to Computer Applications
Hands-on instruction in Word, Excel, and PowerPoint. Lectures, laboratory assignments, quizzes, projects, and a practical examination.
(Course not taught every quarter.)

AHC 4[illegible] Computer Applications
Review of current computer applications for health care professionals, including software/hardware for office management, graphics, educational presentations, literature acquisitions, and adaptive devices.
(Course may not be taught every quarter.)

Prerequisite: AHCJ 426 or demonstrated competency in content of AHCJ 426.

AHC 4[illegible] atabase Management
Theories and steps of database development using Microsoft Access. Topics include but are not limited to: relationships, form building, advanced queries, reporting, and macros. Project creating a basic medical-information database from scratch required. Lecture: 2 hr per week. Lab: 1-2 hr per week.

AHC 4[illegible] Special ro ects in Computer Applications
Computer systems and applications designed to meet the specific professional needs and interests of the student. Emphasizes use of databases with health care data and on-systems design, as needed. Lecture: 2 hr per week. Lab: 1-2 hr per week.

Prerequisite: AHCJ 432 or consent of the instructor.

AHC 4[illegible] euroanatomy I
Basic anatomy and function of the central, peripheral, and autonomic nervous systems and related structures. Gross anatomy of brain and spinal cord. Functional consideration of cranial nerves, tracks, and nuclei of major systems. Lecture, slides, and laboratory with specimens.

AHC 4[illegible] euroanatomy II
Study of neuroanatomical systems, structures, and pathways, with application to lesions of the human nervous system.

AHC 4[illegible] Current Issues ational and lobal erspecti es
Review and discussion of concerns relative to the health field, i.e., legislation, regulations, and professional organizations. Project or paper required.

AHC 4[illegible] esearch Methods
Introduction to the scientific method in research. Focus on the major steps of the research process as

AHC Advanced Clinical Experience to
cloc hours per term

AHC \ Ad anced eurological ehabili tation l

In-depth study of the patient with spinal cord injury, including etiology, current treatment techniques in acute and outpatient settings, and principles of exercise physiology. Review of research activities with regard to a cure for spinal cord injury, as well as the legal aspects of ADA and the individual with a spinal cord injury.

AHC \ ercise and hermoregulation l

Focus on energy sources utilized by the body for exercise, neural and mechanical structures of mechanisms that control body movements, environmental influences on exercise performance, and principles of aerobic and anaerobic exercise. Application of concepts and principles to normal and disabled human conditions.

AHC \ Health Care inancial Management l

AHC esearch I 1

Introduction to the scientific method in health-science research. Focuses on the major steps of the research process: problem identification, literature review, conceptual framework, identification of variables, statement of hypothesis, experimental design, and analysis and presentation of data. Includes critical evaluation of research literature. Application of-

AL A I MISSI A ALS ortfolio elopment racticum

The School of Allied Health Professions conducts an evaluation program that includes courses, validation of writing, and standardized measures related to wholeness. The evaluation courses, Portfolio Practicum I and II and Graduate Portfolio are intended to be a means of integrating the wholeness concept into the lives of the students and of assessing the outcome of their educational process. The portfolio faculty and staff assist students in understanding and modeling the mission of Loma Linda University and the School of Allied Health Professions.

Each portfolio practicum is in progress for three-to-four quarters, during which time the student is developing a portfolio based on the fifteen goals of the School (see Section II, Mission and Goals). The final portfolio provides the student with an organized, goal-driven documentation of growth and achieved competence of abilities in a personal and professional realm of skills. An Associate in Science degree program student completes the one-year Portfolio Practicum; all other undergraduate students complete Portfolio Practicum I and II over a two-year period; each graduate student completes a graduate portfolio.

Portfolio is a tool by which students develop and personally achieve goals established by the School of Allied Health Professions.
Here to help are
Lolita Davidson, Ardis Wazdatskey (director of evaluation and portfolio), and Bette Husted.

ALLIED HEALTH STUDIES ADMINISTRATIVE STAFF
(left to right, top to bottom):
Beverly deForest, Assistant to the Dean;
Pamela Reed, administrative secretary, dean's office;
Karen Granberg, DPTSc Student Research Dept. TA;
Karen Rieley, administrative secretary, marketing;
admissions office staff:
Emmalein Dharmaraj, Leah Natividad-Beck, and Shirley Sing.

ALLIED HEALTH STUDIES

The Department of Allied Health Studies provides a variety of administrative and support services to the School's academic departments, including: development, marketing, admissions, computer support and training, portfolio, and financial services. In addition, the Department of Allied Health Studies supports programs offered

H AL H SCI C achelor of Science

KEIKO KHOO, Program Director

AM I S C I
H AL H SCI C achelor of Science

L C C IC L M

S H M A April March

AHCJ	252	Human Anatomy and Physiology	4*
AHCJ	326	Patient-Care Methods	2*
AHCJ	351	Statistics for the Health Professions	3*
AHCJ	419	Physiology II	3*
RELF	440	World Religions	2-3

or concentration only

OCTH	314	Task Analysis	2*
OCTH	315	Therapeutic Media	2*
OCTH	331	Functional Kinesiology	3*

or concentration only

PHTH	437	Therapeutic Procedures	3*
PHTH	438	Manual Muscle Testing	3*

I A April March

HA ILI A I SCI C , octor of hilosophy

GRENITH J. ZIMMERMAN, Associate Dean of Research and Statistics, Program Director for Doctor of Philosophy, Rehabilitation Science Program

The Graduate School, in cooperation with the School of Allied Health Professions, offers the Doctor of Philosophy degree in rehabilitation science. The degree program by design is inclusive of the many rehabilitation professions, and offers opportunities for qualified clinical professionals in allied health to prepare for careers in independent research, teaching, and administration. It is the goal of this program to prepare graduates who will:

- provide vision and direction for the integration of the rehabilitation professions;
- commit themselves to whole-person care;
- advance the theory and practice of rehabilitation science through research;
- acquire and integrate knowledge related to the social and basic medical sciences; and
- assess, develop, and implement interdisciplinary community-based services.

he Allied Health rofessions

A M S A AMS H SCH L

The sections that follow give the setting for each of the programs offered by the School of Allied Health Professions. In each department the subject and unit requirements for admission and for the professional programs are outlined, and the courses offered are described.

MEET THE DEAN OF OUR SCHOOL, Craig Jackson (center), and those he refers to as “my team” (left) administrative assistant, Pamela Reed, and Beverly deForest, Assistant to the Dean.

CA L LM A SCI C S

L S M A Certificate
S I A CA Certificate achelor of Science ostprofessional achelor of Science
H SICIA ASSIS A Master of hysician Assistant
M E M ICAL CA achelor of Science

ROBERT L. WILKINS, Department Chair

JEFF T. GRANGE, Medical Director for Bachelor of Science, Emergency Medical Care Program

EHREN B. NGO, Program Director for Bachelor of Science, Emergency Medical Care; Director, Center for Emergency Medical Services Education and Research (CEMSER)

TRACI L. MARIN, Director of Clinical Education for Bachelor of Science, Emergency Medical Care

KENRICK C. BOURNE, Program Director for Master of Physician Assistant, Physician Assistant

BENNY HAU, Medical Director for Master of Physician Assistant, Physician Assistant Program

ALLAN M. BEDASHI, Didactic Coordinator for Master of Physician Assistant, Physician Assistant Program

YASMIN C. BRACHO, Assistant Clinical Coordinator for Master of Physician Assistant, Physician Assistant Program

GERALD A. GLAVAZ, Clinical Coordinator for Master of Physician Assistant, Physician Assistant Program

A IS C MMI
M E M ICAL CA
achelor of Science

Gail Dodge
Jeff Grange
Jim T. Holbrook
Craig R. Jackson*
Traci L. Marin
Sarah Momsen
Ehren B. Ngo
Joshua Stapleton
Tamara L. Thomas

A IS C MMI
H SICIA ASSIS A
Master of hysician Assistant

Lisa M. Beardsley
Allan M. Bedashi
Kenrick C. Bourne
Lane Braver
Mark Carr
Shirani de Alwis-Chand
Kent Chow
Neal Dixon
Gerald A. Glavaz
Helen R. Greenwood
Benny Hau
Craig R. Jackson*
Cliff Reeves
Gail T. Rice
Richard Rouhe
Robert L. Wilkins
Grenith J. Zimmerman

A IS C MMI
S I A CA
achelor of Science

or tuition information, please see section II, Financial Information, .

L S M A H, Certificate

The Department of Cardiopulmonary Sciences in the School of Allied Health Professions and the Department of Respiratory Care at Loma Linda University Medical Center are developing an education program in polysomnography. The program will be available beginning 2004 and will lead to a certificate in polysomnography.

Sleep apnea affects approximately 4 percent of women and 9 percent of men. Polysomnography is used by highly skilled therapists to diagnose patients with this disorder. Students accepted into the program will be graduates of accredited A.S. degree programs in respiratory care who are licensed to practice in the state of California. Classes and clinical rotations will be taken at Loma Linda University Medical Center and Jerry L. Pettis Memorial Veterans Medical Center in Loma Linda, which have two adult sleep centers and one pediatric sleep center currently operating. Students who gain further clinical experience will be eligible to sit for the board examination in polysomnography.

For more information, please contact the Department of Cardiopulmonary Sciences.

Representing the Department of Cardiopulmonary Sciences and
its Respiratory Therapy, Emergency Medical Care, and Physican Assistant programs are:
(from left to right) David Lopez, Gerald Glavaz, Barbara Parton, Traci Marin,
Beverley Stocker, Bud Spearman, Bob Wilkins- department chair, Allan Bedashi,
Ken Bourne, Benny Hau, Arthur Marshak, Ehren Ngo, Denise Marnella,
Dave Stanton, and Yasmin Bracho.

RESPIRATORY CARE

Respiratory care is an allied health profession that promotes health and improvement in the cardiopulmonary function of people with heart and lung abnormalities and disease. Newborn, pediatric, adult, and elderly patients are treated for a wide range of problems—infant respiratory distress syndrome; trauma; cardiopulmonary arrest; conditions brought on by shock; postoperative surgical complications; and respiratory diseases such as pneumonia, asthma, cystic fibrosis, chronic bronchitis, and emphysema.

The respiratory care practitioner is a member of the health care team in medical centers, skilled-nursing facilities, outpatient rehabilitation programs, physician offices, and in-home care. Many are involved in research and development of new and innovative care and equipment. They are effective communicators and compassionate caregivers, possessing an awareness of cultural sensitivity and diversity. They have leadership roles in patient

S I A CA Certificate

C C I ICA I

Students are required to have current cardiopulmonary resuscitation (CPR) certification (adult and child) for all scheduled clinical experience. Classes are available on campus at Life Support Education, University Arts, 24887 Taylor Street, Suite 102.

A MISSI

To be eligible for admission, the applicant must have completed a minimum of 96 quarter units (64 semester units) from an accrediated college or university, or its equivalent from a foreign education program.

rere uisites for espiratory Care Certificate

Human anatomy and physiology **or** general biology with laboratory, complete sequence

Microbiology with laboratory

Introductory chemistry with laboratory, complete sequence; or general chemistry with laboratory, complete sequence

High school-level physics **or** introductory physics, one quarter/semester in college; **or** general physics, one quarter/semester in college

Two years of mathematics selected from: algebra I (elementary), algebra II (intermediate), or geometry. Course work may be taken in high school or college.

General psychology

English composition, complete sequence

Introduction to computers (high school or college)

ecommended course or

Speech

e uired minimum grade

All course work must have a grade of C (2.0) or etter.

SSI AL LI I ILI

Upon completion of the program, graduates are eligible to pursue all credentialing examinations offered by the National Board for Respiratory Care (NBRC). Inquiries to NBRC can be made to 8310 Nieman Road, Lenexa, KS 66214-1579; telephone 913/599-4200; email: nbrc-info @nbrc.org or Web site <http://www.nbrc.org>.

AM I S C I
S I A CA Certificate

A		Course or to be ta en hile in the S degree program	
RSTH	304	Cardiopulmonary Anatomy and Physiology	4
RSTH	323	Pulmonary Function Methodology	3
RSTH	331	Pharmacology I	2
RSTH	332	Pharmacology II	2
RSTH	334	Patient Assessment	2
RSTH	341	Respiratory Therapy Science I	5
RSTH	342	Respiratory Therapy Science II	5
RSTH	343	Respiratory Therapy Science III	4
RSTH	354	Case Studies in Adult Respiratory Care	2
RSTH	366	Diagnostic Techniques	3
RSTH	381	Cardiopulmonary Diseases I	2
RSTH	382	Cardiopulmonary Diseases II	2
RSTH	391	Respiratory Care Practicum I	2
RSTH	392	Respiratory Care Practicum II	2
RSTH	393	Respiratory Care Practicum III	4
RSTH	404	Critical Care	4
AHCJ	305	HIV/AIDS and the Health Provider	1
AHCJ	311	Medical Terminology I	2
AHCJ	326	Patient-Care Methods	2
EMMC	316	12-Lead ECG Interpretation	2

RSTH	421	Perinatal and Pediatric Respiratory Care	2
RSTH	422	Advanced Perinatal and Pediatric Respiratory Care	2
RSTH	424	Exercise Physiology and Pulmonary Rehabilitation	3
RSTH	434	Advanced Patient Assessment	2
RSTH	441	Respiratory Therapy Science IV	3
RSTH	444	Case Studies in Neonatal/Pediatric Respiratory Care	2
RSTH	494	Respiratory Care Practicum IV	2
RSTH	495	Respiratory Care Practicum V	2
RSTH	496	Respiratory Care Practicum VI	3
EMMC	315	Cardiology	3
RELE	457	Christian Ethics and Health Care	2

Applicants who have comparable education or experience may be able to gain credit toward the certificate by equivalency examination or evaluation of credit on an individual basis. Loma Linda University reserves the right adddto assess the respiratory care knowledge base and competencies of each applicant by assessment examination(s).

A Loma Linda University grade point average of C (2.0) is required for all courses in the program (see section V).

Respiratory Care BS students, Paula Hizon and Mathew Cabreza pictured above working in the laboratory with the mechanical ventilator.

S I A CA achelor of Science

Loma Linda University offers two Bachelor of Science degree programs in respiratory care. The first program is for students who have had no previous education in respiratory care and who have completed the program prerequisites listed below.

H AM

The two-year, upper-division program leading to the Bachelor of Science degree is a sequence of professional course work intended to prepare competent respiratory therapists with advanced abilities in clinical care. Course work may be designed toward meeting entrance requirements for the dentistry, medicine, and physician assistant programs.

H AM C I S

Upon completion of the program, the graduate should:

1. Collect and review pertinent clinical information and suggest and implement diagnostic procedures according to age-specific criteria.
2. Select, obtain, assemble, maintain, and correct malfunctions on all respiratory therapy equipment.
3. Administer medications via aerosol, subcutaneous, and other appropriate routes of delivery, according to age-specific criteria.
4. Apply current and advanced respiratory care concepts and treatment plans in the areas of ventilatory support systems (invasive and noninvasive), medical gas therapy, gas-exchange therapy, airway care, and advanced resuscitation techniques, according to age-specific criteria.
5. Assist the physician in the performance of all diagnostic or therapeutic procedures related to cardiopulmonary function.
6. Function as an efficient member of the interdisciplinary team.
7. Demonstrate advanced knowledge and clinical skill in specialty areas selected from—
   - neonatal/pediatric critical care
   - adult critical care
   - cardiopulmonary diagnostics
   - hyperbaric medicine
   - sleep disorders medicine
   - cardiopulmonary rehabilitation
   - extended care

C C I ICA I

Students are required to have current cardiopulmonary resuscitation (CPR) certification (adult and child) for all scheduled clinical experience. Classes are available on campus at Life Support Education, University Arts, 24887 Taylor Street, Suite 102.

A MISSI

rere uisites for espiratory Care S

20 units minimum in humanities (choose minimum of two areas from: history, literature, philosophy, foreign language, art/music appreciation or art/music history

Included in this minimum, 4 units of religion per year of attendance at a Seventh-day Adventist college or university

Human anatomy and physiology with laboratory, complete sequence; **or** general biology with laboratory, complete sequence

Microbiology with laboratory

Introductory chemistry with laboratory, complete sequence; **or** general chemistry with laboratory, complete sequence

High school-level physics **or** introductory physics, one quarter/semester in college; **or** general physics, one quarter/semester in college

Two years high school mathematics with grades of C or above **or** intermediate algebra in college

General psychology **or** sociology

Cultural anthropology **or** an approved course dealing with cultural diversity

Select 4 more quarter units from sociology, economics, geography, political science, psychology

English composition, complete sequence

Speech

Computers

Personal health **or** nutrition

Two physical activity courses

Electives to meet minimum total requirements of 96 quarter units

or total unit requirements for raduation, see Division of eneral tudies, LLU N AL DUCA ION UI M N Se tion V .

AM I S C I
S I A CA achelor of Science

A		Course or to be ta en hile in the S degree program	
RSTH	304	Cardiopulmonary Anatomy and Physiology	4
RSTH	323	Pulmonary Function Methodology	3
RSTH	331	Pharmacology I	2
RSTH	332	Pharmacology II	2
RSTH	334	Patient Assessment	2
RSTH	341	Respiratory Therapy Science I	5
RSTH	342	Respiratory Therapy Science II	5
RSTH	343	Respiratory Therapy Science III	4
RSTH	354	Case Studies in Adult Respiratory Care	2
RSTH	366	Diagnostic Techniques	3
RSTH	381	Cardiopulmonary Diseases I	2
RSTH	382	Cardiopulmonary Diseases II	2
RSTH	391	Respiratory Therapy Practicum I	2
RSTH	392	Respiratory Therapy Practicum II	2
RSTH	393	Respiratory Therapy Practicum III	4
RSTH	404	Critical Care	4
AHCJ	305	HIV/AIDS and the Health Provider	1
AHCJ	311	Medical Terminology I	2
AHCJ	326	Patient-Care Methods	2
AHCJ	328	Portfolio Practicum I	1
AHCJ	402	Pathology I	4
AHCJ	403	Pathology II	3
EMMC	316	12-Lead ECG Interpretation	2
REL_	___	Religion elective	2

A			
RSTH	421	Perinatal and Pediatric Respiratory Care	2
RSTH	422	Advanced Perinatal and Pediatric Respiratory Care	2
RSTH	424	Exercise Physiology and Pulmonary Rehabilitation	3
RSTH	434	Advanced Patient Assessment	2
RSTH	441	Respiratory Therapy Science IV	3
RSTH	444	Case Studies in Neonatal/Pediatric Respiratory Care	2
RSTH	464	Case Management in Respiratory Care	2
RSTH	466	Advanced Diagnostic Techniques	2
RSTH	471	Instructional Techniques I	2
RSTH	474	Cardiopulmonary Health Promotion and Disease Prevention	2
RSTH	481	Research in Cardiopulmonary Sciences	1
RSTH	494	Respiratory Care Practicum IV	2
RSTH	495	Respiratory Care Practicum V	2
RSTH	496	Respiratory Care Practicum VI	3
AHCJ	351	Statistics for the Health Professions	3
AHCJ	461	Research Methods	2
AHCJ	465	Seminars in Leadership	2
AHCJ	498	Portfolio Practicum II	1
EMMC	315	Cardiology	3
RELE	457	Christian Ethics and Health Care	2
REL_	___	Religion elective	2
REL_	___	Relgion elective	2

A minimum of 192 quarter units are required for the Bachelor of Science degree in respiratory care.

H AM

Two years high school mathematics with grades of C or above **or** intermediate algebra in college

General psychology **or** sociology

Cultural anthropology **or** an approved course dealing with cultural diversity

Select 4 more quarter units from sociology, psychology, ecnomics, geography, political science

English composition, complete sequence

Speech

Computers

Personal health **or** nutrition

Two physical activity courses

Electives to meet minimum total requirements of 96 quarter units

or total unit requirements for raduation, see Division of eneral tudies, LLU N AL DUCA ION UI M N Se, tion V .

AM I S C I
S I A CA ostprofessional achelor of Science core

all uarter			
RSTH	301	Advanced Respiratory Therapy Science	3
RSTH	422	Advanced Perinatal and Pediatric Respiratory Care	2
RSTH	434	Advanced Patient Assessment	2
AHCJ	305	HIV/AIDS and the Health Provider	1
AHCJ	328	Portfolio Practicum I	1
AHCJ	351	Statistics for the Health Professions	3
AHCJ	465	Seminars in Leadership	2
AHCJ	498	Portfolio Practicum II	1
RELF	406	Adventist Beliefs and Life	2
inter uarter			
RSTH	424	Exercise Physiology and Pulmonary Rehabilitation	3
RSTH	431	Senior Project I	2
RSTH	451	Respiratory Care Affiliation I	2
RSTH	466	Advanced Diagnostic Techniques	2
RSTH	471	Instructional Techniques I	2
AHCJ	402	Pathology I	4
AHCJ	461	Research Methods	2
Spring uarter			
RSTH	432	Senior Project II	2
RSTH	464	Case Management in Respiratory Care	2
RSTH	481	Research in Cardiopulmonary Sciences	1
EMMC	315	Cardiology	3
EMMC	316	12-Lead ECG Interpretation	2
AHCJ	403	Pathology II	3-4
RELE	457	Christian Ethics and Health Care	2
Summer uarter			
RSTH	433	Senior Project III*	4
Electives			

*The Senior Project is a culminating body of work, developed by the student in consultation with the program director and presented to the department faculty. Work may be a research paper, clinical presentation, management project, or other project approved by the program director.

PHYSICIAN ASSISTANT, Master of Physician Assistant

Physician assistants (PAs) are health professionals licensed to practice medicine under physician supervision. Physician assistants are qualified by graduation from an accredited physician assistant educational program and by certification by the National Commission on Certification of Physician Assistants. Within the physician/PA relationship, the PA exercises autonomy in medical decision making and provides a broad range of diagnostic and therapeutic services. The clinical role of a PA includes primary and specialty care in medical and surgical settings in rural and urban areas. The PA's practice is centered on patient care and may also include educational, research, and administrative activities.

PROGRAM

Loma Linda University offers a professional course of study leading to the Master of Physician Assistant (M.P.A.) degree. The program consists of a twelve- month didactic phase that provides a foundation of biological, behavioral, and medical sciences. This is followed by a twelve-month clinical phase of clerkships in a variety of medical specialties designed to provide diverse and intensive patient-care experience. Graduate physician assistants are professionals trained to participate as members of a health care team. They are prepared to manage common health care needs typically encountered in primary-care settings.

Accreditation

The program is fully accreditated by the Accreditation Review Commission on Education for the Physician Assistant, Inc. (ARC/PA).

PROGRAM OUTCOMES

Upon completion of the program, the graduate will be qualified to:

1. Obtain detailed and accurate patient histories.
2. Perform appropriate physical examinations.
3. Evaluate patients and make diagnoses.
4. Order, perform, and interpret diagnostic tests.
5. Order and perform selected therapeutic procedures.
6. Develop, implement, and monitor patient-management plans.
7. Present patient data in oral and written forms.
8. Provide continuity of patient care.
9. Assist in surgical procedures.
10. Perform life-saving procedures in emergency situations.
11. Counsel and instruct patients regarding issues of health care managment, mental health, therapeutic regimens, normal growth and development, and family planning.
12. Refer patients to appropriate health/mental/social service agencies in the community.
13. Write drug orders.
14. Conduct a medical literature search.
15. Conduct an investigation of a medical, health, or psychosocial topic; perform a statistical evaluation; and present data in appropriate oral and written formats.

CLINICAL

Students are required to have current cardiopulmonary resuscitation (CPR) certification (adult and child) for all scheduled clinical experience. Classes are available on campus at Life Support Education, University Arts building, 24887 Taylor Street, Suite 102.

ADMISSION

1. A baccalaureate degree is required for admission to the Master of Physician Assistant Program:
   - A baccalaureate degree in health care or life sciences is preferred.
   - A baccalaureate degree in any field PLUS a certificate in a health related field is acceptable.
   - All degrees must be from accredited insitutions.
2. College level pre-requisite courses:
   - Human Anatomy & Physiology with laboratory (complete sequence)
   - Introductory Chemistry with Laboratory, complete sequence (Inorganic, Organic, and Biochemistry), OR one year of General Chemistry with laboratory.
   - Microbiology with laboratory
   - General Psychology
   - General Sociology OR Cultural Anthropology
   - College Algebra
   - English, one year (freshman composition and literature)

3. Recommended:
    - Statistics
    - Medical Terminology
    - Computer Literacy
4. We grant preference to:
    - applicants with documented health care experience
    - Seventh-day Adventists
    - Graduates of Loma Linda University
    - Applicants from under-represented populations
    - Applicants with documented community service
5. An overall GPA of 3.0 or above and a Sci. GPA of 3.0 or above on a 4.0 scale.
6. Submit your application through CASPA. Three letters of recommendation are required. One must be from a practicing M.D., D.O. or P.A.
7. How to apply: All prospective students must apply through the Central Application Service for Physician Assistant Programs (CASPA) http://www.caspaonline.org or call 240/497-

The students in our Master of Physician Assistant program are nurtured by Dr. Benny Hau, Medical Director; Allan Bedashi, Didactic Coordinator; Dr. Ken Bourne, Program Director; Yasmin Bracho, Assistant Clinical Coordinator; and Gerry Glavaz, Clinical Coordinator, among others, to become the outstanding P.A.'s synonymous with the name Loma Linda Unviersity.

FACES OF THE PHYSICIAN ASSISTANT PROGRAM
Department of Cardiopulmonary Sciences

(clockwise from 12) administrative secretary, Beverley Stocker, and secretary, Melody Chambers,
efficiently work together to make sure the mechanics of the PA program run smoothly;
taking a much needed break from their rigorous schedule are students, Sophia Johansen and Tricia Sol;
here at seven every morning, Kim Hamilton and Stephanie Powers have developed the
perfect study buddy system; busy, busy, busy, Program Direcor, Dr. Kenrick Bourne;
always with a smile on her face, Yasmin Bracho helps make sure student affiliation sites are available.

AM I S C I
H SICIA ASSIS A , Master of hysician Assistant

The program of instruction outlined as follows is for students enrolled during the 2004-2005 academic year.

I S A A M 1

PAST	401	Anatomy and Physiology I	3
PAST	404	Biochemistry for PAs	3
PAST	406	Clinical Laboratory	2
PAST	509	Behavioral Science for PAs	3
PAST	521	Research I	3
AHCJ	305	HIV/AIDS and the Health Provider	1
AHCJ	519	Graduate Portfolio	1
RELE	505	Clinical Ethics	3

S C A I 1

PAST	402	Anatomy and Physiology II	3
PAST	411	Pathology for PAs I	3*
PAST	421	Pharmacology for PAs I	3
PAST	501	Clinical Medicine for PAs I	5
PAST	514	Physical Diagnosis I	3
PAST	522	Research II	2
AHCJ	519	Graduate Portfolio	(in progress)

HI A S I 1

PAST	403	Anatomy and Physiology III	3
PAST			

LI I M

In addition to the requirements listed under PROGRAM OF INSTRUCTION (below), students accepted into the EMC program must maintain a working portfolio. The exact details of this requirement will be explained to the student during the initial orientation meeting.

Meet some of our Emergency Medical Care program students - (left to right) Tyrone Philipson, Clark Binley, Laurel Linder, Brendan Gongol, Ryan Casey, Lisa Higuchi, Nanci Medina, Lisa Kelley, and Heidee Leno

AM I S C I

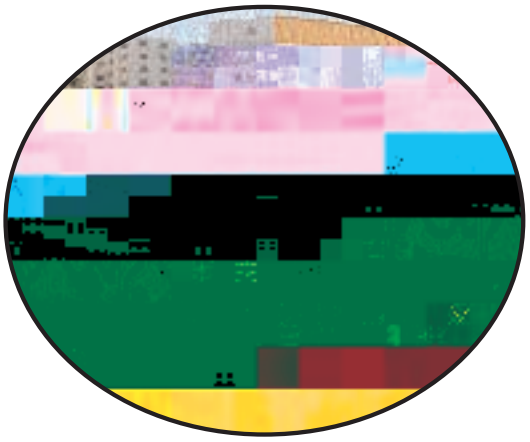
M £ M ICAL CA achelor of Science core

EMMC	308	Pharmacology	3
EMMC	314	ECG Interpretation and Analysis	2
EMMC	315	Cardiology	3
EMMC	316	12-Lead ECG Interpretation	2
EMMC	325	Current Issues in Emergency Medical Care	2
EMMC	331	Introduction to Theories of Emergency Medical Services	2
EMMC	332	Theories of Emergency Medical Services	2
EMMC	427	Cardiopulmonary Therapeutics	2
EMMC	435	Disasters, WMD, and Terrorism	2
EMMC	444	Diversity in EMS	2
EMMC	445	Perinatal and Pediatric Care	3
EMMC	446	Physical Diagnosis	2
EMMC	447	Geriatrics and Aging	2
EMMC	451	Health Care Management for Prehospital Providers	2
EMMC	452, 453	Seminars in EMS Management I, II	2, 2
EMMC	471, 472	Senior Project I, II	2, 2
EMMC	484	Legal Issues in Health Care	2
EMMC	489	Senior Seminars	1
RTCH	464	Moral Leadership	2
RTCH	475	Curriculum Development in Health Sciences	2
RSTH	471	Instructional Techniques I	2
AHCJ	305	HIV/AIDS and the Health Provider	1
AHCJ	324	Psycho-Social Models and Interventions	2
AHCJ	328	Portfolio Practicum I	1
AHCJ	351	Statistics for the Health Professions	3
AHCJ	402, 403	Pathology I, II	4, 4
AHCJ	461	Research Methods	2
AHCJ	498	Portfolio Practicum II	1
RELE	457	Chrisian Ethics and Health Care	3
RELF	416	God and Human Suffering	3
RELF	423	Loma Linda Perspectives	2

Center for Emergency Medical Services Education and Research

N B. N O, C M Director

ADMINISTRATIVE COMMITTEE
Ruel A. Alipoon
Jeff T. Grange
Ehren B. Ngo



The Emergency Medical Care (EMC) Bachelor of Science degree program, Life Support Education (LSE), and the LLUMC Emergency Department (ED) contribute to the Center for Emergency Medical Services Education and Research (CEMSER). CEMSER provides these three constituents and the emergency and critical care community with access to resources needed to advance research and educational goals. CEMSER's primary affiliation is with the School of Allied Health Professions.

MISSION STATEMENT

The Center for Emergency Medical Services Education and Research seeks to advance the mission and goals of Loma Linda University within the prehospital and critical care communities by:

- Providing emergency and critical care health care providers with access to quality Christian education that focuses on personal, spiritual, intellectual, and professional development.
- Providing and expanding comprehensive and ethical research focused on fostering professionalism, leadership, and quality patient care.
- Developing leaders with decision-making skills that reflect spiritual, moral, ethical, and compassionate insight.
- Developing and enhancing managers capable of addressing the needs of today's dynamic health care industry with regard to finance, human-resource management, and quality patient care.
- Fostering compassion and patient advocacy among emergency health care providers.

M £ M ICAL CA MC
achelor of Science degree program

The two-year EMC B.S .degree program is open to the EMT, paramedic, RN, or respiratory therapist who has completed two years of undergraduate work. (See additional admission requirements and program information on page 80.)

L I S CA I LS

Life Support Education offers basic and advanced classes related to cardiac emergency care, as listed below. Life Support Education is in the University Arts building located at 24887 Taylor Street, Suite 102, Loma Linda, CA 92350; telephone (909) 558-4977.

asic Life Support C

Teaches health care providers how to manage a cardiopulmonary-arrest victim with the basics of CPR, including chest compression, mouth-to-mouth, or bag-valve ventilation and automated external defibrillation.

- Basic Life Support
- Basic Life Support Instructor
- Basic Life Support Renewal

Ad anced Cardiac Life Support ACLS

Teaches health care providers how to manage a cardiopulmonary-arrest victim with cardiac medication, defibrillator, chest compression with ventilations, and endotracheal intubation.

- Advanced Cardiac Life Support
- Advanced Cardiac Life Support Instructor
- Advanced Cardiac Life Support Renewal

ediatric Ad anced Life Support ALS

Teaches health care providers how to manage a cardiopulmonary-arrest child or infant with medications, endotracheal intubation, defibrillation and chest compressions with ventilations.

- Pediatric Advanced Life Support
- Pediatric Advanced Life Support Instructor course
- Pediatric Advanced Life Support Renewal

eonatal esuscitation rogram

Teaches the health care provider how to manage and resuscitate a newborn infant having life-threatening cardiopulmonary problems.

- Neonatal Resuscitation Provider
- Neonatal Resuscitation Provider Instructor
- Neonatal Resuscitation Provider Renewal

Heartsa er Automated ternal efibrillator A

Teaches the lay person or health provider how to use the AED in conjunction with CPR.

- Automatic External Defibrillation

LL MC M £ A M

The Emergency Department offers basic and advanced education related to emergency care, as listed below:

rand ounds and Le tures

- Grand Rounds
- Lectures for Emergency Medicine Residents

M and paramedi , ontinuin edu ation, trauma life support, leadership , ertifi ation, and other offerin s

- Critical Care Transport
- National Registry EMT Refresher Program
- National Registry Paramedic Refresher Program
- Paramedic Skills Update
- Basic Trauma Life Support
- Clinical Preceptor Training Certificate
- Leadership Certificate Courses
- ICEMA (Inland Counties Emergency Medical Agency) Protocol Update
- Field-Care Audits
- Wilderness Medicine Certificate
- Mass Gathering Certificate

C AC I MA I

For more information on course offerings, please contact CEMSER at:

Center for mer en y Medi al ervi e
du ation and esear h
Ni hol all, oom 92
Loma Linda University
Loma Linda, CA 92350
909 55 -4 0 phone
909 55 -4 0 A A

Open to LLU students and LLUMC employees, and
available to individuals and groups from the surrounding communities,
Life Support Education classes
are coordinated with the help of
Ruel Alipoon (director), Janine Davis, and Monica Noutfia.

C S SC I I

The Advanced Cardiac Life Support (ACLS) is designed to reevaluate medical professionals as ACLS providers and to increase their skills in the management of cardiac arrest, airway management, and arrhythmia recognition. The lectures, workshops and tests adhere to the guidelines of the American Heart Association. Participants will gain hands-on experience in code management.

C S C I S

At completion of the course, participants will be able to demonstrate proficiency according to American Heart Association standards in the areas of:

- Adult CPR
- Mouth to Mask Ventilation
- Esophageal obturator airway placement
- Endotracheal Intubation
- Basic Arrhythmia recognition and therapeutic treatment
- Function as a team leader in a Mega Code situation including patient assessment, arrhythmia recognition and treatment, supervision of team members, and problem solving.

rere uisites

- Candidate must be a healthcare provider whose activities demand proficiency in ACLS skills.
- Participants must study the textbook prior to class attendance.

IS A I

Applicants must send the registration form along with payment. Please register at least 2 weeks before course date. Registration closes when classes are full.

C I I CA I I S

An ACLS card will be issued upon successful completion of the course. The ACLS Provider Course and ACLS Renewal Course is Approved by the California Board of Registered Nursing, Provider number CEP 10403, and constitutes eligibility for 16 hours of CE credit for the ACLS Provider and 8 CE credits for ACLS Renewal Course.

C S MA IALS

There is a textbook required for this course. Precourse materials and textbook can be picked up at Life Support Education. The price of the book will vary from year to year. If you have any questions regarding materials please call (909) 558-4977.

A I I AL S

$ 10.00 CME credits fee for the following:
(Physicians, Dentists only)

$ 25.00 Rescheduling fee

$ 25.00 Retesting Fee if testing is failed

$ 25.00 Processing fee for refunds

LI

A 7 day notice is required for any cancellation or rescheduling. If there is an emergency or you are called into work please let us know. A $25.00 processing fee will be charged for refunds.

siderations unique to age. Management of geriatric trauma, medical emergencies, and the impact of chronic diseases. Establishing a social response to aging and viable health care delivery models for older adults.

MMC , Health Care Management for rehospital ro iders
Basic principles of management and how they relate to EMS systems. Federal, state, and local authority for EMS delivery and services, resources for and contraints of EMS systems, relationship to and impact on public safety and health care-delivery systems, interface of public and private organizations, current and future issues.

MMC Seminars in MS Management I
Management theories applied to EMS management and practice. Public/private sector integration, public/media relations, government relations, stress management, management/leadership-skills development, decision making, performace improvement.
Prerequisite: EMMC 451.

MMC Seminars in MS Management II
Further application of management theories to EMS management and practice. The quality management process and its relationship to continuous learning, promoting organizational/system change, evaluating effectiveness of performance-improvement projects, strategic planning, and integration of EMS with public safety and public health.
Prerequisite: EMMC 451 and EMMC 452.

MMC Senior ro ect I
Students develop, implement, and evaluate project for in-depth experience in area of choice. May include research; community projects; and/or education, management, or clinical affiliations. Students work under direct supervision of assigned faculty mentor.

MMC Senior ro ect II
Continuation of project developed in EMMC 471.
Prerequisite: EMMC 471.

MMC Legal Issues in Health Care
Introduction to the legal system as it pertains to health care professionals. Concepts of malpractice, litigation, consent for and refusal of medical treatment, advanced directives, and patient confidentiality. Discussion of employment issues, including discrimination and sexual harassment. Development of health and safety programs per OSHA regulations, risk management, legal issues in vehicle operations and equipment, and EMS and law-enforcement interactions.

MMC Senior Seminars
Discussion of issues of professionalism, portfolio development and refinement, short- and long-term goal setting, and development of resume/curriculum vitae.
Prerequisite: Senior-level academic status.

nrollment in AS courses is limited to hysician Assistant rogram students

AS Anatomy and hysiology I, II, III
Gross and microsopic anatomy of the human body. Lecture, laboratory with cadaver dissection, demonstration, and slides. Orientation to structure of various systems of the body.
Prerequisite: Series to be taken in sequence.

AS iochemistry for As
Chemistry and metabolism of carbohydrates, lipids, nucleic acids, and proteins. Chemical basis of life processes. Lecture and laboratory demonstrations to support student competency.

AS Clinical Laboratory
Provides the physican assistant student with an overview of clinical laboratory procedures and operations. Emphasis on interpretation and clinical significance of commonly ordered laboratory tests. Observation and performance of laboratory testing routinely performed in primary-care offices and hospital laboratories. Lecture and laboratory. Laboratory exposure provided in a clinical laboratory setting.

AS athology for As I
Fundamental mechanisms of disease, including cell injury, inflammation, repair, regeneration, and fibrosis; vascular, cardiac, respiratory, gastrointestinal, hepatobiliary, urinary, reproductive, endocrine, and integumentary pathologies. One hour per week participation in differential diagnosis seminar required.

AS athology for As II
Fundamental mechanisms of disease, including the central and peripheral nervous systems; bones and joints; skeletal muscle; developmental, genetic, infectious, and parasitic pathologies; and neoplasia. Two autopsy observations with written report, and one hour per week participation in differential diagnosis seminar required.

AS harmacology for As I
Part I of a two-part course that covers basic concepts of pharmaceuticals used in diagnosis, prevention, and treatment of disease. Systematic presentation of the pharamacology and therapeutic value of drugs used in medicine. Related topics—with special consideration of pediatric and geriatric pharmacology—include drug legislation, PDR, routes of administration, pharmacokinetics, pharmacodynamics, adverse effects, drug interactions, and drug toxicity. Overview of physician assistant's responsibilities in prescribing and/or dispensing pharmaceuticals.

AS harmacology for As II
Part II of a two-part course that covers basic concepts of pharmaceuticals used in diagnosis, prevention, and treatment of disease. Systematic presentation of the pharamacology and therapeutic value of drugs used in medicine. Related topics—with special consideration of pediatric and geriatric pharmacology—include drug legislation, PDR, routes of administration, pharmacokinetics, pharmacodynamics, adverse effects, drug interactions, and drug toxicity. Overview of PA's responsibilities when prescribing and/or dispensing pharmaceuticals.

AS 2[illegible] Clinical Medicine for As I 1
Study of common medical and/or surgical disorders encountered in general adult medicine. Typical clinical presentation, etiology, pathophysiology, diagnostic work-up, EKG interpretation, and management of these disorders.

AS 2[illegible] Clinical Medicine for As II 1
Study of common medical and/or surgical disorders encountered in general adult medicine. Typical clinical presentation, etiology, pathophysiology, diagnostic work-up, and management of medical and/or surgical disorders.

AS 2[illegible] rimary Care ediatrics 1
Common medical and surgical disorders encountered in pediatric medicine. Emphasis on primary-care concepts in the care of children. Introduction to rare disorders that the PA may encounter in primary care. Presentation of disease processes mirrors adult medicine by discussing the etiology, pathophysiology, clinical presentation, diagnostic work-up, and management.

AS 2[illegible] omen s Health Care 1
Common problems encountered in caring for women; management of these problems. Etiology, pathophysiology, clinical presentation, and diagnostic work-up.

AS 2[illegible] Clinical S ills for As 1
Introduction to the basic skills and knowledge needed to evaluate and treat common illnesses and injuries. Safety, aseptic technique, BLS, ACLS, wound care, local anesthesia, suturing, casting, splinting, use of various tubes and drains, emergency medicine, and surgery for physician assistants.

AS 2[illegible] re enti e Medicine Concepts 1
Selected topics dealing with aspects of disease prevention. Relevance of statistics, epidemiology, research designs, and clinical trials; as well as selected disease trends, lifestyle modification, the role of physical activity, nutrition and immunization, public health approaches to communicable diseases, and genomics.

AS 2[illegible] eha ioral Science for hysician Assistants 1
Behavioral science counseling skills necessary to assist patients in dealing with illness and injury, in following prescribed treatment regimens, and in adopting attitudes and behaviors leading to improved health behaviors (including thinking, feeling, and acting).

AS [illegible] hysical iagnosis I 1
Part I of a two-part sequence of lecture, demonstration, and practice in the art and science of obtaining the medical history and performing the physical examination.

AS [illegible] hysical iagnosis II 1
Part I of a two-part sequence of lecture, demonstration, and practice in the art and science of obtaining the medical history and performing the physical examination.
Prerequisite: PAST 514.

AS [illegible] A rofessional Issues 1
Acquaints the entering student with the history, development, and current status of the PA profession, and helps him/her formulate an appropriate perception of the PA role. A historical perspective of the PA profession, as well as current trends and issues; the PA's role in health care delivery; political and legal factors that affect PA practice; intraprofessional factors and the PA's role in relation to physicians and other providers. Importance of professional responsibility and of biomedical ethics in relation to the PA's role as health care provider. Content relating to PA professional organizations, program accreditation, graduate certification and recertification; employment considerations; and professional liability.

AS [illegible] Case Study riting 1
Selection of a case-study patient and preparation of a case study for publication in journals appropriate to the PA's profession. Must be enrolled in PA program.

AS [illegible] esearch I 1
The scientific method in health-science research. Focuses on the major steps of the research process: problem identification, literature review, conceptual framework, identification of variables, statement of hypotheses, experiemental design and analysis, and presentation of data. Critical evaluation of research literature.

AS [illegible] esearch II 1
Application of the research process to problems in related, specific allied health fields. Development of a research proposal. Pilot testing of procedures and data-collection forms.
Prerequisite: PAST 521.

AS [illegible] esearch III 1
Implementation of a research proposal in a practice setting. Computer data analysis and preparation of a research report both in written and oral formats. Development or creation of a PowerPoint presentation, poster, and abstract for submission to a profes-

AS Internal Medicine II utpatient Medicine
A four-week rotation in out-patient medical clinics. Clinical experience with common adult medical problems, including management of chronic diseases. Forty hours per week.

AS ediatrics I Inpatient ediatrics
A four-week rotation as part of a pediatrics admitting team. May include overnight in-hospital call, emergency room call, ward rounds, and outpatient clinic duties. Clinical experience with common childhood illnesses, admissions, discharge, daily progress notes, and patient-managment processes. Sixty hours per week.

AS ediatrics II utpatient ediatrics
A four-week rotation in a pediatrics clinic. Clinical experience with common medical problems and health care needs of people from birth to 18 years. May require evening or weekend hours. Forty hours per week.

AS bstetrics and ynecology
A four-week rotation through various aspects of an obstetrics and gynecology service. Clinical experience in women's health care—with emphasis on primary care, including normal pregnancy and childbirth. May require in-hospital on-call (overnight) or late hours. Sixty hours per week.

AS eneral Surgery
A four-week rotation on general surgery service. Clinical experience with common medical problems requiring surgical intervention, primarily in adults. Includes assignment to an admittting team, in-hospital call (overnight) or late hours. Includes assisting in the operating room and surgical clinic. Sixty hours per week.

AS mergency Medicine
A four-week rotation through a hospital Emergency Department, primarily in urgent care or assigned to minor trauma and illnesses. Clinical experience with common illnesses and injuries, suturing, and splinting. Requires late night and weekend duties. Sixty hours per week.

AS sychiatry, eha ioral Medicine
A four-week rotation through an inpatient and outpatient behavioral medicine service. Clinical experience with common mental health problems, including acute and chronic psychoses, substance abuse, and affective disorders. May require late night or on-call duties. Sixty hours.

AS lecti e I
A four-week elective rotation through a medical or surgical service of choice (as available). Hours/call may vary.

AS lecti e II
A four-week elective rotation through a medical or surgical service of choice (as available). Hours/call may vary.

S H Ad anced espiratory herapy Science I, II, III
Comprehensive review of patient-care techniques. In-depth presentation and discussion of clinical application of respiratory therapy devices and their influences on patient care. Reports and discussions of current and advanced developments. Designed to integrate experience with current concepts and to develop logical courses for proper equipment and technique application for specific patient care. Co-listed with RSTH 441. (Not taught every year.)

Prerequisite: Junior standing or consent of the department chair.

S H Cardiopulmonary Anatomy and hysiology
Anatomic and physiologic components of the cardiovascular and respiratory systems investigated. Empha-sis on histology, embryology, diffusion, gases transported in the blood, acid-base balance, lung volumes and capacities, mechanics of ventilation, ventilation-perfusion relationships, regulation or respiration, cardiac cell-membrane action potentials, and excitation-contraction coupling.

S H Ad anced eonatal espiratory Care
Neonatal and fetal physiology, diseases, and therapeutic interventions. Emphasis on neonatal respiratory care. Review of current research related to high-frequency ventilation, extracorporeal membrane oxygenation, and surfactant therapy.

S H espiratory Care of the Critically Ill e born and Child
Pathophysiology of the newborn, prenatal risk factors, pediatric cardiopulmonary diseases, diagnostics, monitoring of clinical indices, and treatments used in perinatal/pediatric respiratory care. Advanced information on surfactant administration, high-frequency ventilation, and ECMO. (May be used toward Postprofessional B.S. degree in respiratory care in place of RSTH 422.)

S H ulmonary unction Methodology
Evaluation of pulmonary function in health and disease through spirometry, plethysmography, helium dilution, nitrogen washout, single-breath nitrogen, volume of isoflow, and diffusing capacity studies—including blood-gas instrumentation, quality control, quality assurance, and current ATS standards. Lecture and laboratory.

S H harmacology I, II
Survey of pharamacologic agents currently used in medicine—including their kinetics, dynamics, and therapeutics. Special emphasis given to drugs and their effects on the respiratory, cardiovascular, and autonomic nervous systems. Topics include the broncho-dilators, anti-inflammatory agents, mucokinetic agents, cardiovascular agents, diuretics, antimicrobials, neuromuscular agents, and agents used to treat nicotine dependence.

S H espiratory herapy Science I
Basic principles of respiratory therapy, as related to gas physics; medical-gas storage and therapy; and administration of humidity, aerosol and airway pressure therapies, artificial airways, and resuscitation devices. Emphasis on methods of administration of the therapy, with special attention placed on the equipment used, as well as the application of this information to the clinical setting.

S H espiratory herapy Science II
Lecture and laboratory presentation of the principles of respiratory therapy related to lung-inflation therapy; use of artificial airways, and their care and complications. Introduction to mechanical ventilatory support, including beginning ventilators, support systems, comparison of methods, and respiratory monitoring. Emphasis on application of this information to the clinical setting.

Prerequisite: RSTH 341.

S H espiratory herapy Science III
Lecture and laboratory presentation of the principles of respiratory therapy related to mechanical ventilatory support, including patient management and ventilatory support systems. Emphasis on methods of ventilatory support, with special attention to the mechanical ventilators commonly used at the students' clinical sites. Application of this information to the clinical setting.

Prerequisite: RSTH 341, 342.

S H Case Studies in Adult espiratory Care
Adult critical-care concepts presented through a case-study approach. Respiratory care plan used to present diseases, treatment, and procedures relevant to respiratory care. Patient rounds further develop critical-thinking skills in a patient-care setting.

Prerequisite: RSTH 381.

S H iagnostic echni ues
Continues the clinical use of diagnostic tests and procedures. Emphasis on evaluation of chest radiographs, electrocardiography, and monitoring hemodynamics. Lecture and laboratory.

Prerequisites: RSTH 304, 331.

S H Cardiopulmonary iseases I, II
Comprehensive study of cardiopulmonary diseases and their adverse effects. Disease etiology, pathology, pathophysiology, clinical features, prognosis, treatment, and prevention.

Prerequisite: RSTH 304, 331, 341.

Corequisite: RSTH 323, 332, 342, 366.

S H espiratory Care racticum I
General introduction to the clinical setting; assessment of patients with respiratory disease. Development of work habits and patient-care techniques. Students must obtain current cardiopulmonary resuscitation (CPR) certification from the American Heart Association before the end of the quarter.

Prerequisite: RSTH 341.

Concurrent: RSTH 342.

S H espiratory Care racticum II
Application of specific therapeutic techniques, including oxygen and humidity therapy, aerosol therapy, airway management, lung-inflation techniques, and chest physiotherapy.

Prerequisite: RSTH 341, 391; AHA CPR certification.

Concurrent: RSTH 342, 381.

S H espiratory Care racticum III
Therapeutic techniques applied in continuous mechanical ventilation; special procedures, operation and postanesthesia room, and arterial blood-gas laboratory.

Prerequisite: RSTH 343, 381, 392.

Corequisite: RSTH 382, 404.

S H Cardiopulmonary Intensi e Care
Management of the patient with cardiopulmonary failure. Theory and capabilities of various life-support and monitoring systems.

Prerequisite: Senior standing or consent of instructor.

S H Critical Care
Continues the theory, practice, and knowledge of mechanical ventilation—providing an integrated approach to respiratory care in the critical-care arena. A systems-based approach used to incorporate respiratory care concepts such as planning and implementing of protocols, best-practice guidelines, etc. Presentations, projects, and critical evaluation used to increase critical-thinking skills and patient-care skills.

Prerequisite: RSTH 354.

S H Ad anced Cardiac Life Support
Principles and techniques of advanced emergency cardiac care: review of basic CPR, endotracheal intubation, and the use of airway adjuncts. Monitoring and dysrhythmia recognition. Essential and useful drugs for cardiac life support. Intravenous techniques. Appropriate use of devices for elective cardioversion or defibrillation, stabilization, and transportation. Use of circulatory adjuncts. Acid-base balance, drug therapy, and therapeutic interventions.

S H erinatal and ediatric espiratory Care
Fetal development and circulation. Prenatal risk factors. Newborn resuscitation; newborn and pediatric assessment. Etiology, pathophysiology, course, treatment, and outcome of respiratory diseases as they relate to problems in pediatrics and neonatology. Discussion of ECMO, high-frequency ventilation, and nitric oxide.

Prerequisite: RSTH 304, 331.

S H Ad anced erinatal and ediatric espiratory Care
Pathophysiology of newborn and pediatric diseases that are likely to be encountered by the respiratory-care practitioner. Perinatal risk factors, resuscitation, and research on the transition to extrauterine life. Diagnostics, monitoring of clinical indices, and treatments used in perinatal/pediatric respiratory care. Advanced information on surfactant, high-frequency ventilation, and ECMO.

S H ercise hysiology and ulmonary ehabilitation
Metabolism of carbohydrates, lipids, and proteins in energy production, oxygen consumption, carbon dioxide production, and respiratory quotient applied to measurable counterparts of oxygen uptake, carbon dioxide ouput, and respiratory exchange ratio at rest and during exercise. Metabolic studies, body-fat composition, exercise studies, and malnutrition in chronic obstructive pulmonary disease utilized as a foundation for evaluation and implementation of a pulmonary rehabilitation program. Rehabilitation components include team assessment, patient training, exercise, psychosocial intervention, and follow-up.

Prerequisite: RSTH 323.

S H Senior ro ect I
Students required to develop a proposal for a research paper/project. Under the direction of the program director, students will be assigned to a mentor who will assist them with developing their paper/project.

S H Senior ro ect II
Development and expansion of research paper/project begun during previous quarter. Literature search, research question, and data-collection methods developed.

S H Senior ro ect III
Data-collection completed, data analyzed, conclusions and findings written up for publication and for poster presentation.

S H Ad anced atient Assessment
Advanced skills in interviewing, physical examination, and interpretation of laboratory data. Lecture, reading material, and physical-examination procedures. Provides insight for better interview and examination of patients with cardiopulmonary disease. Increases understanding of the pathophysiology behind the symptoms.

S H espiratory herapy Science I
In-depth presentation and discussion of the clinical application of respiratory therapy devices and their influences on patient care. Reports and discussions of current and advanced developments. Emphasis on application of this information to the clinical setting. Co-listed with RSTH 301. (Not taught every year.)

Prerequisite: RSTH 341, 342, 343; or permission of instructor.

S H Case Studies in eonatal ediatric espiratory Care
Development of respiratory care-management skills of the neonatal and pediatric patient through the presentation of student case studies. Clinical staff and faculty review current management of the newborn, infant, and child. Students present patients and explain implications of care. Assistance in presentation skills.

Prerequisite: RSTH 421.

S H espiratory Care Affiliation I
General care, basic critical care, and advanced critical care in the adult, pediatric, and neonatal setting as practiced at LLUMC. Open to students who are now, or have been recently, employed by LLUMC.

Prerequisite: California RCP licensure.

S H espiratory Care Affiliation II
Specialty clinical assignments selected from the following areas: adult critical care, cardiopulmonary specialties, pediatrics and neonates, polysomnography, rehabilitation and patient education, research, and special procedures. Limited to students in the postprofessional B.S. degree program in respiratory care.

Prerequisite: AHCJ 461; RSTH 422; California RCP licensure.

S H espiratory Care Affiliation III
Specialty clinical assignments selected from the following areas: adult critical care, cardiopulmonary specialties, pediatrics and neonates, polysomnography, rehabilitation and patient education, research, and special procedures. Limited to students in the postprofessional B.S. degree program in respiratory care

Prerequisite: AHCJ 461; RSTH 452; California RCP licensure.

S H espiratory Care Affiliation I
Specialty clinical assignments selected from the following areas: adult critical care, cardiopulmonary specialties, pediatrics and neonates, polysomnography, rehabilitation and patient education, research, and special procedures. Limited to students in the postprofessional B.S. degree program in respiratory care.

Prerequisite: AHCJ 461; RSTH 452; California RCP licensure.

S H espiratory Care Affiliation
Specialty clinical assignments selected from the following areas: adult critical care, cardiopulmonary specialties, pediatrics and neonates, polysomnography, rehabilitation and patient education, research, and special procedures. Limited to students in the postprofessional B.S. degree program in respiratory care.

Prerequisite: AHCJ 461; RSTH 452; California RCP licensure.

S H hysical iagnosis I
Systematic review of bedside assessment techniques utilized in the care of patients with respiratory disease. Student presentations and discussions of selected cases that involve diagnostic and therapeutic modalities of particular interest to respiratory therapists. (Three [3] units required for B.S. degree in respiratory therapy.)

S H hysical iagnosis II
Continued discussion of clinical assessment techniques and interpretation of findings in patients with cardiopulmonary disease. Emphasis on use of laboratory tests, chest radiographs, arterial blood gases, and other tests used to evaluate the patient. Lecture, reading, and discussion of case studies.

S H Management racticum II III
Experience in management of respiratory or emergency medical-care management. Clinical application of the theoretical management skills developed during the didactic portions of the training.

S H Ad anced iagnostic echni ues
Advanced diagnostic theory and practice in the following areas: Holter monitoring, echocardiography, bronchoscopy, sleep studies, and other relevant respiratory care diagnostics.

Prerequisite: RSTH 366.

S H Instructional echni ues I, II, III
Development of units of instruction, instructional

H AM

The program trains the modern phlebotomist to perform venipuncture, capillary puncture, and CPR; topics include medical terminology, laboratory safety, basic anatomy and physiology, quali-

H AM

The Cytotechnology Program, based on the completion of two years of study at an accredited college or university, leads **either** to a certificate **or** to a certificate and a Bachelor of Science degree. The program of study begins with the Autumn Quarter. A certificate is awarded at the completion of the fourth quarter of study, and those electing to continue are awarded the Bachelor of Science degree upon the completion of an additional two quarters of study. With the certificate in cytotechnology and the baccalaureate degree, the student is eligible to take a national examination and become a registered cytotechnologist.

Registered cytotechnologists entering the program to receive the Bachelor of Science degree are considered to have completed, on the basis of registry, the equivalent course work listed in the first

H AM C I S

Upon completion of the program, the graduate should be qualified to:

1. Determine and implement the appropriate procedures for collecting and processing biological specimens for cytologic analysis.
2. Detect, differentiate between, and diagnose presence and absence of disease in gynecologic and nongynecologic samples.
3. Integrate and relate data generated by the various clinical departments, making judgments regarding possible discrepancies; confirm cytologic results; verify quality-control procedures; and develop solutions to problems concerning the generation of laboratory data.
4. Use contemporary and uniform diagnostic terminology in reporting laboratory results.
5. Judge the results of quality-assurance measures and institute proper procedures to maintain accuracy and precision.
6. Evaluate current and new techniques, instruments, and procedures in terms of their clinical and diagnostic usefulness and practicality.
7. Demonstrate professional conduct and interpersonal communication skills with patients, laboratory personnel, other health care professionals, and the public.
8. Recognize, encourage, and act upon the individual's need for continuing education as a function of growth and maintenance of professional competence.
9. Apply sound principles of management and supervision.
10. Understand and apply sound principles of scientific research.

A MISSI

L A NO : AD O C- A NO AN ABL O C DI .

rere uisites for Cytotechnology Certificate only

Baccalaureate degree from an accredited college/university

General biology, complete sequence

Human anatomy and physiology, complete sequence

Microbiology with laboratory

General chemistry with laboratory, complete sequence

College algebra

English composition, complete sequence

rere uisites for Cytotechnology S

20 units minimum in humanities (choose minimum of two areas from: history, literature, philosophy, foreign language, art/music appreciation/history)

Included in this minimum, 4 units of religion per year of attendance at a Seventh-day Adventist college or university

General biology, complete sequence

Human anatomy and physiology, complete sequence

Microbiology with laboratory

General chemistry with laboratory, complete sequence

College algebra

Cultural anthropology **or** an approved course dealing with cultural diversity

Select 8 units from a minimum of two areas: sociology, economics, geography, political science, psychology, anthropology

English composition, complete sequence (minimum of 9 quarter units)

Personal health **or** nutrition

Two physical activity courses

Electives to meet the minimum total requirement of 96 quarter units

or total unit requirements for raduation, see Division of eneral tudies, LLU N AL DUCA ION UI M N Be tion V .

Ho to apply Cytotechnology

Prospective students should apply as soon after January 1 as possible for the next academic year. The certificate program begins in August and the B.S. degree program begins in September. Preference will be given to applicants whose applications and completed transcripts are received by March 1.

It is suggested that applicants take a minimum of two years of mathematics and natural sciences (excluding general science) during the high school years. A high school diploma or the GED is required for acceptance.

If English is not the native language, an undergraduate must submit a minimum score of 550 for the Test of English as a Foreign Language (TOEFL) or a minimum score of 90 percent on the Michigan Test of English Language Proficiency (MTELP) or the equivalent. Minimum scores of 5 both on the TOEFL writing test and the speaking test (TWE and TSE-A) are required for acceptance (see section II, INTERNATIONAL STUDENTS).

ACA MIC SSI

A minimum grade of C (2.0) is required for all courses in the program. A grade of less than C in any one course, or unsatisfactory clinical performance, will be cause for dismissal from the program for the remaining academic year. Readmission to the program will require reapplication.

AM I S C I
£ CH L , Certificate achelor of Science

The program of instruction outlined as follows is for students enrolled during the 2004-2005 academic year.

C I ICA

CLSC	341	Female Genital Cytology	12
CLSC	351	Respiratory Cytology	7
CLSC	353	Urinary Tract and Prostate Cytology	3
CLSC	357	Gastrointestinal Tract Cytology	2
CLSC	361	Body Cavity and Miscellaneous Secretions Cytology	8
CLSC	363	Bone Biopsy Cytology	1
CLSC	365	Breast Cytology	1
CLSC	367	Cytogenetics	1
CLSC	371	Cytopreparation Techniques	3
CLSC	373	Histotechnology Techniques	1
CLSC	481	Supervised Cytology Research Project	4
CLSC	491, 492	Cytology Affiliation I, II	6, 6
AHCJ	328	Portfolio Practicum I	1
AHCJ	402, 403	Pathology I, II	4, 4

A microscope rental fee and a usage and replacement fee are required

Margie Martinez, Senior Administrative Secretary in the Department of Clinical Laboratory Science, is ready, willing, and able to answer any concerns the students might have -- and ALWAYS with her winning smile.

Meet some of the faculty and staff of the Department of Clinical Laboratory Science -- (front row) Dr. John Lewis, Clark Masangcay, Monique Gilbert, Sally Greenbeck, Rodney Roath; (back row) James Brandt, Margie Martinez, Dr. Ron Hillock, Kelly Liu, Marlene Ota, Dr. Ken Cantos-department chair, and Thuan Nguyen.

CLI ICAL LA A SCI C achelor of Science

formerly M ICAL CH L

A student who has an interest in science, an investigative mind that enjoys the challenge of solving problems quickly and accurately, and a desire to help others should consider a career as a clinical laboratory scientist (CLS).

Clinical laboratory scientists examine and analyze body fluids, tissues, and cells. They look for bacteria, parasites, or other microorganisms; analyze the chemical content of fluids; match blood for transfusions; and test for drug levels in the blood to show how a patient is responding to treatment.

Clinical laboratory scientists perform complex chemical, biological, hematological, immunologic, microsopic, and bacteriologic tests. They use, maintain, and troubleshoot sophisticated laboratory equipment that is used to perform diagnostic tests. The clinical laboratory scientist possesses the scientific and diagnostic skills required for DNA and bio-molecular technology and genetic engineering applications, analyzes these test results and discusses them with the medical staff.

I I S

Employment of clinical laboratory workers is expected to parallel the growth of other health care occupations through the year 2010, particularly as the volume of laboratory tests increases with population growth and with the development of new technology. Employment opportunities are excellent, with current vacany rates of 12 percent. The 21st century is offering clinical laboratory scientists new avenues for test development, experimental design, administration, and education.

Clinical laboratory scientists work in hospitals or similar medical facilities, clinical and reference laboratories, home-health diagnostics, transfusion services, physicians' offices, and private medical clinics. Employment is also available in pharmacutical and biotechnology companies, health information systems, DNA-technology and genetic engineering corporations, research laboratories, federal government agencies, forensics and crime investigation, veterinary hospitals, U.S. Public Health Service facilities, and in the areas of medical product development, as well as in customer and patient education.

3. Obtain certification and licensure as a practitioner in clinical laboratory science.
4. Demonstrate self-confidence in technical, professional, and interpersonal skills.
5. Become a cooperative, effective, and efficient health care worker.
6. Communicate effectively—both orally and in writing—with peers, supervisors, patients, the public, and members of the health care team.
7. Read and interpret professional literat1.1rpersonalg02 Tc(4.)8j1'8.82 9 60.009.774 5894 Tm0 0 g02 1(writShworkhis

AM I S C I

CLI ICAL LA A . SCI C , achelor of Science

The program of instruction outlined as follows is for students enrolled during the 2004-2005 academic year.

I A

O - UMM ION

CLSM	301	Laboratory Mathematics Review*	1
CLSM	309	Quantitative Analysis (Chemical)	4
AHCJ	105	Procedures in Phlebotomy	5

AU UMN UA

CLSM	321	Hematology I	3
CLSM	327	Clinical and Pathogenic Microbiology I	5
CLSM	331	Biochemistry	5
AHCJ	328	Portfolio Practicum I	1
AHCJ	418	Physiology I	4

IN UA

CLSM	322	Hematology II	3
CLSM	324	Immunology I	3
CLSM	328	Clinical and Pathogenic Microbiology II	5
CLSM	332	Clinical Chemistry I	4
CLSM	341	Immunohematology I	3

C S S

For information about units of credit and course numbers, see the beginning of section III of this BULLETIN.

CLSC 20, 20 Introduction to adiographic rocedures I, II 2, 2
Nature and description of radiologic procedures for the nonradiologic technologist. Principles and medical techniques applied to the radiographic setting. Survey of anatomy and instrumentation. Includes observation laboratory.

CLSC , emale enital Cytology , 1
Histology and cytology of the female genital tract. Cytohormonal changes, nonneoplastic abnormalities, premalignant lesions, and rare malignancies. Lecture, demonstration, and microscopic examination.

CLSC , espiratory Cytology 1
Histology and cytology of the respiratory tract. Lecture, demonstration, and microscopic examination. Research methods, with emphasis on experimental design and interpretation of results.

CLSC rinary ract and rostate Cytology 1
Histology and cytology of the urinary tract and prostate. Lecture, demonstration, and microscopic examination.

CLSC astrointestinal ract Cytology 1
Histology and cytology of the gastrointestinal tract. Lecture, demonstration, and microscopic examination.

CLSC , ody Ca ity and Miscellaneous Secretions Cytology 1
Histology and cytology of fluids from the body cavities and other sites. Research methods applicable to cytology, with emphasis on experimental design and interpretation of results. Lecture, demonstration, and microscopic examination.

CLSC one iopsy Cytology , 1
Histology and cytology of bone. Lecture, demonstration, and microscopic examination.

CLSC reast Cytology , 1
Histology and cytology of the breast. Lecture, demonstration, and microscopic examination.

CLSC Cytogenetics , 1
Meiosis, mitosis, karyotype preparation. Genetic disorders. Lecture, demonstration, and laboratory.

CLSC , Cytopreparation echni ues 1
Procedures on collection and fixation techniques from all organ sites. Techniques in assuming cumulation of follow-up data and laboratory quality control. Clinical and social aspects of AIDS. Lecture, demonstration, and laboratory.

CLSC Histotechnology echni ues , 1
Histologic preparatory techniques, with emphasis on special stains.

CLSC eneral Histology 1
Microscopic study of fundamental tissues, cells, organs, and systems of the human body, with emphasis on laboratory and conference exercises.
Prerequisite: AHCJ 402, 403.

CLSC athology 1
Advanced pathology, with emphasis on the cytologic changes of cells in disease. Review of all organ systems, with correlation between tissue-biopsy material and cytologic findings.
Prerequisite: PATH 305, 306.

CLSC Hematology 1
Theory and background of routine and special laboratory procedures used in diagnosis and treatment of hematologic and other diseases. Evaluation and comparison of methodology. Emphasis on bone marrow, body fluid, and peripheral blood-cell morphology: hematopoiesis, maturation, kinetics. Atypical and abnormal cellular morphology, including leukemias, lymphomas, and anemias. Clinical and social aspects of AIDS.

CLSC , Ad anced Specialties 1
Principles and techniques of electron microscopy, including basic cell ultrastructure, immunohistochemistry, and molecular biology.

CLSC Current esearch echni ues 1
Introduction to current research techniques and skills development. Techniques in immunocytochemistry, image, flow cytometry, and molecular pathology.

CLSC , Super ised Cytotechnology esearch ro ect 1
Research project under the supervision of the program director. Oral presentation and paper.

CLSC Super ised Hematology esearch ro ect 1
Supervised research project under the direction of the hematopathologist. Oral presentation and paper.

CLSC , , Cytology Affiliation I, II , 1
Six two-week internships in the cytopathology laboratory. Rotation through all phases of diagnostic service work and laboratory functions in cytology. Independent screening of routine gynecologic and nongynecologic specimens.

CLSM Laboratory Mathematics e ie , 1
Problem solving related to clinical determinations, including solution preparation and calculations necessary for generating laboratory-test results from raw data.

CLSM rine and ody luid Analysis I , 1
Urinalysis screening procedure and its application in

CLSM [illegible] Medical [illegible]arasitology [illegible]
Medically important parasites: life cycles, clinical features, infective diagnostic stages. Demonstrations, slide studies, and diagnostic procedures. Lecture and laboratory.

CLSM [illegible] [illegible]uantitati[illegible]e Analysis Chemical [illegible]

CLSM , , rine and ody luid Analysis II , 1
Correlation of theory and clinical experience with—and their application to—analytical techniques. Assessment and interpretation of data. Evaluation and comparison of methodologies. Urinalysis screening procedures and applications in the diagnosis of renal, systemic, and metabolic diseases. Processing, analysis, and morphologic evaluation of body fluids.

Prerequisite: CLSM 303.

Corequisite: CLSM 471.

CLSM , iagnostic Microbiology
Correlation of theory and clinical experience with—and their application to—analytical techniques. Assessment and interpretation of data. Evaluation and comparison of methodologies. Directed study and review of diagnostic bacteriology, mycology, parasitology, and virology. Emphasis on isolation and identification of pathogenic

CLSM 435 Clinical Practicum III 4
Thirteen weeks of supervised clinical laboratory experience in selected areas, including: chemistry and special procedures. Student performs tests routinely done in these areas of the clinical laboratory. Incorporates experience in administrative duties.

Prerequisite: Satisfactory completion of Clinical Laboratory Science Program junior-year courses.

Corequisite: CLSM 434, 455.

H AL H I MA I MA A M

H AL H I MA I S S MS Master of Health Information Systems ost Master s Certificate in Health Information Systems

H AL H I MA I A MI IS A I Certificate achelor of Science Health Information echnology HI rogression achelor of Science

C S CIALIS Certificate

MARILYN H. DAVIDIAN, Department Chair; Program Director for Health Information Systems and Health Information Administration

DIANA S. MEDAL, Program Coordinator for Certificate, Coding Specialist

KIMBERLY S. RICHARDS, Recruitment Coordinator

TERRI L. ROUSE, Clinical Coordinator

AC I

Robert S. Blades
Kent Chow
Noha S. Daher
Marilyn H. Davidian
Intithar S. Elias
Helen R. Greenwood
Debra L. Hamada
Diana S. Medal
Dulce Peña
Terri L. Rouse
Michael Scofield
Donna G. Thorpe

CLI ICAL AC I

Jere E. Chrispens
Jennifer L. Guerrero
Melissa Hingula
Linda M. Palmer
Audrey J. Shaffer
Rita M. Stiffler
Betty Ann Wagner
Douglas F. Welebir

I I

For tuition information, please see section II, Financial Information, SCHEDULE OF CHARGES.

A IS C MMI S

Betty Ann Wagner, Chair
F. Faye Brown
Deborah Critchfield
George DeLange
Cynthia M. Doyon
Craig R. Jackson*
Margaret B. Jackson
Irvin Kuhn
Barbara Pinkowitz
Rita M. Stiffler

A IS C MMI M H I S

Arthur W. Kroetz, Interim Chair
Jere E. Chrispens
Padmini Davamony
David Holt
Craig R. Jackson*
Kristin Krug-Schmidt
Damon Needleman
Betty Ann Wagner
Grenith J. Zimmerman

A IS C MMI C S CIALIS

Rita M. Stiffler, Chair
Darlene Downs
Kate Haggerty
Carel Hanson
Melissa Hingula

*ex officio

I I S

While many health information administrators are employed in various areas of acute-care facilities, others work in alternative-delivery health care systems, research facilities, quality assurance, data companies, industrial establishments, governmental agencies, medical departments of insurance companies, accounting firms, or as consultants to skilled nursing and other facilities.

The multiplicity of new technologies, the advent of electronic health records, the demand for health information, the emphasis on evaluation of care, the surge in research, the emphasis on cost control, and other factors combine to require comprehensive knowledge and increased utilization of administrative talent and judgment.

H AL H I MA I A MI IS A I , Certificate

A MISSI

To be eligible for admission, the applicant must have completed a minimum of 96 quarter units at an accrediated college or university.

rere uisites for Health Information Administration, Certificate

Bachelor'

A MISSI

T

C T S CIALIS Certificate

Health care facilities need coders who accurately select ICD-9-CM codes, CPT codes, and DRG and APC assignments for diagnostic and surgical information recorded in health records. In most instances, financial reimbursement is directly

C S S

or information a out units of , redit and , ourse num ers, see the e innin of se, tion III of this BULL IN. Multinum ered , ourses must e , ompleted in sequen , e.

HLCS 2 harmacology 1
Introduction to pharmacology, including a review of pharmaceuticals used in diagnosis, prevention, and treatment of disease as commonly encountered in medical records.

Prerequisite: HLCS 239 or equivalent.

HLCS 2 ssentials of Human iseases 1
Survey of human diseases, including the etiology, pathogenesis, and clinical manifestations of commonly encountered diseases.

Prerequisite: Human anatomy and physiology

HLCS 2 Introduction to Medical ecords 1
Introduction to health care facilities and the information systems involving health records. In-depth study of health record content, confidentiality of health care information, and professional ethics.

HLCS 2 , Medical erminology 1
Prefixes, suffixes, and root words used in the language of medicine. Terms pertaining to pathology and surgery.

HLCS 2 2 Coding I 1
Principles and conventions of ICD-9-CM coding in diseases and procedures pertaining to infectious disease; diseases of blood, endocrine, respiratory, digestive, genitourinary, skin, and musculoskeletal systems; and mental disorders. One hour weekly laboratory included to enhance coding proficiency.

Prerequisite: HLCS 236 or equivalent.

HLCS 2 Coding II 1
Principles and conventions of ICD-9-CM coding in diseases and procedures pertaining to pregnancy, perinatal conditions, poisonings, injuries, complications of medical and surgical care, the circulatory system, and neoplasms. One hour weekly laboratory included to enhance coding proficiency using actual patient records.

Prerequisite: HLCS 242.

HLCS 2 Coding III 1
Principles of current procedural coding (CPT) at the intermediate level—including surgical coding for all body systems, medical procedures, anesthesia coding, radiology, pathology, and laboratory coding. Modifier assignment included. 2 hour weekly laboratory practice on 3M and Quadramed software included.

Prerequisite: HLCS 243.

HLCS 2 aluation and Management Coding for illing and eimbursement 1
Principles of billing and third-party reimbursement as they relate to physician professional coding and APC assignment for health care institutions. E & M coding conventions and modifiers included. Coding for physician practice settings including outpatient, inpatient, ER, observation, SNF, and other common settings. Principles of health service billing are covered, including billing terminologies, the billing process and the universal billing forms. One hour weekly laboratory practice included to enhance student proficiency using actual patient records and 3M encoding software.

Prerequisite: HLCS 245.

HLCS 2 Coding Special opics 1
Coding system usage by reimbursement agencies, laws governing these processes, and federally supervised coding auditing to assure that the laws of coding are followed. Health care-delivery systems and internal billing and reimbursement in these settings. Requirements of state and federal coding regulatory agencies, ethics of coding, coding quality, and coding compliance. Content varies to accommodate the changing nature of health care-reimbursement processes and laws.

Prerequisite: HLCS 245.

HLCS 2 , Coding racticum I 1
Sixty-six-hours of coding laboratory designed to provide a capstone experience for students who have completed all academic course work in coding. Enables students to apply all state and national coding and reimbursement regulations to a variety of inpatient and outpatient records. Provides students the opportunity to improve speed and accuracy prior to entering the job force.

Prerequisite: HLCS 257.

HLCS 2 2 Coding racticum II 1
A continuation of HLCS 261. Practicum II includes an additional 66 hours of coding laboratory experi-

MHIS , , Security and ata Communications 1
How information systems work. Fundamentals of information-systems hardware and software, including existing databases on local and national networks. Internet and Intranet projects required. Distributed data processing, client-server systems, local-area networks (LAN), wide-area networks (WAN), and data communications, including voice and image. Field trips. Scheduled laboratory assignments using various database environments.

MHIS , Maintenance and peration of Information Systems 1
Process of maintenance and management of data-communication systems. Network administration. Analysis and development of information-security systems, system auditing, information-system documentation, and system-maintenance plans. Devlopment of maintenance plan and security plan. Scheduled laboratory.

MHIS ro ect Management S ills 1
Fundamentals of project planning in information systems, including building the project team, defining project objectives, structuring and scheduling the project, and establishing a project timeline. Use of Mircosoft Project for documentation requirements. Reporting, monitoring, analysis, and control also presented.

MHIS Mar et esearch Methods in Health Care 1
Application of health care-market data sources, including the Internet, *Dartmouth Health Care Atlas*, government and health care agencies, health care-market-research firms, publications, and others. Effective presentation of market-research data for decision-support systems using multiple communication formats—including written analysis, public speaking/LCD presentations, media strategic-planning/business-planning documents, accreditation reports, and other resources.

MHIS Seminar in Health Information Systems 1
Projects and case studies designed to prepare the student for the internship. Techniques of personnel selection, interviewing, vendor evaluation, and management of an HIS department. Includes concentrated, hands-on experience with technology as it relates to health information systems. Flexible content tailored to the needs and prior experience of the students.

Taken in the last quarter before the internship.

MHIS Health Systems perations Manage ment 1
Use of quantitative methods to analyze and improve business processes within an organization. Regression analysis, simulation, decision analysis, capacity planning, inventory models, linear programming, scheduling, and cost-benefit analysis.

MHIS Strategic Health Information Systems Management 1
Decision making and planned change through the strategic-planning process. Purpose, vision, mission, and strategic objectives. Developing strategic alternatives and choices incorporating information technology. System life-cycle method. Concepts of marketing strategy and competition analysis in the health care market. Integration mergers, restructuring, and downsizing; and their effects. Presentation of a health information-system technology business plan.

MHIS Health Information Systems Internship 1
Practical application of the principles of classroom theory in a health care setting. Major project required.

Prerequisite: Completion of all M.H.I.S.-degree course work, or permission of department chair.

**MHIS irected Study , ** 1
Individual arrangements for students to study under the guidance of a program faculty member. May include literature review, research, or other special projects.

C I

See CONJOINT COURSES, section III eneral Information, for course descriptions.

C A

**L Christian thics and Health Care ** 1
Ethical issues in modern medicine and related fields from the perspective of Christian thought and practice.

Additional project required for third unit.

**L Loma Linda erspecti es ** 1
History and philosophy of Loma Linda University as a Christian health-sciences institution that fosters human wholeness.

Additional project required for third unit.

DIETETIC TECHNICIAN, Associate in Science

The dietetic technician is a support member of the nutrition-care team. At the direction of the dietitian, the dietetic technician screens patients for nutrition-care needs, marks menus, teaches individuals or groups, monitors effectiveness of nutrition care, and documents findings in the patient's medical record. Dietetic technicians contribute to the overall success of the food service by developing menus, supervising food-service employees, monitoring quality of food, and providing in-service training for employees.

CAREER OPPORTUNITIES

The dietetic technician practices with other members of the nutrition-care team, including the registered dietitian, the dietetic assistant, and food-production and food-service personnel. Employment may be found in a variety of environments, including hospitals and other health care facilities, retirement centers, schools and universities, government and community agencies, food-management companies, and industrial feeding sites.

PROGRAM

The program consists of four quarters and integrates the theory of the classroom studies with the experience of the laboratory and supervised clinical experience. Students participate as active learners in a variety of settings planned to develop competent dietetic technicians. The Associate in Science degree is awarded upon successful completion of the program.

Accreditation

The Dietetic Technology Program is currently granted continuing accreditation by the Commission on Accreditation for Dietetics Education of The American Dietetic Association, 120 South Riverside Plaza, Suite 2000, Chicago, IL 60606-6995; telephone: 312/899-5400. Web site <www.eatright.org/cade; FAX: 312/899-4817.

SPECIAL ADMISSION REQUIREMENTS

Upon satisfactory completion of the program and upon recommendation of the faculty, the graduate will be eligible to take the registration examination of the Commission on Dietetic Registration in order to become a dietetic technician, registered (DTR).

SPECIAL ASSOCIATIONS

Students and graduates are eligible for membership in The American Dietetic Association. The mission of the association is to provide direction and leadership for quality practice, education, and research; and to promote optimal health and nutritional status of the American population. This organization grants student membership at a nominal cost to undergraduates of accredited programs. The national office of The American Dietetic Association is at 120 South Riverside Plaza, Suite 2000, Chicago, IL 60606-6995. Along with membership in the American Dietetic Association, students become members of the California Dietetic Association. Students are encouraged to join the Inland District Dietetic Association and, where possible, the Seventh-day Adventist Dietetic Association.

PROGRAM GOALS

1. Prepare graduates to be competent entry-level dietetic technicians;
2. Assure 90% of enrolling students complete the program with encouragement, empowerment, and support of faculty and staff;
3. Provide professionally trained Dietetic technicians, Registered, who may be employed by the health care and educational systems of the Seventh-day Adventist Church, or local, national, or international entities;
4. Develop a "career ladder" for nutrition education at Loma Linda Univerasity.

H AM C I S

Upon completion of the program, the graduate should be qualified to:

1. Perform competently at the entry level of technical practice.
2. Value life-long learning.
3. Utilize current technology.
4. Participate as a leader in nutrition care.
5. Recognize the option to pursue a bachelor's degree program upon completion of the Associate in Science degree.
6. Fill the need for registered dietetic technicians, where appropriate, within the health care and educational network of Seventh-day Adventist institutions as well as local organizations.

AM I S C I

I I A I ICS, achelor of Science

Dietetics, a vital profession in the field of health promotion, focuses on the sciences of nutrition and management in feeding individuals and groups throughout the life cycle. The Coordinated Program in Dietetics combines supervised professional practice with didactic curriculum to develop professional skills concurrently with cognitive and technical skills to enable the graduate to establish eligibility to become a registered dietitian.

Admission to the program is based on a selective process. To be eligible for consideration, the applicant must meet the following criteria: completion of subject requirements, as indicated, at an accredited college or university; a 3.0 G.P.A. or above; an interview; a letter of application; and recommendations.

I I S

Dietetic practice is the application of principles derived from integrating knowledge of food, nutrition, biochemistry, physiology, business and management, journalism, behavioral and social sciences, and the arts to achieve and maintain health, prevent disease, and facilitate recovery from illness.

Members of the dietetics profession practice in a variety of environments, including hospitals and other health care facilities, schools and universities, government and community agencies, business, and industry. A growing number of dietitians are employed in physicians' offices, clinics, home-health care agencies, mass communication, and many other entrepreneurial roles.

By successfully passing the registration examination for dietitians, practice opportunities as a specialist in medical nutrition therapy, administrative dietetics, nutrition education, community nutrition, or research are available. There is increased recognition of the importance of nutrition in the fields of medicine, dentistry, and health promotion—with emphasis on fitness and optimal well-being. This indicates that the dietitian's scope of practice is steadily widening.

M ICAL I I H A

The Registered Dietitian in medical nutrition therapy applies the science of nutrition to the care of people through health promotion and disease prevention and uses medical-nutrition therapy in the treatment of disease. The effective dietitian must be aware of the cultural, social, economic, aesthetic, and psychological factors that affect eating patterns. As a member of the patient-care team, the registered dietitian (RD) is responsible for assessing, implementing, and monitoring the nutritional care of patients. In

addition, the RD may serve professionally as a nutrition practitioner in health care; a teacher in an educational institution; a research dietitian; or a nutrition consultant-educator in municipal, state, or federal departments of health.

ADMINISTRATIVE DIETETICS

The registered dietitian (RD) in management is accountable for the food-service systems. In a health care institution, the RD is responsible for the effective functioning of food service from the standpoint of patients, administration, medical staff, and personnel. The administrative RD may also teach; manage food systems in educational, public, or commercial facilities; serve as consultant to health care or educational institutions; or enter the field of research.

COMMUNITY DIETETICS

Community registered dietitians practice in diverse settings, translating nutrition science into improved health status. Challenges may include forming partnerships with various organizations, mastering technology, enacting regulations and policies that protect and improve the public's health, and creatively managing scarce resources. Dietitians working in the community exhibit high-quality leadership and planning skills, and many create positions that are entrepreneurial as well as financially rewarding.

PROGRAM

The Nutrition and Dietetics Program is established to prepare entry-level dietitians to join the profession and contribute to the wholeness of mankind. The graduate is awarded the Bachelor of Science degree and is eligible to write the registration examination of the Commission on Dietetic Registration. The program is composed of didactic and supervised professional practice experiences in an environment of liberal arts education to prepare an educated graduate. Admission to the professional program at this University begins with the postsummer session of the sophomore year. The applicant will present at least two years of preprofessional education from an accredited college or university to meet the specific subject requirements for 2004-2005.

The professional program of seven or eight quarters includes theory, laboratory, research, and clinical experiences. Ten weeks of clinical experience are scheduled at the end of the junior year and ten weeks during the Spring Quarter of the senior year. Students participate as active members of the nutrition-care team in multiple clinical settings. Administrative affiliation experiences involve decision-making assignments in volume-feeding operations.

Accreditation

The Coordinated Program in Dietetics is currently granted continuing accreditation by the Commission on Accreditation for Dietetics Education of The American Dietetic Association, 120 South Riverside Plaza, Suite 2000, Chicago, IL 60606-6995, 312/899-5400.

SPECIALIZATION

Upon satisfactory completion of the program and upon recommendation of the faculty, the graduate will be eligible to take the registration examination for dietitians in order to become a registered dietitian.

STUDENT ASSOCIATION

Students and graduates are eligible for membership in The American Dietetic Association. The mission of the association is to provide direction and leadership for quality practice, education, and research; and to promote optimal health and nutrition status of the American population. The association grants student membership at a nominal rate to students in accredited programs. The national office of The American Dietetic Association is at 120 South Riverside Plaza, Suite 2000, Chicago, IL 60606-6995. Along with mem-

bership in The American Dietetic Association, students become members of the California Dietetic Association. Students are encouraged to join the Inland District Dietetic Association and, where possible, the Seventh-day Adventist Dietetic Association.

H AM ALS

1. Prepare graduates to be competent entry-level dietitians;
2. Assure 90% of enrolling students complete the program with encouragement, empowerment, and support of faculty and staff;
3. Provide professionally trained Registered Dietitians, who may be employed by the health care and educational systems of the Seventh-day Adventist Church, or local, national, or international entities;
4. Serve as a nutrition resource to Seventh-day Adventist Church organizations.

H AM C I S

Upon completion of the program, the graduate should be qualified to:

1. Perform competently at the entry level of professional practice.
2. Exhibit Christian ethical and moral values.
3. Exhibit an investigative spirit to continue attaining knowledge and developing professional competency beyond the entry level.
4. Communicate effectively and be computer literate, using and analyzing data in the decision-making process.
5. Develop leadership skills to achieve personal and corporate goals.
6. Incorporate critical-thinking skills into professional and personal decisions.
7. Demonstrate, from a historical and contemporary basis, the value of diversity in the personal and professional life from ethnic, gender, generational, and ideological points of view.

A MISSI

Admission to the program is based upon a selective process. To be eligible for consideration the applicant must meet the following criteria:

- a 3.0 G.P.A. or above
- an interview
- a letter of application
- recommendations
- completion of program prerequisites

rere uisites for utrition and ietetics S

20 units minimum in humanities
- Choose minimum of two areas from: history, literature, philosophy, foreign language, art/music appreciation, or art/music history
- Must include also 4 units of religion per year of attendance at a Seventh-day Adventist college or university

Two years high school mathematics with grades of C or better **or** intermediate algebra in college

Anatomy and physiology, complete sequence with laboratory

Introductory chemistry, complete sequence with laboratory after current requirement for chemistry.
NOTE: We recommend General Chemistry for those considering an advanced degree in Nutrition and Dietetics. We will accept either chemistry sequence.

Microbiology with laboratory

General psychology

Sociology

Cultural anthropology **or** an approved course dealing with cultural diversity

English composition, complete sequence

Speech

Two physical activity courses

Human nutrition

DTCS 302 Food Selection and Preparation

DTCS 303 The Art of Food Presentation

Electives to meet the total minimum requirements of 87 quarter units

or total unit requirements for raduation, see Division of eneral tudies, LLU N AL DUCA ION UI M N Se tion V .

AM I S C I I A ICS achelor of Science

The program of instruction outlined as follows is for full-time students enrolled during the 2004-2005 academic year.

I A

AU UMN UA , eptem er 22 - De, em er 0, 2004

DTCS	305	Professional Issues in Nutrition and Dietetics	0.5
DTCS	339	Life-Cycle Nutrition	2
DTCS	341	Nutrition Assessment	3
DTCS	371	Quantity Food Purchasing, Production, and Service	5
AHCJ	329	Orw-R.Fistry with Laboratory -1.148.0[(w UTUMN QUAK36Tc198 654..661 m365 Tm08 654..661 lS9 0 0 9	

(Seated, left to right) Maxine Taylor and Ken Burke.
(Standing, left to right) Bert Connel (department chair),
Jana Bowen, Martina Karunia, Georgia Hodgkin, and Cindy Kosch.
It is impossible to corner all of the Department of Nutrition and Dietetics faculty members at one time. Their quest for keeping the curricula up to date is a never-ending task and occupies their time when not in the classrooms.

I I A _I , ICS, Certificate

A MISSI

To be eligible for admission, the applicant must have earned a minimum of a baccalaureate degree at an accredited college or university.

Sub ect re uirements for , ,

The applicant must complete the core professional courses required for the B.S. degree.

esidency re uirement

A minimum of 18 units of credit in residency is required.

AM I S C I
I I A _I , ICS, Certificate

An individualized program of instruction will be developed prior to admission, based on the applicant's need and previous courses, to assure that all program requirements are met. Eligibility to write the registration examination for dietetians of the Commission on Dietetic Registration will be based on completion of program requirements as well as on demonstrated competency in the following certificate prerequisites.

rere uisites for utrition and _ietetics, Certificate

Bachelor's degree from an accredited college

Human anatomy and physiology with laboratory, complete sequence

Microbiology with laboratory

General chemistry with laboratory, one semester or two quarters

NO : A minimum rade of C I 2.0 is required for all , ourses in the pro ram.

CH Independent Study in ietetic echnology
Project or paper to be submitted on a topic of current interest in an area of dietetic technology. Regular meetings to provide the student with guidance and evaluation.

CS Human utrition
Fundamentals of normal nutrition. Carbohydrates, proteins, fats, vitamins, minerals; their roles in human metabolism. Introduction to nutrition in the life cycle. Per week: lecture 3 hours.

CS ood Selection and reparation
Foods and their nutritive values. Changes associated with maturation, preservation, table preparation, transportation, and storage in relation to food safety. Per week: lecture 3 hours, laboratory 3 hours. Laboratory fee.

CS he Art of ood resentation
Art of food presentation to enhance acceptance of food. Nutritional concepts and cultural food patterns in planning and producing meals. Focus on meal service at home and in professional and social settings. Per week: lecture 2 hours, practicum 3 hours. Laboratory fee.

Prerequisite: DTCS 301, 302; or consent of the instructor.

CS Community utrition
Education of community members in different areas related to nutrition. Requires knowledge of normal nutrition and life-cycle issues. Nutrition assessment; medical nutrition-therapy topics such as obesity, CHD, diabetes, etc. Legislative processes and politics. Program planning, implementation, management, and evaluation. Counseling, teaching, and facilitating group processes. Interpreting data and research findings. Identifying and accessing community nutrition resources. Community interactions that promote a healthy lifestyle, including but not limited to nutrition topics. Per week: lecture 2 hours, practicum 6 hours.

Prerequisite: DTCS 301, 339, 341.

CS rofessional Issues in utrition and ietetics
Growth of nutrition and dietetics as a profession, and the role of the professional in restoration and maintenance of health. Illustrated nontraditional roles of the registered dietitian and dietetic technician, registered. Emphasis on development of professionalism, accountability, and responsibility for life-long learning. Preparation of a professional portfolio.

CS Human and Clinical utrition for ursing
Fundamentals of normal nutrition. Carbohydrates, proteins, fats, vitamins, minerals; their roles in human metabolism. Investigating the role of nutrition at various stages in the life cycle of the individual in health and disease. Nutrition intervention in the prevention and treatment of disease in the clinical setting.

CS Clinical utrition for ursing
Nutrition intervention in the prevention and treatment of disease in the clinical setting.

CS utrition and Human Metabolism
Nutritional requirements and metabolism of essential nutrients for the human organism at the cellular level. Focus on vitamin and mineral metabolism. Per week: lecture 4 hours.

Prerequisite: DTCS 301 or equivalent; general chemistry; anatomy and physiology; biochemistry.

CS Life Cycle utrition
Management of the normal nutrition needs of individuals across the lifespan. Includes focus on pregnancy, lactation, normal infant growth and development; childhood and adolescence, with an overview of school feeding programs. Adult men's and women's health issues. Geriatrics. Per week: lecture 1 hour, practicum 3 hours.

Prerequisite: DTCS 301.

Corequisite: DTCS 341.

CS utrition Assessment
Basic knowledge of the responsibilities of the clinical dietitian: review of the medical record, documentation in the medical record, medical terminology, and patient interviewing. Utilization of the computer for diet analysis. Introduction to nutrition assessment, anemias, food allergies, vegetarian diets, nutrition quackery, sports nutrition, obesity

DTCS 371 Quantity Food Purchasing, Production, and Service (4)

Emphasis on methods to achieve quantitative and qualitative standards in quantity food production. Menu planning for institutions. Purchasing. Practicum in food production and service. Open to dietetics students only. Per week: lecture 2 hours, practicum 9 hours.

Prerequisite: Microbiology.

DTCS 372 Food Systems Organization and Management (3)

Study of food-service systems. Effective utilization of resources within the food system. Computer application in food-systems management. Per week: lecture 2 hours, practicum 6 hours.

Prerequisite: DTCS 371.

DTCS Nutrition and Dietetics Practicum (4)

Supervised experience in medical nutrition therapy, community, and administrative dietetics in hospitals, outpatient clinics, public health departments, and food systems. Performance review and evaluation. Ten weeks (400 clock hours) during the summer at the end of the junior year.

Prerequisite: DTCS 304, 343, 372.

DTCS Senior Seminar (1)

Development of professional skills; team efforts to market nutrition in the community; volunteer efforts in the community; professional networking; and special topics as determined by nutrition and dietetics faculty. Emphasis on professional portfolio and transition to entry-level nutrition educator/dietitian/food-service director.

Prerequisite: DTCS 305 or equivalent.

DTCS Pharmacology in Medical Nutrition Therapy (2)

General overview of pharmacology, including kinetics, dynamics, and therapeutics of drugs. Basic definitions, sources of information, classification of drugs, and

CS Advanced Community Nutrition
Provides students access to community professionals in the context of informal, round-table discussions. Topics may include school-based nutrition education and interventions; epidemiology (cancer, CHD, or vegetarian diets); addictions; nutrition education and teaching aids; study of an international health organization; nutrition and public policy in the U.S. (FDA, NCI, etc.); nutrition journalism; the RD in private practice; soy-protein use around the world; and promotion of nutrition in the community. Provides students a weekly opportunity to participate in professional practice, including opportunity to conduct community-based programs and limited research. Assignments include giving a multimedia presentation, professional-practice case studies, professional-practice diary, writing a nutrition article to be submitted for publication, and a special-interest project (subject to approval of the instructor).

Prerequisite: DTCS 304.

CS Community Nutrition Affiliation
Professional practice in community-nutrition settings,

in both traditional and nontraditional settings. Tnity-nutrition sal-

in bo4 Tc[(.r0 ninterest project)'k ofl-

oreenice eTD0o4 asson article to be sucity-Nutwi 50clinTcl to approvao4 assutr.
0nIE refI1U1j-0.556e suUi-nutr in pri.0 0 tpa,6 556e s00010 spa,0m p5 49.nTc ,a 5c m

Here they are, the
administrative

The occupational therapist and occupational therapy assistant work with persons who find it difficult to cope with psychological or physiological dysfunction.

The primary concern of both therapist and assistant is to stimulate those changes in behavior patterns that will increase the patient's personal independence and ability to work within his/her cultural and personal milieu. To accomplish this goal, the occupational therapist evaluates the patient; sets up treatment goals; and works together with the occupational therapy assistant in selecting tasks from the gamut of normal daily self-care activities, using them to assist the patient in gaining independent-living skills regardless of disability or handicap.

Essential to the role of occupational therapy is an interest in the behavioral sciences and a concern for the individual's need to find proper adjustments to life's circumstances. A desire to teach and a background or interest in medical science are beneficial. Those inclined to mechanical or scientific techniques are suited to helping patients develop their capacities for employment. Others find that they can use their interests in creative arts, crafts, music, and teaching to work with disabled homemakers, children, and retired persons.

I I S

Occupational therapists and occupational therapy assistants practice in general hospitals, rehabilitation centers, pediatric or psychiatric clinics, schools, skilled-nursing facilities, home care, and outpatient community-centered programs

SSI AL IS A I

Upon satisfactory completion of the occupational therapy A.A. or entry-level M.O.T. degree—including completion of Level II fieldwork within twenty-four months following completion of academic preparation, and upon recommendation of the faculty—the graduate is eligible to take the national certification examination administered by The National Board for Certification for Occupational Therapy (NBCOT). The board offers computerized examinations on demand throughout the year.

Many states require licensure in order to practice; however, state licenses are based on the results of the NBCOT certification examination. The American Occupational Therapy Association provides recognition essential to the practice of occupational therapy in the United States and most foreign countries. Information about qualifying examinations can be obtained at the office of the department chair.

When the graduate applies to write the certification examination with the NBCOT, s/he will be asked to answer questions related to the topic of felonies. For further information on these limitations, contact NBCOT at 800 South Frederick Avenue, Suite 200, Gaithersburg, MD 20877-4150; or telephone 301/990-7979.

SSI AL ASS CIA I S

Students are eligible for membership in The American Occupational Therapy Association and Occupational Therapy Association of California, two organizations that foster development and improvement of service and education. The student is encouraged to become a member, read the journal, and attend local professional meetings. The national office address is: The American Occupational Therapy Association, P. O. Box 31220, Bethesda, MD 20824-1220.

CC A I AL H A ASSIS A

Associate in Arts

L A NO : AD O C- A NO
AN ABL O C DI .

rere uisites for ccupational herapy Assistant A A

Religion required, 4 units per year of attendance at a Seventh-day Adventist college or university

Fine arts

H AM

The second year of the Occupational Therapy Assistant (OTA) Program, leading to the Associate in Arts degree, is based on the completion of one year of prerequisite course work at any accredited college or university. The four quarters of course work at Loma Linda University begin with the Autumn Quarter of the sophomore year. For the two ten-week clinicals during the summer at the end of the program, the student is assigned for experience at approved hospitals and in various community health care programs. Level II fieldwork must be completed within eighteen months following academic preparation.

C C I ICA I

Students are required to have current cardiopulmonary resuscitation (CPR) certification (adult and child) for all scheduled clinical experience. Classes are available on campus at Life Support Education, University Arts building, 24887 Taylor Street, Suite 102.

IMM I A I S

Students are required to have a current TB test, the complete hepatitis B series, and chicken pox immunizations for all scheduled clinical experience. Titers for MMR, hepatitis B, and varicella must be completed before entering the program. These are essential for fieldwork placements. Immunizations are available at the Student Health Service, Evans Hall. (See section II, Admissions Information: ENTRANCE REQUIREMENTS—Pre-entrance health requirement/Immunizations.)

A S A I

Students are required to have their own transportation to and from fieldwork sites and other class-related activities.

A MISSI

To be eligible for admission, the applicant must have completed a minimum of 48 quarter units or 32 semester units at an accredited college or university.

English composition, complete sequence
Speech
Introduction to Computers
Personal health or nutrition
Two physical activity courses
Electives to meet the minimum total requirement of 96 quarter units

or s perience

A minimum of forty hours of documented community service of the applicant's choice is required before application will be considered for admission.

A MISSI ption o M
Master of ccupational herapy trac

This option is for individuals who have earned a baccalaureate degree from an accredited college or university. Graduates will receive a Master of Occupational Therapy degree ONLY.

OCTH	542	Current Trends in Occupational Therapy Practice II	3
OCTH	544	Advanced Occupational Therapy History	3
OCTH	551	Theoretical Perspectives on Occupation	3
OCTH	552	Practice Perspectives in Occupational Therapy	3
OCTH	561, 562	Program Development/Design I, II	3, 3
OCTH	563	Professional Competency Development	3
OCTH	571-573	Research I, II, III	2, 2, 2
AHCJ	509	Teaching and Learning Styles	3
AHCJ	601	Research-Proposal Writing	3
RELR	536	Spirituality and Occupation	3

A minimum grade of C with an overall G.P.A. of 2.5 is required for all courses in the program. The program of instruction is full time for each quarter. Academic credit of less than 12 units per quarter does not indicate less than full-time work.

Religion course required for M.O.T. track students.

Postprofessional Master of Occupational Therapy

THESIS

T

COMMENCEMENT

Postprofessional Master of Occupational Therapy

The program of instruction outlined as follows is for full-time students enrolled during the 2004-2005 academic year. The curriculum is four quarters in length for full-time students or eight quarters in length for part-time students.

OCTH	526	Business Topics in Health Care	3
OCTH	542	Current Trends in Occupational Therapy Practice II	3
OCTH	544	Advanced Occupational Therapy History	3
OCTH	551	Theoretical Perspectives on Occupation	3
OCTH	552	Practice Perspectives in Occupational Therapy	3
OCTH	699	Directed Study	3
AHCJ	509	Teaching and Learning Styles	3
AHCJ	511	Biostatistics I	3
AHCJ	526	Computer Applications II	3
AHCJ	591	Research I	3
AHCJ	592	Research II	3
_____	____	Elective	3
_____	____	Elective	3
_____	____	Elective	3
REL_	____	Religion elective	3

C S S

For information about units of credit and course numbers, see the beginning of section III of this BULLETIN.

C A Introduction to ccupational herapy
Growth of occupational therapy as a profession and its role in medical rehabilitative care. Human development from birth to death. Self-care, work, and play related to physical function and sociocultural adjustment. Per week: lecture 1 hour.

C A Applied Anatomy
Review of upper/lower extremities and trunk anatomy. Analysis-associated pathology as it applies to function. Per week: lecture 1 hour, laboratory 2 hours.

C A Introduction to unctional euroanatomy
Basic concepts of the anatomy of brain and spinal cord. Introduction to the neuron, synapse, nerve conduction, cell threshold, and feedback system. Per week: lecture 2 hours.

C A ccupational herapy Assistant racticum I II
Observation and supervised experience in commu-nity programs. Per week: 8 hours.
Prerequisite: Must be completed in sequence.

C A herapeutic Acti ities I
Basic activities used by the occupational therapy assistant in a clinic setting. Problem-solving approach to woodwork, metalwork, and the primitive crafts. Clinic maintenance and safety emphasized. Per week: lecture 1 hour, laboratory 2 hours.

C A herapeutic Acti ities II
General introduction to the use of assistive technology and splinting, and their role in occupational therapy. Per week: lecture 1 hour, laboratory 2 hours.

C A ccupational herapy Assistant Seminar
Practical application of analyzing an activity for an individual or group of patients and demonstrating the ability to adapt those activities to each patient's needs. Per week: lecture 2 hours.

C A Inter ention echni ues
Theory and application of basic skills in the management of disabled persons. Application of skills to body mechanics, self-care, and homemaking. Use of adaptive equipment in laboratory and clinic settings. Per week: lecture 1 hour, laboratory 2 hours.

C A ccupational herapy ractice I
Normal and abnormal growth and development. Diagnosis and treatment of disabilities associated with development. Per week: lecture 4 hours, laboratory 2 hours.

C A ccupational herapy ractice II
Introduction to major categories of physical dysfunction, with emphasis on intervention strategies and appropriate treatment protocols. Per week: lecture 4 hours, laboratory 2 hours.

C A ccupational herapy ractice III
Theoretical foundations based on mental-health practice. Development of therapeutic relationships, data gathering, treatment methods, and use of adaptive activities to fit the needs of individual patients or groups. Per week: lecture 4 hours, laboratory 2 hours.

C A ehabilitation rinciples
Introduction to general rehabilitation principles. Course work emphasis on treatment planning, documentation, and introduction to clinical reasoning. Per week: lecture 1 hour.

C A Human athology I II III
Introduction to disorders and diseases. Includes organ-system diseases, central-nervous system dysfunction,

California laws. Laboratory includes current concepts in the design and fabrication of upper-extremity orthotics and custom-made assistive devices for the hand. Emphasis on the use of low-temperature thermoplastics and alternative splinting materials. Per week: lecture 2 hours, laboratory 2 hours.

Prerequisite: OCTH 451, 452, 453.

C H undamentals of Case Manage ment

Intoduction to application of critical reasoning process; effective communication, documentation and overall professional skill building. Application of case-management skills, evaluation, intervention planning, implementation, re-evaluation, and termination when appropriate.

C H Case Analysis easoning and Management I

Intoduction to application of critical reasoning process; effective communication skills with clients, families, and team members. Documentation and overall professional skill building.

Prerequisite: OCTH 451.

C H Case Analysis easoning and Management II

Continuation of case-management process as a means of addressing questions of importance to occupational therapy practice through theoretical perspectives. Application of case-management skills, evaluation, intervention planning, implementation, re-evaluation, and termination when appropriate. Emphasis on critical reasoning through clinically based case presentations. Per week: seminar/discussion 2 hours.

Prerequisite: OCTH 442, 451, 452.

C H isorders of Human erformance I

Overview of the etiology, clinical course, evaluation, management, and prognosis of congenital, developmental, acute and chronic-disease processes; and of traumatic injuries. Includes problems associated with individuals and families having difficulty with social-cultural expectations; emphasis on effect of such conditions on human occupational performance across the lifespan.

Prerequisite: OCTH 309, 341.

C H isorders of Human erformance II

Continuation of overview of etiology, clinical course, evaluation, management, and prognosis of congenital, developmental, acute, and chronic-disease processes; and of traumatic injuries. Includes problems associated with individuals and families having difficulty with social-cultural expectations; effect of such conditions on human occupational performance across the lifespan.

Prerequisite: OCTH 306, 331, 451.

C H isorders of Human erformance III

Continuation of overview of etiology, clinical course, evaluation, management, and prognosis of congenital, developmental, acute, and chronic-disease processes; and of traumatic injuries. Includes problems associated with individuals and families having difficulty with social-cultural expectations; effect of such conditions on human occupational performance across the lifespan.

Prerequisite: OCTH 452.

C H ield or perience I II

Supervised fieldwork experience in clinical and/or community-based programs. Emphasis on assessment, planning, treatment, problem solving, administration, and professionalism. Successful completion necessary before the student is eligible to take the certification examination (480 clock hours each).

C H ccupational herapy Indepea

C H Ad anced ccupational herapy History
Provides the student with an extensive understanding of the history of occupational therapy by critically reviewing historical incidents, the history of occupational therapy and societal theories and practices, political conditions, and historical incidents. Facilitates the student's ability to enact advocacy and to better understand future projections in the field.

C H , heoretical erspecti es on ccupation
Provides the student with an expansive view of diverse influences on occupation and occupational therapy practice by critically investigating occupational theories and academic disciplines, such as anthropology, sociology, psychology, and philosophy. Exploration will lead to a better understanding of the uniqueness of occupation.

C H ractice erspecti es in ccupational herapy
Provides the student with a view of the diverse influences on occupational therapy practice by critically investigating practice theories and issues which will affect the student's transition into professional life.
Prerequisite: OCTH 551.

C H , ro ram e elopment esign I
Focus on selection, research, and design of programs pertinent to occupational therapy practice.

C H ro ram e elopment esign II
Implementation of program planning, culminating with program evaluation and outcome assessment.
Prerequisite: OCTH 561.

C H rofessional Competency e elopment
Student pursues an area of special interest under the direction of the faculty adviser. Topic must be approved by the OT department.

C H esearch I
Student develops and implements a scholarly research proposal by systematically identifying and investigating a problem, issue, or question of relevance to occupational therapy practice.
Prerequisite: OCTH 411; AHCJ 351, 461.

C H esearch II
The purpose of this course is to develop and implement a scholarly research. Focus is on seeking IRB approval and initiating data gathering and preliminary analysis of findings.
Prerequisite: OCTH 571 and AHCJ 601.

C H esearch III
The purpose of this course is to develop and implement a scholarly research. Emphasis on analysis of data, and presentation of findings in a research colloquium..
Prerequisite: OCTH 572.

C H ccupational herapy Ad anced Specialty rac
Presentation of in-depth practice application in an area of occupational therapy. Opportunity to pursue various topics related to current trends. Development of advanced clinical skills, where appropriate.

C H irected Study
Student pursues an area of special interest under the direction of the faculty adviser. Topic must be approved by the OT department.

C I

See CONJOINT COURSES, section III eneral Information, for course descriptions.

C A

L Christian thics and Health Care
Ethical issues in modern medicine and related fields from the perspective of Christian thought and practice.

L Spirituality and ccupation
Exploration of the relationship between spirituality and occupation through assimilation of information drawn from religious theorists, theology, spiritual and religious practices, and occupation.
Additional project required for fourth unit.

Junior OT students, Julie Witcombe and Kiera Unsell, practice feeding techniques used with developmentally delayed clients.

AC L

Carol J. Appleton
Edd J. Ashley
Bruce D. Bradley
Lawrence E. Chinnock
Gary A. Coleman

PHYSICAL THERAPIST ASSISTANT, Associate in Science

The physical therapist assistant is a skilled paraprofessional health worker who, under the supervision of a physical therapist, carries out the patient's treatment program. The extent to which the physical therapist assistant is involved in treatment depends upon the supervising therapist.

A planned patient-care program is carried out by the assistant, following established procedures. Duties of the physical therapist assistant include: training patients in exercises and activities of normal daily living; performing treatment interventions; utilizing special equipment; assisting in performing tests, evaluations, and complex treatment procedures; and observing and reporting the patient's responses.

The other members of the rehabilitation team include the occupational therapist, nurse, speech and hearing therapist, respiratory therapist, recreational therapist, physician, social worker, chaplain, vocational counselor, dietitian, and psychologist. This team has as its objective the optimum functional restoration and rehabilitation of patients disabled by illness or injury.

PHYSICAL THERAPIST

Physical therapy offers a career for men and women who are interested in medical science and who enjoy working with people. Physical Therapist Assistant graduates have a wide choice of opportunities with medical groups, hospitals, rehabilitation centers, outpatient clinics, national and state agencies, and school systems. For those who desire to further their education, Progression Master of Physical Therapy and Post-professional Doctor of Physical Therapy and Doctor of Physical Therapy Science programs are available.

H AM

T

rere uisites for hysical herapist Assistant, A S

Individuals who already have a bachelor's degree from a regionally accredited college or university need to complete only the prerequisites denoted with an asterisk (*)

Four units of religion are required only if the applicant has attended a Seventh-day Adventist college or university

Select 4 units from one area: history, literature, philosophy, foreign language, art/music appreciation/ history

*Human anatomy and physiology with laboratory, complete sequence

*Introductory physics with laboratory, one quarter/semester

*Two years high school mathematics with grades of C or above **or** intermediate algebra in college

*General psychology

*Human growth and development **or** developmental psychology **or** abnormal psychology

Freshman English composition, complete sequence

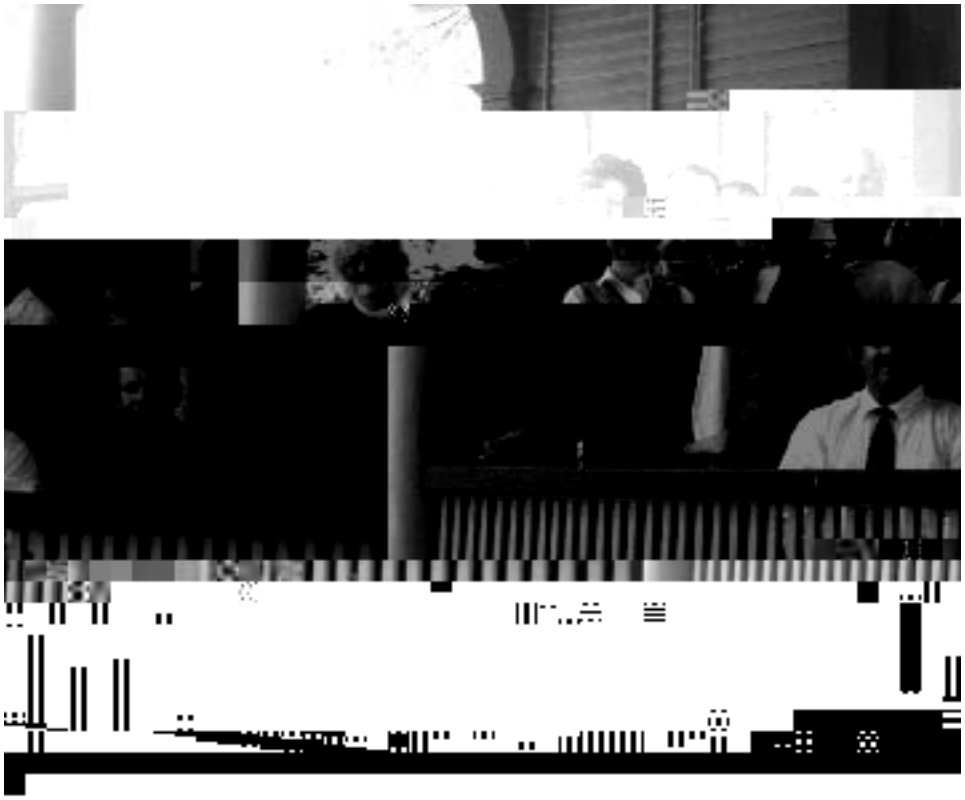
*Speech

Personal health **or** nutrition **or** two physical activity courses

Electives to meet the minimum total requirements of 48 quarter units or 32 semester units

or bser ation s perience

Twenty hours in an inpatient physical therapy setting, plus an additional sixty hours in an inpatient or outpatient setting—for a total of eighty hours—are required.



Representing the Department of Physical Therapy and its many programs are:
(front row) James Syms and Eric Johnson,
(second row) Jan Fisher, Nicceta Davis, Donna Thorpe, Jeannine Stuart-Mendes, Tony Valenzuela, Bonnie Forrester, Andrea Walker,
(third row) Howard Sulzle, Carol Appleton, Jerry Petrofsky, Edd Ashley,
(fourth row) Larry Chinnock, Wes Swen, and Everett Lohman . . . .
and that's not all of our PT/PTA faculty!

Jan Fisher (below), administrative assistant, has seen many changes in our Department of Physical Therapy over the years . . . and things just keep getting better.

(Left, from top down) the administrative secretaries—Jodee Shaw of the Physical Therapy Assistant program and Barbara Cassimy and Andrea Walker of the various physical therapy master's and doctoral degree programs—help keep the faculty and all the students on the right track.

AM I S C I

H SICAL H A IS ASSIS A , Associate in Science

The program of instruction outlined as follows is for students enrolled during the 2003-2004 academic year.

S H M A

PHYSICAL THERAPY

Progression Master of Physical Therapy
Postprofessional Master of Physical Therapy
Entry Level Doctor of Physical Therapy
Postprofessional Doctor of Physical Therapy
Postprofessional Doctor of Physical Therapy Science

Physical therapists evaluate and treat patients with disease, injury, or disabilities. In many states, registered physical therapists work as independent practitioners. The physical therapy techniques are applied to restore strength, flexibility, and coordination; to reduce pain; and generally to prepare the patient to function more effectively at work and in activities of daily living. Agents such as heat, light, electricity, water exercise, and massage are used. While working with patients, psychological and sociological principles are used to motivate and instruct.

Within the profession there are many specialties, including orthopaedics, neurology, pediatrics, geriatrics, cardiopulmonary, hand rehabilitation, and sports physical therapy. Physical therapists work in acute-care and convalescent hospitals, rehabilitation centers, children's centers, private practice, athletic training and sports-medicine programs, research institutions, school systems, and home-care agencies.

CLINICAL

Students are required to have current cardiopulmonary resuscitation (CPR) certification (adult and child) for all scheduled clinical experience. Classes are available on campus at Life Support Education, University Arts building, 24887 Taylor Street, Suite 102.

PROFESSIONAL ASSOCIATION

Students and graduates are eligible for membership in the American Physical Therapy Association (APTA). The objective of the association is to foster development and improvement of service and education. This organization grants student membership at a nominal cost to students of approved schools. The student is required to become a member of this association while in the program and is encouraged to read the journal and attend the APTA-sponsored meetings.

PROFESSIONAL STATUS

Satisfactory completion of the progression M.P.T., or entry-level D.P.T. degree requirements and clinical affiliation qualifies the student to sit for all state licensure examinations.

AM I S C I

H SICAL H A , rogression Master of hysical herapy

The program of instruction outlined as follows is for students enrolled during the 2004-2005 academic year.

A

PHTH	436	Kinesiology	3
PHTH	438	Manual Muscle Testing	3
PHTH	465	Exercise Physiology	3
PHTH	495, 496	Research I, II	3, 2
PHTH	502, 503	Neurology II, III	3, 3
PHTH	504	Pediatric Care I	3
PHTH	521-523	Orthopaedics I, II, III	3, 3, 3
PMPT	427	Human Life Sequence	2
PMPT	476	Therapeutic Exercise	3
PMPT	477	Locomotion Studies	3
AHCJ	311	Medical Terminology	2
AHCJ	328	Portfolio Practicum I	1
AHCJ	402, 403	Pathology I, II	4, 3
AHCJ	412	Anatomy	9
AHCJ	418, 419	Physiology I, II	4, 3
AHCJ	443, 444	Neuroanatomy I, II	4, 2
AHCJ	538	Histology	2
RELF	416	God and Human Suffering	2
RELF	440	World Religions	3

A

PHTH	413	Clinical Neurology	2
PHTH	501	Neurology I	2
PHTH	511	Clinical Orthopaedics	2
PHTH	512	Clinical Psychiatry	2
PHTH	515	Hand Rehabilitation for the Physical Therapist	2
PHTH	525, 526	General Medicine I, II	3, 3
PHTH	534	Soft-Tissue Techniques	2
PHTH	561	Physical Therapy Administration	4
PHTH	595-597	Applied Research I, II, III	1, 2, 1
PMPT	474	Physical Therapy Practicum	1.5
PMPT	524	Electrotherapy	2
PMPT	534	Physical Therapy Communication and Documentation	2
PMPT	535	Hydrotherapy and Massage	2
PMPT	583	Physical Therapy Affiliation I	4
PMPT	591	AdvancedHand Re-59777j-37a9516(2)]TJ0 -1.1.5e5u2unic0001 TDIY.00tTfHande Techniques5 98.03233 0 T	

PMPT 2Hydotherapy and Massage the Physical and Massage1 1d Therapto.176pu STRUistraD-0.0s .88235 0.00001 TD(583)Tj5.

H SICAL H A . ostprofessional Master of hysical herapy

A MISSI

To be eligible for admission, the applicant must have earned a bachelor's degree in physical therapy from an accredited program. There is no GRE requirement for acceptance into this program.

L SC

A TOEFL score of 550 (213 if computer generated) is required for foreign students. All foreign transcripts, including high school, must be submitted to an approved evaluation service. The list of the four approved services can be obtained from the School of Allied Health Professions admissions office. Results of the evaluation are to be sent to this University directly from the evaluation center. Official foreign transcripts must be sent to the School of Allied Health Professions, directly from school to school, at the time of application.

H AM

The Postprofessional Master of Physical Therapy Program is designed for individuals with a baccalaueate degree in physical therapy who wish to pursue advanced studies in their profession.

To practice physical therapy in the United States, one must meet the criteria of the state in which s/he wishes to practice. Credentials are evaluated based on the applicant's entry-level education. Postprofessional education cannot be used for this purpose.

AM I S C I

H SICAL H A . ostprofessional Master of hysical herapy

The program of instruction outlined as follows is for students enrolled during the 2004-2005 academic year.

PHTH	529	Pathokinesiology of Gait	3
PHTH	531	Soft-Tissue Mobilization	3
PHTH	545	Orthopaedic Interventions: Mobilization of Peripheral Nerves and Diathroidal Joints of the Extremities	3
PHTH	548	Function-Based Rehabilitation	3
PHTH	598	Advanced Specialty Tracks	3
AHCJ	505	Educational Psychology for Health Professionals	3
AHCJ	509	Teaching and Learning Styles	3
AHCJ	511	Biostatistics I	3
AHCJ	526	Computer Applications II	3
AHCJ	538	Histologys degree in physical12 TD-03.0egreein phys'HCJ 505	

PHYSICAL THERAPY, Entry Level Doctor of Physical Therapy

PROGRAM

The Entry-Level Doctor of Physical Therapy Program (D.P.T.) is designed for individuals who have no previous degree in physical therapy and wish to pursue a Doctor of Physical Therapy degree and professional certification. Admission to the University follows presentation of three academic years of prerequisites earned at a regionally accredited college or university. The program is 3.25 years in length. The emphasis in the program is on professional courses, ethics, and practical experience. Additional emphasis is placed on research and specialized clinical affiliations.

Accreditation

The program is accredited by the Commission on Accreditation in Physical Therapy Education of the American Physical Therapy Association, 111 North Fairfax Street, Alexandria, VA 22314; telephone 703/706-3245.

Clinical Experience

Supervised experience is obtained in a variety of settings and at different times during the program. First-year students complete one two-week practicum assignment during the Spring Quarter. Second-year students complete one three-week assignments during the Autumn Quarter. The major clinical assignments are during the third year. The student will be assigned one three-week clinical rotation and one ten-week affiliation during Summer Quarter, an eleven week affiliation during Winter Quarter and one ten-week affiliation during Spring Quarter. The final affiliation is ten weeks in length during Summer Quarter.

All clinical assignments will be made by the academic coordinator of clinical education or a designate. Because of the limited number of local facilities available, assignments cannot be made on the basis of the student's family/marital status or personal preference. Although the department makes an effort to accommodate the student's preference, the student agrees to accept the clinical assignments made by the department at any of the affiliated facilities, whether local or out of state.

ADMISSION

Subject requirements for 2010-2011

To be eligible for admission, the applicant must have a minimum G.P.A. of 3.0 and must have completed a minimum of 138 quarter units at a regionally accredited college or university. Admission is a selective process. Criteria used include: G.P.A., completion of subject requirements, interview, essay, recommendations, and work experience.

The minimum subject admission requirements in quarter units are listed below. Grades of C- and below are not transferable for credit.

Prerequisites for Entry Level Doctor of Physical Therapy

Individuals who already have a bachelor's degree from a regionally accredited college or university need to complete only the prerequisites denoted with an asterisk ( )

Humanities/Religion, minimum of 28 units. If applicants have attended a Seventh-day Adventist college or university, they must have a minimum of 4 units religion per year (up to 12).

All applicants must have a minimum of 16 units in humanities selected from at least two of the following areas: civilization/history, fine arts, literature, modern language, philosophy, performing/visual arts (not

H SICAL H A . ostprofessional octor of hysical herapy

AM I S C I
H SICAL H A . ostprofessional octor of hysical herapy

The program of instruction outlined as follows is for student enrolled during the 2004-2005 academic year.

PHTH	541	Advanced Clinical Practice I	3
PHTH	542	Advanced Clinical Practice II	3
PHTH	543	Advanced Clinical Practice III	3
PHTH	629	Lower-Quarter Biomechanical Relationships	3
AHCJ	507	Pharmacology in Rehabilitation	3
AHCJ	516	Clinical Imaging	3
AHCJ	518	Neurobiology	3
AHCJ	527	Medical Screening for Rehabilitation Professionals	3
AHCJ	551	Professional Systems in Management I	3
AHCJ	605	Critical Analysis of Scientific Literature	3
AHCJ	699	Directed Study	3
RELR	525	Health Care and the Dynamics of Christian Leadership	3
____	___	Electives	9

ADMISSION

Regular meetings to provide the student with guidance and evaluation. Elected on the basis of need or interest.

H H 2 eurology I 4
Basic physiological and neurophysiological mechanisms specific to therapeutic concepts. Clinical approach to pathology and trauma of the central and peripheral nervous systems. Stroke, spinal cord injury, and head injuries. Emphasis on clinical application.

H H 2 eurology II
Basic physiological and neurophysiological mechanisms specific to therapeutic concepts. Clinical approach to pathology and trauma of the central and peripheral nervous systems. Emphasis on proprioceptive neuromuscular facilitation.

H H 2 eurology III
Continuation of basic physiological and neurophysiological mechanisms specific to therapeutic concepts. Clinical approach to pathology and trauma of the central and peripheral nervous systems. Emphasis on comparing and contrasting facilitation techniques.

H H 2 ediatric Care
Discussion of the etiology, associated problems, and physical therapy care of clients with cerebral palsy, spina bifida, and various orthopaedic disorders. Includes presentation and demonstration of adaptive equipment options. Laboratory demonstrations. Introduction to the physical therapist's role in the NICU.

H H 2 Lo er uarter iomechanical elationships
Advanced examination procedures for performing a biomechanical assessment of the lower extremities. Emphasis on identifying causes of, compensations for, and complications of movement dysfunctions associated with lower-extremity musculoskeletal pain syndromes. Physical therapy management of gait abnormalities.

H H Clinical rthopaedics
Systematic review of disease and injury affecting the musculoskeletal system (particularly the hands), resulting in physical disability. Conditions caused by congenital deformities, fractures, trauma, tumors, disease, and sports injuries. Radiologic terminology, properties, and imaging.

H H Clinical sychiatry
Introduction to mental and personality disorders. Review of abnormal behaviors commonly found in a clinical setting.

H H opics in ehabilitation
Lecture and discussion of current topics relating to the practice of physical therapy. Content varies from quarter to quarter. (May be repeated for additional credit for a maximum of 6 quarter units.)

H H lectrotherapy
Principles and techniques of electrotherapy procedures, including electrodiagnosis. Basic physical and physiological indications and contraindications. Lecture, demonstration, and laboratory.

H H rthopaedics I
Basic theory of extremity mobilization. Each joint presented in relationship to articular and periarticular structures that determine joint function and dysfunction. Evaluation and mobilization techniques.

H H rthopaedics II
Basic theory of spinal evaluation and treatment techniques. General principles of functional anatomy, tissue and joint biomechanics, pathology, and treatment. Medical exercise training.

H H rthopaedics III
Basic theory of spinal evaluation and treatment techniques. General principles of functional anatomy, tissue and joint biomechanics, pathology, and treatment. Medical exercise training.

H H Hand ehabilitation for the hysical herapist
Functional anatomy and pathophysiology in the diagnosis and treatment of the forearm, wrist, and hand. Common problems, integrated scientific knowledge base into treatment choice. Rational and general treatment concepts for, but not limited to, fractures, joint derangement, stiffness, flexor and extensor multiple-system trauma, arthritis and vascular disorders. Common surgical procedures of the forearm, wrist, and hand; as well as basic concepts and practical application of static and dynamic splinting.

H H eneral Medicine I II
Medical and surgical disorders. Basic pathology and/or etiology and clinical manifestations. Medical treatment for conditions within selected spe40 -1.11765 T2 proced

trends in general medicine physical therapy. Development of advanced clinical skills, where appropriate.

AS 220 Anatomy
Anatomy of the human body, with emphasis on the neuromuscular and skeletal systems, including anatomical landmarks. Basic neuroanatomy of the central nervous system.

AS 221 Applied Kinesiology
Introduction to functional anatomy of the musculoskeletal system. Application of biomechanics of normal and abnormal movement in the human body. Introduction to components of gait. Lecture and laboratory.
Prerequisite: PTAS 201.

AS 230 Introduction to Physical Therapy
Physical therapy practice and the role of the physical therapist assistant in providing patient care. Quality assurance. Interpersonal skills. Introduction to the multidisciplinary/team approach. Familiarization with health care facilities and government agencies.

AS 231 Documentation Skills
Introduction to basic abbreviations, medical terminology, chart reading, and note writing.

AS 232 Physical Therapy Procedures
Principles of basic skills in the physical therapy setting. Goniometry. Sensory- and gross-muscle testing. Mobility skills in bed and wheelchair, and transfer training. Gait training and activities of daily living. Body mechanics, positioning, and vital signs. Architectural barriers identified. Teaching techniques for other health care providers, patients, and families. Wheelchair measurement and maintenance. Lecture and laboratory.

AS 240 General Medicine
Introduction to general-medicine conditions, including pathology and management of medical problems. Diseases of the body systems, including urinary, reproductive, digestive, circulatory, endocrine, and musculoskeletal. Theoretical principles and practical application of respiratory techniques, exercises, and postural drainage. CPR certification required before end of term.

AS 241 Neurology
Introduction to neurological conditions, including pathology and management of medical problems of stroke, head injury, Parkinson's disease, spinal cord and nerve injuries, and other conditions.

AS 242 Orthopaedics I
Introduction to common orthopaedic conditions, pathologies, and surgical procedures of the peripheral joints. Introduction to joint mobilization. Procedures and progression of therapeutic exercises for each specific joint covered, as these exercises relate to tissue repair and healing response. Practical laboratory includes integration of treatment plans and progressions.

AS 243 Therapeutic Exercise
Introduction to therapeutic exercise theories and practical applications. Tissue response to range of motion, stretch, and resistive exercise. Laboratory covers practical applications of various types of exercise techniques and machines used in the clinics, and a systematic approach to therapeutic exercise progression.

AS 244 Physical Therapy Modalities
Basic physical therapy modalities—including heat-and-cold application, hydrotherapy and massage, pool therapy, physiology and control of edema, stump wrapping, standard precautions, and chronic-pain management. Lecture and laboratory.

AS 245 Applied Electrotherapy
Principles and techniques of electrotherapy procedures, including basic physiological effects. Indications and contraindications for specific electrotherapy modalities. Practical application and demonstration of modalities in a laboratory setting.

AS 246 Wound Care
Normal structure and function of the skin. Pathology of the skin, including problem conditions, burns, and wounds. Lecture and laboratory to include wound identification, measuring, dressing, treatments, and debridement. Model wounds used for hands-on training.

AS 247 Applied Pediatrics
Normal and abnormal development, from conception to adolescence. Emphasis on developmental sequence, testing, and treatment of neurological and orthopaedic disorders. Practical laboratory.

AS 248 Applied Geriatrics
Introduction to various aspects of geriatric care. Wellness care and adaptation to exercise modalities. Procedures pertaining to the geriatric patient. Diagnosis and aging changes that affect function in geriatric rehabilitation.

AS 249 Introduction to Athletic Training for the Physical Therapist Assistant
Introductory study of the neuromusculoskeletal system as it applies to the athletic population. Development and implementation of a sports-medicine program, participation in physical examination, medical emergencies in the sports-medicine setting, criteria for return to play, types and frequency of sport-specific injuries, pre-game sidelines/courtside set-up, techniques of athletic-tape application to various body locations, and on-field examinations.

AS 250 Orthopaedics II
Introduction to common orthopaedic conditions, pathologies, and surgical procedures of the spine. Treatments, procedures, and progression of therapeutic exercises of the spine as related to tissue repair and healing response. Practical laboratory includes integration of treatment plans and progressions.

AS 251 Applied Neurology
Introduction to facilitation techniques of neurodevelopmental treatment, proprioceptive neuromuscular facilitation, Brunnstrom, and principles of therapeutic exercise of the cardiac patient. Practical laboratory.

AS 252 Physical Therapy Practice
Observations of evaluations, treatments, and various diagnoses. Billing procedures and third-party payors. Completion of a resume and a state licensing application. Preparation and presentation of case study and in-service.

AS 253 Applied Prosthetics and Orthotics
Introduction to basic principles in the use of selected

prosthetic and orthotic devices. Exposure to various types of devices and adjustment to devices; examination of indications and contraindications for orthotic and prosthetic use with patients seen in physical therapy.

Prerequisite: PTAS 203.

AS rofessional Seminar 1

Contemporary theories and practices of physical therapy. Topics covered by faculty and guest lecturers may include: sports taping, ortho taping, soft tissue, geriatric experience through affective learning, Meyers-Briggs personality categories, Kolb learning styles, vestibular rehabilitation, music therapy, and hand therapy. Lecture and laboratory.

AS sychosocial Aspects of Health 1

Psychological and sociological reactions to illness or disability. Includes trauma, surgery, and congenital and terminal illness. Individual and family considerations.

AS hysical herapist Assistant racticum 1

Two-week assignment to be completed during the Winter Quarter in an affiliated clinical setting. Emphasis on patient and staff working relationships. Awareness of patient disorders and limited application of physical therapy techniques. Forty clock hours per week of supervised clinical experience.

AS hysical herapist Assistant Affiliation I, II, III 1

I: One six-week assignment to be completed during the Spring Quarter.

II, III: Two six-week assignments to be completed in affiliated clinical settings during the second Summer Quarter. Exposure to a variety of clinical facilities. Forty clock hours per week of supervised clinical experience. The combined total of twenty weeks of clinical experience prepares the student for entry-level performance.

C I

See CONJOINT COURSES, section III eneral Information, for course descriptions.

C A

H Aspects of Health romotion 1

Dynamics of community and individual health. Factors in the promotion of a healthful lifestyle, including cardiovascular enhancement, stress reduction and coping mechanisms, nutritional awareness, weight management, and substance control.

M AM Ad anced Human ro th and e elopment 1

5 M Human biological, ding cardiovascul: sports taping, ortho tap43ova1.11765 TD(weigE13 Human G/F0 1 Tf1Torts t0 1 orts 44h5tS

A_IA I _ CH L

M _ICAL A_I A H . Associate in Science
A_IA I SCI C S achelor of Science
A_IA I H A . CH L . achelor of Science Certificate
A_I L IS ASSIS A . achelor of Science ost achelor of Science Certificate
_IA S IC M _ICAL S A H . Certificate
M _ICAL _ SIM . Certificate

AC I

Laura L. Alipoon
Kelly A. Burk
Mark J. Clements
Noha S. Daher
Carol A. Davis
Marie M. DeLange
Intithar S. Elias
Erma P. Ezpeleta
Barbara S. Holshouser
Noriece R. Kisinger
Arthur W. Kroetz
Steven L. Leber
Renee N. S. Mercado
Terese R. Pfeiffer

CLI ICAL AC I

Brenda S. Holden
Helen J. King
Glenn A. Rouse

I I

For tuition information, please see section II, Financial Information, SCHEDULE OF CHARGES.

You can count on a friendly greeting and a helping hand from Beverly Martinez, administrative secretary in the Department of Radiation Technology.

M ICAL A A , Associate in Science

The medical radiographer, or radiologic technologist, is responsible for the accurate imaging of body structures on a radiograph or other image receptor. The technologist determines proper exposure factors, manipulates medical imaging equipment, evaluates the radiographic image for quality, and provides for patient protection and comfort.

The technologist frequently assists the physician team member in specialized procedures. These often require the administration of chemical mixtures to the patient for enhanced viewing of the function of body systems.

H AM

The Medical Radiography Program begins with the Autumn Quarter and is based on the completion of one year of prerequisite course work at any accredited college or university. The first quarter at Loma Linda University primarily emphasizes the theoretical aspects of radiography, with one day per week in clinical orientation. The remaining five quarters combine clinical training on a two-to-five-days-per-week basis, with more advanced classroom topics. The schedule extends through vacation periods and may involve some evening assignments.

Affiliations

For the clinical portion of the program, students are assigned to one of the affiliated medical centers: Loma Linda University Medical Center and Loma Linda University Community Medical Center, Inland Valley Regional Medical Center, Hemet Valley Medical Center, Eisenhower Medical Center, Desert Hospital, Redlands Community Hospital, Menifee Valley Medical Center, Pioneer Memorial Hospital, El Centro Regional Medical Center, White Memorial Medical Center, or St. Mary Regional Medical Center.

Accreditation

The program is accredited by the Joint Review Committee on Education in Radiologic Technology (JRCERT), 20 North Wacker Drive, Suite 900, Chicago, IL 60606-2901; telephone 312/704-5300. The program is also approved by the State of California Department of Health Services.

C C I ICA I

Students are required to have current cardiopulmonary resuscitation (CPR) certification (adult and child) for all scheduled clinical experience. Classes are available on campus at Life Support Education, University Arts building,

rere uisites, Core uisites for adiation Sciences, S

20 units minimum in humanities (choose minimum of two areas from: history, literature, philosophy, foreign language, art/music appreciation/history)

Included in this minimum, 4 units of religion per year of attendance at a Seventh-day Adventist college or university

Human anatomy and physiology with laboratory, one semester/quarter minimum; **or** general biology with laboratory, complete sequence

Additional natural science units from: chemistry, geology, mathematics, physics, and statistics

Must have a total of 12 quarter hours, including up to 6 units from anatomy and physiology

Two years high school mathematics with grades of C or above, **or** intermediate algebra in college

Cultural anthropology **or** an approved course dealing with cultural diversity

Select 8 quarter units from: economics, geography, political science, psychology, sociology, or anthropology

English composition, complete sequence

Personal health or nutrition

Two physical activity courses

Electives to meet the minimum total requirements of 42 quarter units

AM I S C I
A A I SCI C S, achelor of Science

Core courses and religion studies		**units**
RTCH 385	Current Issues in Radiation Sciences I	2
RTCH 464	Moral Leadership	2
RTCH 471	Applied Research Methods	1
RTCH 485	Current Issues in Radiation Sciences II	2
RTCH 494	Senior Project	2-3
RTMR 451	Management of a Radiologic Service	3
AHCJ 305	HIV/AIDS and the Health Provider	1
AHCJ 308	Professional Communications	1-2
AHCJ 328	Portfolio Practicum I	1
AHCJ 351	Statistics for the Health Professions	3
AHCJ 461	Research Methods	2
AHCJ 465	Seminars in Leadership	2
AHCJ 498	Portfolio Practicum II	1
REL_ ___	Religion electives	8

A A M HASIS

A A MI IS A I A CA I , units		
RTCH 411-412	Student-Teaching Practicum I, II	2, 2*
RTCH 413-414	Radiologic Management Practicum I, II	2, 2*
RTCH 475	Curriculum Development in Health Sciences	2
RTMR 454	Quality Management in Radiation Sciences	2
RSTH 471	Instructional Techniques I	2

A minimum grade of C (2.0) is required for all classes.

*Total of 4 units to be chosen from RTCH 411, 412, 413, 414.

CLI ICAL AC IC

A six-to-twenty-four month, full-time internship in a second clinical specialty selected from the following areas:

CLINICAL CIAL	UNI A N D O A D B. . D	CLINICAL CIAL	UNI A N D O A D B. . D
Medical sonography	38 units	Special imaging technology	18 units
Echocardiography	18 units	Radiation therapy technology	26-41 units
Nuclear medicine technology	18 units		

Acceptance into these specialties is separate from acceptance into the baccalaureate program. For more detailed information about admission requirements and the program of instruction, request an outline of the certificate programs in these specialties.

C SCI C

12-15 quarter units selected from the natural sciences in the areas of: biology, anatomy, physiology, medical terminology, and physics.

A_IA I H A CH L achelor of Science

Radiation therapy is a multifaceted career that combines working in a highly technical environment with the opportunity to work closely with patients and members of many other professions to provide a high standard of clinical care. Radiation therapy is the therapeutic application of ionizing radiation to malignant and benign conditions. The therapist is responsible for delivering the treatment, which is prescribed by a radiation oncologist; maintaining accurate treatment records; and imple-

I M S

The student in the baccalaureate program completes:

- the General Education requirements;
- the radiation sciences core requirements;
- an area of emphasis (administration and education is the only emphasis offered through distance learning at this time).
- Electives are selected from existing courses after consultation with the program adviser.

AM I S C I

A A I H A CH L achelor of Science

e uired Core Courses and eligion Studies			units
RTCH	385	Current Issues in Radiation Sciences I	2
RTCH	471	Applied Research Methods	1
RTCH	494	Senior Project	2
RTMR	451	Management of a Radiologic Service	3
RTMR	454	Quality Management in Radiation Sciences	2
AHCJ	305	HIV/AIDS and the Health Provider	1
AHCJ	328	Portfolio Practicum I	1
AHCJ	351	Statistics for the Health Professions	3
AHCJ	461	Research Methods	2
AHCJ	498	Portfolio Practicum II	1
EMMC	314	Introduction to 12-Lead ECG Interpretation	1
EMMC	484	Legal Issues in Health Care	2
RELF	416	God and Human Suffering	3
RELF	423	Loma Linda Perspectives	2
RELE	457	Christian Ethics and Health Care	3

rac A			units
RTTH	332	Radiation Biology	1
RTTH	342	Patient-Care Practices in Radiation Therapy	2
RTTH	344	Radiation Therapy Procedures	2
RTTH	345	Quality Assurance in Radiation Therapy	1
RTTH	348	Radiation Therapy Review	1
RTTH	353	Psycho-Oncology	2
RTTH	355	Physical Principles of Radiation Therapy	3
RTTH	356	Physical Principles of Dosimetry	3
RTTH	357	Applied Dosimetry	2
RTTH	358	Advanced Dosimetry (with laboratory)	3
RTTH	364	Radiation Oncology I	3
RTTH	365	Radiation Oncology II	3
RTTH	371-374	Radiation Therapy Affiliation I, II, III, IV	1, 1, 1, 1
RTTH	381, 382	Topics in Radiation Therapy	2, 2
AHCJ	402	Pathology I	4
AHCJ	403	Pathology II	3-4
AHCJ	404	Pharmacology	1
DTCS	301	Human Nutrition	3

rac			units
RTCH	411	Student Teaching Practicum I	2
RTCH	413	Radiologic Management Practicum I	2
RTCH	464	Moral Leadership	4*
RTCH	470	Curriculum Development in Health Science	2
RTTH	353	Psycho-Oncology	2
RTTH	358	Advanced Dosimetry (with laboratory)	3
AHCJ	402	Pathology I	4
AHCJ	403	Pathology II	3-4
AHCJ	404	Pharmacology	1
AHCJ	465	Seminars in Leadership	2*
DTCS	301	Human Nutrition	3
RSTH	471	Instructional Techniques I	2

*Either RTCH 464 or AHCJ 465 may be taken.

A_IA I H A CH L Certificate

During the twelve-month certificate program of clinical studies in radiation therapy technology, students take formal course work along with instruction in the clinical aspects of radiation therapy. The program begins with the Autumn Quarter. The clinical portion of the program consists of practical demonstrations in the use of radiation therapy equipment and an opportunity to participate, under close supervision, in actual radiation therapy procedures in a variety of radiation oncology departments. The clinical calendar varies from the University calendar in that the clinical schedule is full time (forty clock hours per week), arranged around lectures, and coordinated with the operation of the Loma Linda University Medical Center radiation medicine department.

AC SSI S

H AM C I S

Upon completion of the program, the graduate should be qualified to:

1. Develop and refine critical thinking skills to enhance their ability to analyze and develop the most effective means of care for their patients.
2. Demonstrate leadership skill through advanced and multilevel thinking in clinical practice.
3. Synthesize pertinent patient data from diagnostic images and patient interviews to suggest and implement appropriate patient management and clinical pathways.
4. Develop and refine their skills in performing fluoroscopy and other radiology procedures.
5. Exhibit professional behavior in all interactions, including communicating appropriately with patients, colleagues and others with whom they come in contact.
6. Demonstrate teamwork in the clinical setting and other situations where this concept leads to completion of goals that an individual could not easily meet alone.
7. Participate in educational and professional activities, sharing knowledge with colleagues, and investigating new and innovative aspects of professional practice.
8. Support the profession's code of ethics and comply with the profession's scope of practice.

A MISSI

To be eligible for admission, the applicant must have:

- A maximum of 105 quarter or 70 semester units from an accredited community college, which will be accepted as transfer credit, including units for clinical education. Students who have completed a hospital training program are allowed 48-quarter units (as part of the maximum) of academic credit on the basis of their registry certificate.
- Certification from the American Registry of Radiologic Technologists (ARRT)
- A minimum of two years of full-time radiography work experience
- Prerequisites for Radiologist Assistant, B.S. degree

rere uisites for adiologist Assistant S degree

Please contact the program director for guidance concerning prerequisites.

20 quarter or 14-semester units minimum (choose a minimum of two areas from: history, literature, philosophy, foreign language, art/music appreciation/history).

Also included in *the above* minimum, 4 units of religion per year of attendance at a Seventh-day Adventist college or university

12 quarter or 8 semester units from 2 areas, to include anatomy and physiology, statistics, and research methods.

12 quarter or 8 semester units, to include cultural anthropology or an approved course dealing with cultural diversity

9 quarter or 6 semester units, to include a complete sequence of freshman English

3 quarter or 2 semester units to include two physical activities and a personal health or nutrition course

Electives to bring the total units, to 71 quarter or 48 semester units of General Education

or total unit requirements for raduation, see Division of eneral tudies, LLU N AL DUCA ION UI M N Se tion V .

AM I S C I
A L IS ASSIS A achelor of Science

The program of instruction outlined below is for students admitted during the 2004-2005 academic year. Entrance to the clinical year is contingent upon the completion of all prior requirements. The Bachelor of Science degree program consists of 65 units:

I A		units
RTCH 464	Moral Leadership	2
RTRA 331	Pharmacology I	2
RTRA 332	Pharmacology II	2
RTRA 344	Medical Anatomy and Physiology	2
RTRA 351	Patient Assessment I	2
RTRA 346	Clinical Management and Education	2
RTRA 352	Patient Assessment II	2
RTRA 371	Clinical Internship	1
RTRA 372	Clinical Internship	1
RTRA 373	Clinical Internship	2
RTRA 384	Radiobiology and Health Physics	3
RTRA 385	Radiology Procedures and Image Evaluation I	3
RTRA 386	Radiology Procedures and Image Evaluation II	4
RTRA 387	Radiology Procedures and Image Evaluation III	4

AHCJ	328	Portfolio Practicum I	1
AHCJ	402	Pathology I	4
AHCJ	403	Pathology II	3
REL_		Religion	3
REL_		Religion	3

CLI ICAL A **units**

H AM

T AC ,

AM I S C I
LA S IC M LICAL S A H , Certificate

The program of instruction outlined below is for students enrolled during the 2004-2005 academic year.

AC ,
o year certificate
wo , redentials D eneral DM , V

RTMS	344	Introduction to Medical Sonography	1 or 4
RTMS	345	OB-GYN and Neurosonography	4
RTMS	346	Vascular Technology/Doppler/Scan Techniques	5
RTMS	348	Abdomen Small-Parts Sonography	4
RTMS	371-378	Medical Sonography Clinical Affiliation	1, 1, 1, 1, 1, 1, 1, 1
RTMS	379	Ultrasound Physics and InstruSon or 4	

M ICAL SIM Certificate

H AM

The certificate program in medical dosimetry is designed to train personnel in the discipline of dosimetry within a radiation oncology environment, and to prepare them to take the certified medical dosimetrists board examination (CMD).

Medical Dosimetry is a very dynamic, exciting field involving a combined knowledge of mathematics, physics, and the biological and medical sciences. Dosimetrists plan optimal isodose distributions and treatment dose calculations for a variety of external beam as well as brachytherapy treatments. The medical dosimetrists must possess excellent analytical skills, an ability to critically evaluate data, and an aptitude for physics and mathematics. They must also be able to work closely as a team with physicists, physicians, radiation therapists, and other personnel.

Due to a lack of training programs in this discipline throughout the United States, there is a shortage of medical dosimetrists in many areas of the country. This program will aim to provide a supply of well-trained dosimetrists who will be able to meet the needs of Radiation Oncology

AM I S C I
M ICAL SIM Certificate

The program of instruction outlined below is for students enrolled during the 2004-2005 academic year.

Baccalaureate in Physics
Pre-requisite: Anatomy and physiology (no lab required) and Medical Terminology

FALL QUARTER

RTMD	355	Physical Principles of Radiation Therapy I	3
RTMD	361	Practicum 24 hours/week	1
RTSI	367	Cross-sectional Radiographic Anatomy	3
RTTH	344	Basic Principles of Radiation Therapy	2
RTTH	364	Radiation Oncology I	3
RELE	457	Christian Ethics and Healta	

CL A M ICI CH L , Certificate

Nuclear medicine uses radioactivity to diagnose and treat disease. This medical specialty provides information about both the structure and the function of virtually every major organ system within the body. Nuclear medicine procedures are safe, involve little or no patient discomfort, and do not require the use of anesthesia. The nuclear medicine technologist is responsible for preparing and administering radiopharmaceuticals; performing patient-imaging procedures; accomplishing computer processing and image enhancement; analyzing biologic specimens; and providing images, data analysis, and patient information for diagnostic interpretation by the physician health care-team member.

H AM

During the twelve-month certificate program of clinical studies in nuclear medicine, students take formal course work along with instruction in the clinical aspects of nuclear medicine. This includes participation, under close supervision, in the actual procedures within the nuclear medicine department. The clinical calendar varies from the University calendar in that the clinical schedule is full time (forty clock hours per week), arranged around lectures and coordinated with affiliated nuclear medicine departments. The program begins with the Autumn Quarter.

Accreditation

The program is accredited by the Western Association of Schools and Colleges, Accrediting Commission for Senior Colleges and Universities, 985 Atlantic Avenue, Suite 100, Alameda, CA 94501; and by the Department of Health Services, Radiologic Health Branch, P.O. Box 942732, Sacramento, CA 94234-7320.

IS A C CA I

The Nuclear Medicine Technology Program is offered via distance education at Fresno City College, Fresno, California.

C C I ICA I

Students are required to have current cardiopulmonary resuscitation (CPR) certification (adult and child) for all scheduled clinical experience. Classes are available on campus at Life Support Education, University Arts building, 24887 Taylor Street, Suite 102.

SSI AL IS A I A C I ICA I

Upon completion of the certificate requirements, the student is eligible to write the qualifying examination in nuclear medicine of The American Registry of Radiologic Technologists (ARRT), and the certifying examination of the Nuclear Medicine Technology Certification Board (NMTCB) and of the state of California (CTNM).

A MISSI

rere uisites for uclear Medicine echnolo y Certificate

he appli ant must fulfill one of the followin requirements:

Be a graduate of an accredited radiologic technology program; **or**

Be an ARRT-registered radiologic technologist; **or**

Be an ASCP-certified medical technologist; **or**

Be a registered nurse with at least two years of college credit, with a minimum of an associate degree; **or**

Have a baccalaureate degree in one of the natural sciences;

and

must have redits in the followin :

Two years high school mathematics with grades of C or above **or** intermediate algebra in college

Chemistry with laboratory (one quarter/semester introductory or general)

General physics with laboratory, complete sequence (highly recommended)

Human anatomy and physiology with laboratory, complete sequence

Medical terminology

Patient-care methods

bser ation s perience

A minimum of twenty-four hours of observation in a nuclear medicine department is required.

Certifications

1. CPR certification (adult, child)
2. Venipuncture*
3. ECG/EKG interpretation*

If the student is unable to complete these three certifications prior to entering the program, then equivalent courses** can be taken concurrently with the program.

**offered by:
LLU Life Support Education or
* LLU Medical Center Staff Development

AM I S C I
CL A M ICI CH L , Certificate

The program of instruction outlined below is for students enrolled during the 2004-2005 academic year.

RTNM	351, 352	Principles of Nuclear Medicine I, II	3, 3
RTNM	353, 354	Nuclear Medicine Procedures I, II	2, 2
RTNM	371-374	Nuclear Medicine Affiliation I, II, III, IV	1, 1, 1, 1
RTNM	381	Topics in Nuclear Medicine I	2
RELE	457	Christian Ethics and Health Care	2

A minimum grade of C (2.0) is required for all courses in the program.

Some of the people you will see when enrolled in one of the many programs in our Department of Radiation Technology are (left to right) Mark Clements, Laura Alipoon, and Dolly Kisinger (faculty); Art Kroetz (department chair); Carol Davis (faculty); Beverly Martinez (department secretary); and Steve Leber and Erma Ezpeleta (faculty).

C S S

For information about units of credit and course numbers, see the beginning of section III of this BULLETIN.

CH Current Issues in adiation Sciences I
A faculty-facilitated course that includes class discussion, small-group work, and presentation of student projects. Students choose the direction of their learning within the scope of the content by choosing the content of their group work and projects.

CH Student eaching racticum I, II
Classroom teaching experience. Includes preparation of lecture outlines, objectives, and tests. Presentation of lectures and laboratory sessions. Practical application of teaching techniques.

CH adiologic Management racticum I, II
Observation of and discussion with selected administrative personnel in a radiology service. Emphasis on practical application of management theory. Projects assigned.

CH Moral Leadership
Methods of applying servant leadership to management and educational settings. Concepts of managing learners and professionals, assessing leadership style, the essence of leadership, leadership skill building, and conflict management discussed within a moral framework. Assigned readings, discussions, papers, and personal inventories utilized to aid in assessing the learner's leadership skills.

CH Applied esearch Methods
Application of research methods to radiation sciences. Directed experience with a research project. Laboratory.
Prerequisite: AHCJ 351.
Concurrent: AHCJ 461.

CH Curriculum elopment in Health Sciences
Curriculum development theories and approaches applied to the health-science arena. Development of a seminar, course, or curriculum. Designing assessment tools and procedures, designing a learning experience, selecting appropriate technologytools and bjectiveaching t Units. Stk, ent 5 Tsul to manage-and prexperiedvi ap[(s.assesJ 461.)TjETE

M— 2 reatment lanning I 1

Course will include an in-depth study of the planning of isodose distributions and dose calculations within different target volumes. Topics covered include IMRT, conformal therapy, and stereotactic radiosurgery.

M— 2 reatment lanning II 1

The course is designed to develop the student's ability to construct treatment plans using 3D/IMRT planning techniques. It integrates theory with practice. Students are required to complete a number of plans that utilize all the major treatment techniques. The plans on which students will be working will be decided by anatomical tumor site. There will be a brief lecture at which plans of specific tumors are shown and discussed, and then students will be expected to produce similar plans. The student is expected to build a notebook of plans and present them to the class as a mid-term and final examination.

M— 2 Special opics 1

This seminar course allows for in-depth study of 'cutting edge' techniques within Radiation oncology and in the diagnostic modalities that serve to support them. These topics include IMRT, TBI, USGI, IORT, MLC, Dyn.11se m0 Tc.ile1 VT*0110 .9562 Tm-0.0002 Tc(RTMD 302 T)Tjns using 3D/IMRT plan-

MS , ascular ltrasound Clinical Affiliation , , , , , , 1

Clinical experience in vascular ultrasound (416 clock

A Clinical Internship
During the mentored clinical experience, students complete a wide variety of competencies and generate a report stating initial observations of diagnostic images on neonatal, pediatric, adult, and geriatric populations. Students utilize clinical contracts and a clinical portfolio.

A adiobiology and Health hysics
Reviews the effects of ionizing and nonionizing radiation and fundamental concepts of radiation protection. Designed to promote the conscientious operation of radiologic and fluoroscopic devices. Provides a complement to guided practice in operating the fluoroscopic device during clinical mentoring. Procedures and techniques to optimize image quality while reducing radiation exposure to patients, operator, and ancillary personnel.

A adiology rocedures and Image aluation I II III I
Provides a framework for various imaging procedures and the role of the radiologist assistant in the radiology department. Designed to provide the framework for systematic observation of static, digital, X-sectional, and dynamic diagnostic images for the purpose of evaluating the presence of abnormalities, anomalies, and pathological conditions.

A Clinical Internship
During the mentored clinical experience, students complete a wide variety of competencies and generate a report stating initial observations of diagnostic images on neonatal, pediatric, adult, and geriatric populations. Students will utilize clinical contracts and a clinical portfolio.

A L L Clinical Internship cloc hours
During the mentored clinical experience, students complete a wide variety of competencies and generate a report stating initial observations of diagnostic images on neonatal, pediatric, adult, and geriatric populations. Students will utilize clinical contracts and a clinical portfolio. *RTRA 373, 471-474 will have a minimum of 312 clock hours per quarter.

A adiologist Assistant esearch ro ect
Student completes a faculty-facilitated research project related to radiation sciences. Radiation sciences faculty must approve all projects.

A Comprehensi e e ie
Review of the major content areas covered in the radiologist assistant program. Student evaluation and performance analysis accomplished.

SI M I hysics I
Basic principles, physics, imaging parameters, biological effects, management, and patient protocol of magnetic resonance imaging (MRI).

SI M I hysics II
Basic principles, physics, imaging parameters, biological effects, management, and patient protocol of magnetic resonance imaging (MRI).
Prerequisite: RTSI 361.

SI atient Care in Special Imaging
Overview of patient care in MRI and CT imaging. General aspects of patient care, pharmocology and drug administration, radiation safety. Examines some areas of radiology management. Prepares students for the additional areas required in the National Registry for the specialty areas of CT and MRI.

SI Cross sectional adiographic Anatomy
Overview of gross anatomy. Identification of normal anatomy in two-dimensional as well as three-dimensional planes. Relation of the structural as well as the physiological functions of the different body systems.

SI C hysics
Basic principles, physics, imaging parameters, radiological effects, management, and patient protocol of computed tomography (CT).

SI Special Imaging Affiliation I
Nine months of clinical experience (three quarter terms of 520 clock hours per term) that provides a wide variety of experiences in computerized tomography (CT) and magnetic resonance imaging (MRI).

SI Special Imaging Affiliation II
Nine months of clinical experience (three quarter terms of 520 clock hours per term) that provides a wide variety of experiences in computerized tomography (CT) and magnetic resonance imaging (MRI).

SI Special Imaging Affiliation III
Nine months of clinical experience (three quarter terms of 520 clock hours per term) that provides a wide variety of experiences in computerized tomography (CT) and magnetic resonance imaging (MRI).

SI opics in Special Imaging I II III
Survey of selected topics in special imaging. Procedure summaries, projects, literature reviews. May be taken concurrently with RTSI 371-373 for credit toward the baccalaureate degree.

SI Special ro ect
Project to be submitted in the form of a paper or a visual aid representing a topic of current interest in an area related to radiation sciences. Regular meetings to provide guidance to the student.

SI C I Internships I II III
Advanced clinical training for qualified CRT, ARRT-certified individuals with current CPR and fluoroscopy permit. Training involves three quarters (nine months) of clinical time in the areas of cardiovascular/general angiography and interventional radiography. Full-time clinical-learning experience involving forty hours per week.

SI Ad anced Clinical rocedures I II III I
Credit for full-time, postcertification clinical practice in a radiology service. Periodic evaluations by the clinical supervisor.

Art Kroetz, Chair of the Department of Radiation Technology

S CH LA A AH L A A L

S CH LA A AH L , Associate in Science
S CH LA A AH L A A L , achelor of Science
S CH LA A AH L , ost achelor of Science Certificate

KEIKO KHOO, Department Chair

JEAN B. LOWRY, Program Director for Master of Science and Certificate, Speech Language Pathology

PAIGE SHAUGHNESSY, Academic Coordinator for Clinical Education, Speech-Language Pathology and

S CH LA A A H L , Certificate rere uisite

Any individual with a bachelor's degree from an accredited institution is eligible for the certificate (prerequisite) program. This program permits completion of undergraduate prerequisites before entering the graduate program. The individual must have a bachelor's degree from an accredited institution, with a G.P.A. of 3.0; and GRE scores will be required before admission to the graduate program. It is recommended that the applicant take the GRE before applying to the certificate program. Completion of the certificate program does not guarantee admission into the graduate program.

AM I S C I

S CH LA A A H L , Certificate rere uisite

SPPA	276	Communication Across the Lifespan	4
SPPA	314	Language Analysis for Speech-Language Pathologists	4
SPPA	317	Acoustic and Physiological Phonetics	2
SPPA	318	Transcription Phonetics	3
SPPA	324	Language Disorders of Children	4
SPPA	334	Phonological and Articulation Disorders	4
SPPA	376	Anatomy of Speech-Hearing Mechanism	4
SPPA	424	Adult Language Pathology	4
SPPA	434	Disorders of Fluency	2
SPPA	435	Voice Disorders	2
SPPA	444	Organic Speech Disorders	4
SPPA	477	Bilingualism and Biculturalism II	2
SPPA	485	Procedures and Materials in Speech-Language Pathology	4
SPPA	486	Diagnostic Methods in Speech-Language Pathology	4

Students who plan to complete a Clinical Rehabilitative Services Credential–Language, Speech, and Hearing *will need to take the following additional course:*

PSYC	305	Psychological Foundations of Education	4

NOTE: tudents who plan to , omplete the requirements for the Certifi, ate of Clini, al Competen, e from the Ameri, an pee, h-Lan ua e earin Asso, iation will need to have their under raduate , ourse wor reviewed y the fa, ulty adviser.

Jeanne Stoddard is the administrative secretary for the Department of Speech-Language Pathology and Audiology. If you want to hear someone properly articulate the department's name, telephone Jeanne.

S CH LA A A H L ASSIS A , Associate in Science

H AM

The Speech-Language Pathology Assistant Program leads to the Associate in Science degree and prepares the student for professional registration as a speech-language pathology assistant (SLPA). The SLPA program at Loma Linda University is generally completed in two years. Students enter as sophomores, after having completed approximately one year of course work at any accredited college or university prior to acceptance into the program.

In January 2000, the State of California Board of Examiners in Speech-Language Pathology and Audiology, and the American Speech-Language-Hearing Association issued regulations for training, credentialing, licensing, and supervision for a new category of paraprofessional, i.e. the speech-language pathology assistant (SLPA). The program has been approved by the California State Department of Consumer Affairs and the Speech-Language Pathology and Audiology Board.

For more information, please contact the Department of Speech-Language Pathology and Audiology.

S CH LA A A H L A A L , achelor of Science

H AM

The Speech-Language Pathology and Audiology Program, leading to the Bachelor of Science degree, begins with the Autumn Quarter of the junior year. The freshman and sophomore years, which are taken at an accredited college/university afford the fundamentals of a liberal education. The emphasis in the junior and senior years is on professional courses and practical experience.

Clinical s perience

Supervised clinical practicum is an integral part of the student's education. Completion of specific theoretical courses precedes placement for practicum. Clinical praticum is available for students who have a GPA of 3.0 or above in the major courses.

Accreditation

The program is approved by the Council on Academic Accrediation of the American Speech-Language-Hearing Association, 10801 Rockville Pike, Rockville MD 20852; telephone 301/897-5700.

A A I C IAL

The Speech-Language Pathology and Audiology Program is approved by the Commission on Teacher Credentialing to prepare students for the California Clinical Rehabilitative Services Credential in Language, Speech, and Hearing. Requirements for this credential include the completion of specific academic and clinical work at the graduate level.

A student preparing for a career in California schools should consult the department regarding specific course and practicum requirements for this credential.

H AM C I S

Upon completion of the program, the graduate should be qualified to:

1. Demonstrate a basic knowledge of the human communication processes, including:
   - the anatomic and physiologic bases for the normal development and use of speech, language, and hearing;
   - the physical bases and processes of the production and perception of speech, language, and hearing;
   - the linguistic variables related to normal development of speech, language, and hearing.

Dem09 0 0 9 67.024 247.12 153.0 0.0082 Tc(pon compl85on of the program, th clinical woe101.05ialvc(fsch10 /entc 26

S A honological and Articulation isorders 1
Definition, classification, etiology, diagnosis, and treatment of phonological/articulation disorders.
Prerequisite: SPPA 318.

S A Assisti e echnology 1
Introduction to the development and use of assistive technology. Use of assistive technology for individuals in need of augmentative or alternative means of communication.

S A Anatomy of Speech Hearing Mechanism 1
Anatomy and physiology of auditory-vocal communicative process.

S A ilingualism and iculturalism 1
Explores theories and issues of bilingualism and biculturalism, introducing the literature that gives insights into the experiences and achievements of minority college students and young adults. Opportunities are given to examine students' own identify and competence when faced with another culture or language. Critique the efficacy of various bilingual/dual language education practices based on psycholinguistic models.

S A Adult Language athology 1
Impairment of language and speech related to organic neuropathology.
Prerequisite: SPPA 376.

S A eha ior Management Applications ith Special opulations 1
Addresses the principles of behavior modification and discrete trials training as they apply to persons with Autism, developmental delays, congenital syndromes and attention deficit hyperactivity disorder.

S A isorders of luency 1
Characteristics, theories of etiology, and principles of management of stuttering and other fluency disorders.

S A oice isorders 1
Definition, classification, etiology, diagnosis, and treatment of voice disorders. Pitch, intensity, quality, and resonance.
Prerequisite: SPPA 376.

S A rganic Speech isorders 1
Introduction to the classification, cause, manifestations, assessment, and treatment of craniofacial disorders/cleft palate, tongue thrust, dysarthria, apraxia of speech, and dysphagia.
Prerequisite: SPPA 376.

S A echni ues for SL and Accent Modification 1
Principles and procedures for teaching English as a second language (ESL) and accent modification to bilingual speakers of English.

S A Hearing roblems and asic Audi ometry 1
Anatomy and physiology of the auditory mechanism. Nature of the acoustic stimulus, disorders of the ear, problems of the hard-of-hearing. Pure-tone audiometry. Applicable toward California audiometric certification.

S A Speech Language athology and Audiology racticum 1
Supervised practice in diagnosis and therapy.
Prerequisite: SPPA 324, 334, 485, 486.

S A ilingualism and iculturalism II 1
Addresses the clinical competencies and cultural sensitivity needed in dealing with bicultural and bilingual clients. Discusses the impact of such knowledge on assessment and intervention.

S A rocedures and Materials in Speech athology 1
Principles and procedures of speech-language therapy within and across disorders. Methods of determining treatment effectiveness. Regulations governing public school services. Observation of speech therapists working in schools, hospitals, and private clinics.

S A iagnostic Methods in Speech Language athology 1
Purpose for assessment. Procedures employed in describing and diagnosing speech-language impairments.
Prerequisite: SPPA 318, 324, 334.

S A or shops in Speech Language athology and Audiology 1
3pa9a faring. Pure-tone audiom-

S C Human europsychology
Introduction to brain-behavior relationships, including cerebral asymmetry, disconnection syndromes, disorders of memory and language, biological substrates of affective behavior, motor and perceptual dysfunction, and drug actions.

A A SCH L

M S degree courses

The program leading to the Master of Science degree in speech-language pathology and its descriptions for the following courses are provided in the BULLETIN of the Graduate School.

S A arly Childhood Language is orders

S A reschool and School Age Children s Language isorders

S A oice isorders

S A S allo ing isorders

S A Aural ehabilitation and Hearing Aids

S A Clinical ractice in Speech Language athology and Audiology Ad anced

S A Instrumentation in Speech and Hearing

S A rofessional Aspects of Speech Language athology and Audiology

S A Counseling in Communication isorders

S A irected eaching in Speech Language athology

S A or shop in Speech Language athology Audiology

S A ternship in Speech Language athology

S A esearch Methods and rofessional Literature

S A Seminar Motor Speech isorders and Augmentation

S A Seminar raumatic rain In ury

S A Seminar Adult Language isorders

S A Seminar Stuttering

S A Seminar pen Seminar

S A Seminar Articulation

S A esearch

S A hesis

S A irected Study

It takes special dedication and commitment to enter the field of speech-language pathology and audiology. Here are our full-time faculty that meet the criteria. . .
(l to r) Paige Shaughnessy, Jan McFarland, department chair-Kay Khoo, Jean Lowry, Susan Steffani, Karen Mainess, and department administrative secretary - Jeanne Stoddard

IV

ACUL
O LI ION

Statement of Mission

Courses

aculty of eligion

S A M MISSI

The Faculty of Religion is committed to the following four tasks as informed by the teachings and practice of the Seventh-day Adventist heritage and mission:

1. To promote Christian wholeness for faculty and students in their personal and professional lives and witness.
2. To provide a religion curriculum with the following emphases:
   - Foundational Studies (biblical, theological, historical, and mission).
   - Ethical Studies (personal, professional, and social).
   - Relational Studies (applied theology, clinical ministry, and psychology of religion).
3. To foster and support research in the foundational, ethical, and relational disciplines.
4. To serve the University, the church, and the larger world community by personal involvement in fostering deeper spirituality, theological integrity, and social justice.

C S S

A I AL S I S

BIBLICAL UDI

L e estament ritings
Interpretation of selected letters and passages of the New Testament, with a view to their theological and practical significance for today.
Additional project required for third unit.

L ospel of ohn
Key passages and themes in John, with an exploration of its message for today.
Additional project required for third unit.

L iblical rophets
Selected books, passages, and themes in the Old Testament prophets, with an exploration of their theological and practical significance for today.
Additional project required for third unit.

L esus
Study of Jesus as healer and teacher, prophet and reformer, Son of God and Savior.
Additional project required for third unit.

L ospel of Mar
Key passages and themes in Mark, with an exploration of its message for today.
Additional project required for third unit.

L ospel of Lu e
Key passages and themes in Luke, with an exploration of its message for today.
Additional project required for third unit.

L ospel of Matthe
Key passages and themes in Matthew, with an exploration of its message for today.
Additional project required for third unit.

L aul s Messa e in omans
Chapter-by-chapter interpretation of Paul's most influential letter, in which the good news of God's salvation is applied to the issues of Christian life and community.
Additional project required for third unit.

L aniel
Nature, purpose, and message of the apocalyptic book of Daniel.
Additional project required for third unit.

L e elation
Nature, purpose, and message of the apocalyptic book of Revelation.
Additional project required for third unit.

L Lo e and Se in the ible
Study of Scripture on the reality, nature, and challenges of love, both divine and human; and of key biblical passages on the goodness, meaning, and distortions of human sexuality.
Additional project required for third unit.

MI ION UDI

L Christian Mission 1
Biblical theology applied to defining the concerns, structures, and methods of Christian mission. Concept of the Church, the definition of missionary, and the priorities of mission.
Additional project required for third unit.

L Cross Cultural Ministry 1
Study of the challenges of serving cross-cultural situations from a Christian mission perspective, using the insights of missiology and cultural anthropology as they relate to personal and professional growth, social change, and effective intercultural communication and service.
Additional project required for third unit.

L Anthropology of Mission 1
Study of Christian mission, applying the findings of anthropology as they relate to cultural change. Processes of religious development, means of diffusion, factors affecting religious acculturation, and analysis of programs intended to effect changes in religion.
Additional project required for fourth unit.

HICAL S S

L Christian nderstanding of Se uality 1
Interpretations of human sexuality in ancient, medieval, and modern Christian thought, with emphasis on contemporary issues such as marriage, divorce, homosexuality, and artificial human procreation.
Additional project required for third unit.

L ersonal and rofessional thics 1
The foundations, norms, and patterns of personal integrity and professional responsibility.
Additional project required for third unit.

L Christian thics and Health Care 1
Ethical issues in modern medicine and related fields from the perspective of Christian thought and practice.
Additional project required for third unit.

L irected Study 1
Prerequisite: Consent of the instructor.

L Clinical thics 1
Case-based analysis of bioethics, with emphasis on clinical applications. Conceptual and historical readings in bioethics.
Additional project required for fourth unit.

L ioethical Issues in Social or 1
Theoretical and practical dilemmas in bioethics. Contributions of social workers to these issues.
Additional project required for fourth unit.

L Christian ioethics 1
Christian perspectives on ethical issues in health care.
Additional project required for fourth unit.

L thics for Scientists 1
Ethical aspects of scientific research, with emphasis on Christian contributions.
Additional project required for fourth unit.

L thical Issues in ublic Health 1
Ethical issues encountered by public health administrators, educators, and investigators.
Additional project required for fourth unit.

L Christian usiness thics 1
Christian and other perspectives on ethical issues in business and their pertinence to health care delivery and administration.
Additional project required for fourth unit.

L Christian Social thics 1
Relationships between Christian beliefs and social theory and practice.
Additional project required for fourth unit.

L Clinical thics racticum I 1
Theories and applications of ethics in the clinical setting.

L Clinical thics racticum II 1
Theories and applications of ethics in the clinical setting.
Prerequisite: RELE 554.

L heological thics 1
Ethical implications of the primary theological legacies of Western culture.
Additional project required for fourth unit.

L hilosophical thics 1
Ethical themes and significant theorists in Western philosophy.
Additional project required for fourth unit.

L iblical thics 1
Exploration of the nature of biblical ethics and the contribution which the Bible makes to ethical reflection and action.
Additional project required for fourth unit.

L Seminar in Christian thics 1
Advanced study of selected topics in Christian ethics.
Prerequisite: Consent of the instructor.

L irected Study 1
Prerequisite: Consent of the instructor.

LA I AL S S

A LI D OLtheolo i, al le a, ies
of

L Church and Community Leadership

L Culture, sychology and eligion
Introduction to the major contours of Western culture as they relate to various schools of psychological thought and the influence of religious beliefs.

Additional project required for fourth unit.

L sychology of eligion
Psychological research of religion from an eclectic approach. Faith development, ethnographic varieties of religious experiences, narrative analysis, and cross-cultural religious experiences.

Additional project required for fourth unit.

L sychology of Moral and aith elopment
Study of logical, moral, and faith reasoning from a cognitive–developmental perspective. How cultural and religious norms affect moral thinking.

Additional project required for fourth unit.

L irected Study
Prerequisite: Consent of the instructor.

AL LI I S S S

L esearch Methods
Study of presuppositions and procedures for scholarship in religion and ethics, with an introduction to research in the natural and behavioral sciences. Practical themes include writing, library and Internet resources, and forms of scholarly papers and articles.

Two units of credit may be given for research methods class taken in another discipline.

Additional project required for fourth unit.

L eading utorial
Reading course for graduate students in religious studies. Topics vary depending on student and instructor interests.

Additional project required for fourth unit.

Prerequisite: Consent of the instructor.

L Clinical Internship cloc hours
Supervised clinical internship. Minimum of one hour of individual supervision per week, and a final evaluation from the supervisor at the completion of 400 hours of clinical internship.

L ro ect
Prerequisite: Consent of the instructor and of student's adviser.

L Independent esearch
Prerequisite: Consent of the instructor and of student's adviser.

L hesis
Prerequisite: Consent of the instructor and of student's adviser

V

DIVI ION O N AL UDI

LLU Philosophy of General Education

LLU Criteria for General Education Courses

LLU General Education Requirements

LLU General Education Courses Offered by the School

LLU General Education Courses—Online and Booklet

L MA LI A I SI HIL S H AL CA I

As a Seventh-day Adventist health-sciences institution, Loma Linda University seeks to exemplify a life of service and sensitivity beyond the requirements of academic excellence within a professional discipline. With its rich spiritual heritage, the University places special emphasis on educating its students for a life of service in a global community.

General education at Loma Linda University consists of courses, lectures, programs and activities coordinated with the intent to integrate faith and learning. In addition to the basics of cultural heritage and diversity, scientific inquiry and analysis, communication, and wellness, the curriculum emphasizes the University's spiritual heritage as well as moral and ethical decision-making that is grounded in Christian principles.

Thus, a general education is considered to be the cornerstone upon which students begin cultivating their abilities to:

1. Understand the fundamental Christian prin-

AHC Statistics for the Health rofessions
Fundamental procedures in collecting, summarizing, analyzing, presenting, and interpreting data. Measures of central tendency and variation, probability, binomial and normal distribution, hypothesis testing and confidence intervals, t-tests, chi-square, correlation, and regression. Introduction to SPSS statistical package for computer data analysis.

Prerequisite: Competency math exam at 75%.

AHC athology I
Fundamental mechanisms of disease, including cell injury; inflammation, repair, regeneration, and fibrosis; vascular, cardiac, respiratory, gastrointestinal, hepatobiliary, urinary, reproductive, endocrine, and integumentary pathologies.

AHC athology II
3 units: Fundamental mechanisms of disease, including the central and peripheral nervous systems, bone and joint, skeletal muscle, developmental, genetic, infectious, and parasitic pathologies; and neoplasia.

4 units: Additional unit requires two autopsy viewings and written report.

Prerequisite: AHCJ 402.

AHC hysiology I
Physiology of the human body, including cellular, neuromuscular, cardiovascular, respiratory, gastrointestinal, renal, and endocrine physiology.

AHC hysiology II
Detailed study of neuromuscular physiology.

Prerequisite: AHCJ 418.

AHC esearch Methods
Introduction to the scientific method in research. Focus on the major steps of the research process as these steps relate to research report evaluation, proposal writing, literature review, development of conceptual framework, identification of variables, statement of hypotheses, research design, and analysis and presentation of data.

Prerequisite: AHCJ 351.

S A Hearing Science
Introduction to basic theories and laboratory exercises in acoustics, psychoacoustics, and physiological acoustics.

S A Anatomy of Speech and Hearing Mechanism
Anatomy and physiology of auditory-vocal communicative process.

OCIAL CI NC

AHC HI AI S and the Health ro ider
Current issues on HIV/AIDS, with special emphasis on the epidemiology and etiology of the disease. Psychosocial, economic, ethical, and legal concerns. Education for prevention and impact on the health care worker. Resources available. Risk factors and precautions for blood-borne pathogens, HIV, hepatitis, and tuberculosis.

AHC sycho Social Models and Inter en tions
Orientation to the major models in psychology and how they relate to medical care. Development of a psychological model for interpretation of needs of the person in crisis. Understanding the roles of psychiatrists, psychologists, social workers, and family therapists. Suicide intervention. Critical-incident debriefing. Support factors in providing temporary, adequate psychological care for all involved in medical crisis.

AHC ortfolio racticum I
Introduction to the goals for a graduate of Loma Linda University. Students demonstrate progression towards effective communication, teamwork, support of diversity, ethical behavior, appreciation of human worth, balanced work-rest-leisure within a spiritual atmosphere, and commitment to long-term personal and professional growth.

AHC inancial Management
Financial aspects of health care involving prospective reimbursement system, analysis of various health-care reimbursement schemes, and hospital financial disbursements. Budget variance analysis, analysis of cost components, operating statements, and productivity related to a department budget. Special projects may be assigned as needed.

AHC Health Care Management
Management theory: planning, organizing, directing, and controlling (including budgetary controls). Department productivity and theories of work simplification. Preparation of resumes, interviewing skills, professional attitudes, group theory, and group dynamics. Students spend the last two to three weeks doing special projects designed and supervised by their departments. (Department of Nutrition and Dietetics students register for a 2-unit practicum in conjunction with this course.)

AHC ducational sychology for Health rofessionals
Psychological factors relating to learning processes in professional and higher education. Emphasis on the role of communication skills in learning settings, gender influences on learning, objective setting and course design, stimulating higher-level thinking, motivation, and retention.

Prerequisite: AHCJ 409.

AHC sychology of hysical isability
Psychological reactions to illness or disability. Methods of dealing with these reactions considered with reference to the clinical situation. Seminar approach to professional responsibilities for health care.

AHC ortfolio racticum II
Continued progress towards the goals for a Loma Linda University graduate.

1 unit: Development of portfolio that illustrates the potential graduate's ability to meet the goals set by SAHP for graduates of baccalaureate and master's degree programs.

2 units: Requires a research abstract. Course covers three quarters (AU, WN, SP). IP grade will carry through each quarter until completion of third quarter, at which time grade is issued.

S A ilingualism and iculturalism
Explores the theories and issues of bilingualism and biculturalism, introducing literature that gives insights into the experiences and achievements of minority college students and young adults. Opportunities are given to examine students' own identity and competence when faced with another culture or language. Critique the efficacy of various bilingual/dual language education practices based on psychoholinguistic models.

MAI C MM ICA I
uarter credits

AHC rofessional Communications
Forms of written and verbal communication routinely required in the performance of the health care-manager's duties. Projects include memos, letters, confidential FAX cover design, short reports, meeting notices, minutes, and creation of an agenda.

AHC Medical erminology
Language of medicine, including word construction, definitions, and the use of terms related to medical science. Course organized by body systems.

AHC Human esources Management
Theory and practice of the management of people at work. Organizational behavior concepts and the problems of employee procurement, training, and motivation. Job evaluation, wage administration, employee benefits, and negotiating with labor unions. Preparation both for managing people a

AHC ynamics of Learning and each ing
Examination of the theories of learning applied to teaching process. Includes evaluation of current research and methods of instruction.

AHC Adult Learning Styles
Theories and styles of learning, personality factors relating to learning, implications of effective intellectual, emotional, and social functioning included within the context of structuring education for the adult learner. Analysis of the teaching process from setting of objectives, selection of content, and design of classroom and clinical teaching strategies, with emphasis on alternatives to lecturing.

AHC Introduction to Computer Appli cations
Hands-on instruction in Word, Excel, and PowerPoint. Lectures, laboratory, assignments, quizzes, projects, and a practical examination.

AHC atabase Management I
Introduction to database management concepts, with emphasis on medical information. Microsoft Excel used as a flat database. Data management and presentation using the sorting, reporting, and charting functions of Excel.

Prerequisite: Introduction to computers.

AHC atabase Management II
Theories and steps of database development using Microsoft Access. Topics include but are not limited to relationships, form building, advanced queries, reporting, and macros. Required project creating a basic medical-information database from scratch.

Prerequisite: AHCJ 431 or consent of instructor.

AHC Special ro ects in Computer Applications
Computer systems and applications designed to the specific professional needs and interests of the student. Emphasizes use of databases with health care data and on-systems design, as needed.

Prerequisite: AHCJ 431, 432.

AHC roup rocess and ynamics
Introduction to principles and techniques of group theories, processes, and dynamics, as applied to the health professional setting. Concepts include group functions, roles, structures, and characteristics; group membership, norms, dynamics, and relations. Theoretical perspectives on group development, dynamics, and conflicts. Practical issues, including educational applications, negotiation, observation, and diagnosis. Leadership issues, facilitation, expedition, and termination. Simulation exercises, active learning, and flexible choices of study and application.

AHC Seminars in Leadership
Seminar in contemporary leadership topics designed to prepare graduates for entry into the new work requirements. Through observation and participation, students explore the responsibility of the employee of today for successful integration into customer and community service and social responsibility.

S A eginning Sign Language
Focus on learning American Sign Language (ASL) for conversational purposes. Students learn fingerspelling, acquire a sign vocabulary of approximately 500 words, and explain and demonstrate the basic grammatical rules of ASL. Opportunity provided to use ASL with native signers. Students discuss ASL in contrast to the various sign systems currently being used in educational settings in this country.

MAI H AL H A LL SS
uarter credits

CS Human utrition
Fundamentals of normal nutrition. Carbohydrates, proteins, fats, vitamins, minerals; their roles in human metabolism. Introduction to nutrition in the life cycle. Per week: lecture 3 hours.

CS Human and Clinical utrition for ursing
Fundamentals of normal nutrition. Carbohydrates, proteins, fats, vitamins, minerals; their roles in human metabolism. Investigating the role of nutrition at vari- nutrition. Ca

LL AL CA I C S S, LI A L

A complete listing of courses offered each academic term at this University to meet general education domain requirements is included on the Loma Linda University Web Site at <www.llu.edu/ssweb/> under the course schedules.

By linking from course schedules to "General Education Brochure and Course Descriptions" the student has access also to the entire list of general education courses and course descriptions. It is available at the above web site as a printable booklet—*Loma Linda University General Education Philosophy, Requirements, and Courses*.

VI
I DI C O

I SI A A A MI IS A I

IC S H A S S

Lowell C. Cooper, M.Div. M.P.H.	Chair
B. Lyn Behrens, M.B., B.S.	Vice Chair
Don C. Schneider, M.A.	Vice Chair
Brian Bull, M.D.	Secretary

SCHOOL ADMINISTRATION

ADMINISTRATION

Craig R. Jackson, J.D., M.S.W., Dean
Edd J. Ashley, Ed.D., Associate Dean, Student Affairs
Grenith J. Zimmerman, Ph.D., Associate Dean, Research, Program Director for Rehabilitation Science
Kent Chow, M.B.A., Assistant Dean, Finance
G. Charles Dart, Jr., M.B.A., Director, Marketing and Retention
Helen Greenwood, M.A., Director, Admissions and Records
_____, Director, Development
Ardis Wazdatskey, M.A., Director, Evaluation

COMPUTER SERVICES

Intithar S. Elias, M.S., Director
Brandon A. Spurgeon, A.S.
Rajae Aree

RESEARCH ASSISTANTS

Grenith J. Zimmerman, Ph.D., Associate Dean
Noha S. Daher, M.S.P.H.
Leda de Dios, B.S.
Ardis Wazdatskey, M.A.

CALIFORNIA LUTHERAN AREA SCIENCES

Robert L. Wilkins, Ph.D., Department Chair
Jeff T. Grange, M.D., Medical Director for Bachelor of Science, Emergency Medical Care Program
Ehren B. Ngo, M.S. Program Director for Bachelor of Science, Emergency Medical Care; Director, Center for Emergency Medical Services Education and Research (CEMSER)
Traci L. Marin, B.S, Director of Clinical Education for Bachelor of Science, Emergency Medical Care Program
Kenrick C. Bourne, Dr.P.H., Program Director for Master of Physician Assistant, Physican Assistant Program
Benny Hau, M.D., Medical Director for Master of Physician Assistant, Physician Assistant Program
Julie Y. Lee, MPH, Assistant Didactic Coordinator for Master of Physician Assistant, Physician Assistant Program
Allan Bedashi, M.S., Didactic Coordinator for Master of Physician Assistant, Physician Assistant Program
Gerald A. Glavaz, M.P.A.S., Clinical Coordinator of Clinical Education for Master of Physician Assistant, Physician Assistant Program
Yasmin C. Bracho, M.P.A., Assistant Clinical Coordinator for Master of Physician Assistant, Physician Assistant Program
N. Lennard Specht, M.D., Medical Director for Respiratory Care Program
David Lopez, Ed.D., Program Director for Post-Professional Bachelor of Science, Respiratory Care; and for Certificate, Polysomnography
David M. Stanton, M.S., Program Director for Certificate, Respiratory Care; and for Bachelor of Science, Respiratory Care
Arthur B. Marshak, B.S., Director of Clinical Education for Bachelor of Science, Respiratory Care Program

CLINICAL LAB ASSISTANT

Kenneth A. Cantos, M.D., Department Chair
Monique K. Gilbert, B.S., Program Director for Certificate, Phlebotomy
Marlene M. Ota, B.S., Program Director for Certificate and for Bachelor of Science, Cytotechnology
Darryl G. Heustis, M.D., Medical Director for Cytotechnology Program
Pamela J. Wat, M.D., Medical Co-director for Cytotechnology Program
Sally S. Greenbeck, M.P.H., Program Director for Bachelor of Science, Clinical Laboratory Science
Katherine G. Davis, B.S., Clinical Coordinator for Clinical Laboratory Science Program
James M. Pappas, M.D., Medical Director for Clinical Laboratory Science Program

HEALTH INFORMATION MANAGEMENT

Marilyn H. Davidian, M.A., Department Chair; Program Director for Health Information Systems and for Health Information Administration
Diana Medal, M.A., Program Coordinator for Certificate, Coding Specialist
Terri Rouse, B.S., Recruitment Coordinator, Health Information Administration Program
_____, Coordinator for Clinical Education

I I A ⎯ ⎯ ICS

Bert C. Connell, Ph.D., Department Chair and Program Director; Bachelor of Science, Nutrition and Dietetics; Certificate, Dietetics
Kenneth I. Burke, Ph.D., Emeritus Professor
Georgia W. Hodgkin, Ed.D., Associate Department Chair, Program Director; Dietetic Technology
Maxine Taylor, M.S., Academic Coordinator of Clinical Education; Nutrition and Dietetics Program
Cindy Kosch, M.S., RD, Assistant Professor, Nutrition and Dietetics; Certificate Coordinator

CC A I AL H A

Liane H. Hewitt, M.P.H., OTR/L, Department Chair, Program Director for Associate in Arts, Occupational Therapy Assistant; and Program Director for Post-Professional Master of Occupational Therapy
Esther Huecker, M.A., OTR/L, BCP, Program Director, Entry-Level Master of Occupational Therapy
Judith A. Palladino, M.A., OTR/L, Academic Coordinator for Fieldwork Education, Occupational Therapy Program
Sharon Pavlovich, A.A., COTA/L, Academic Coordinator for Fieldwork Education, Occupational Therapy Assistant Program

H SICAL H A

Edd J. Ashley, Ed.D., Department Chair
Howard W. Sulzle, Ed.D., Associate Department Chair
Lawrence E. Chinnock, Ed.D., Program Director for Progression Master of Physical Therapy, and for Entry-Level Doctor of Physical Therapy
Everett B. Lohman III, D.P.T.Sc., Program Director for Post-Professional Master of Physical Therapy; Post-Professional Doctor of Physical Therapy; and Post Professional Doctor of Physical Therapy Science
Jeannine Stuart-Mendes, M.P.T., Academic Coordinator of Clinical Education for Entry-Level Doctor of Physical Therapy Program
Desmyrna R. Taylor, M.P.T., Program Director for Associate in Science, Physical Therapist Assistant
Carol J. Appleton, M.P.H., Academic Coordinator of Clinical Education for Progression Master of Physical Therapy Program and Physical Therapist Assistant Programs; Assistant Program Director for Physical Therapist Assistant

A ⎯A I CH L

Arthur W. Kroetz, Ph.D., Department Chair
Erma P. Ezpelata, B.S., Program Director for Certificate, Nuclear Medicine Technology
Mark J. Clements, M.A., Associate Department Chair; Program Director for Associate in Science, Medical Radiography; Program Director for Bachelor of Science, Radiation Therapy Technology; Coordinator for Certificate, Diagnostic Medical Sonography Program
Laura L. Alipoon, Ed.S., Program Director for Bachelor of Science, Radiation Sciences; Program Director, Radiologist Assistant
Steven L. Leber, B.S., Clinical Coordinator for Associate in Science, Medical Radiography Program; Program Director for Certificate, Special Imaging Technology
Marie M. DeLange, B.S., Clinical Program Director for Certificate, Diagnostic Medical Sonography
Carol A. Davis, M.A., Clinical Program Director for Certificate, Radiation Therapy Technology; Program Director, Medical Dosimetry
Gregory E. Watkins, M.D., Medical Adviser for Medical Radiography Program
Glenn A. Rouse, M.D., Medical Director for Certificate, Diagnostic Medical Sonography Program
_____, Medical Director for Certificate, Nuclear Medicine Technology Program
James M. Slater, M.D., Medical Director for Radiation Therapy Technology Program
Terese R. Pfeiffer, B.S., Program Coordinator, Loma Linda University Programs, Fresno, CA

S CH LA A A H L A ⎯A ⎯ L

Keiko Khoo, M.A., M.S., Department Chair
Jean B. Lowry, Program Director for Master of Science, for Bachelor of Science; Program Director Certificate, Speech Language Pathology and Audiology
Paige Shaughnessy, Academic Coordinator for Clinical Education, Speech-Language Pathology and Audiology Program
Karen Mainess, Ph.D., Program Director for Associate in Science, Speech-Language Pathology Assistant

SCHOOL COMMITTEES

ADMINISTRATIVE COUNCIL

Craig Jackson, Chair
Kent Chow
Charles Dart
Helen Greenwood
Grenith Zimmerman
Department chairs
Faculty Council chair
Chancellor*

ADMISSIONS COMMITTEE

Edd Ashley, Chair
Charles Dart
Helen Greenwood
Craig Jackson
Dean, Student Affairs*
Department chairs
Chancellor*
Special assistant to the chancellor (diversity)*

COMMUNICABLE DISEASES COMMITTEE

Ken Cantos, Chair
John Lewis
Terence Tay

CLINICAL CURRICULA COMMITTEE

Judith Palladino, Chair
Carol Appleton
Yasmin Bracho
Kelly Burk
Katherine Davis
Intithar Elias
Erma Ezpeleta
Monique Gilbert
Gerald Glavaz
Craig Jackson
Yoomi Kim
Dolly Kisinger
Steve Leber
Traci Marin
Arthur Marshak
Jeannine Stuart Mendes
Sharon Pavlovich
Paige Shaughnessy
Howard Sulzle
Maxine Taylor

CHILD, MATERNAL AND FAMILY HEALTH COMMITTEE

Art Kroetz, Chair
Marilyn Davidian
Intithar Elias
Liane Hewitt
Georgia Hodgkin
Gail Rice
Desmyrna Taylor

LIBRARY AND TECHNOLOGY COMMITTEE

Cindy Kosch, Chair
Marilyn Davidian
Marissa Smith
Bud Spearman

ACADEMIC COUNCIL

Craig Jackson, Chair
Laura Alipoon
Ruel Alipoon
Kenrick Bourne
Lawrence Chinnock
Mark Clements
Charles Dart
Marilyn Davidian
Carol Davis
Marie DeLange
Erma Ezpeleta
Monique Gilbert
Sally Greenbeck
Liane Hewitt
Georgia Hodgkin
Esther Huecker
Steven Leber
Everett Lohman
David Lopez
Jean Lowry
Karen Mainess
Diana Medal
Ehren Ngo
Marlene Ota
David Stanton
Desmyrna Taylor
Ardis Wazdatskey

ADMISSIONS AND FINANCIAL AID COMMITTEE

Georgia Hodgkin, Chair
Edd Ashley
Bertrum Connell
Liane Hewitt
Paige Shaughnessy
Cheryl Simpson
Robert Wilkins

RESEARCH COMMITTEE

Grenith Zimmerman, Chair
Edd Ashley
Kenneth Burke
Mark Clements
Marilyn Davidian
Nicceta Davis
Esther Huecker
Craig Jackson*
Kelly Liu
Jerrold Petrofsky
Susan Steffani
Robert Wilkins
Student representative
University advancement grant writer/researcher

SPECIAL CASES COMMITTEE

Bert Connell, Chair
Arthur Marshak
Desmyrna Taylor
Mark Clements (alternate)
Karen Pendleton (alternate)

SPECIAL ALLIANCE HOUSE COMMITTEE

Desmyrna Taylor, Chair
Laura Alipoon
Christy Billock
Kenneth Burke
Craig Jackson*
David Lopez
Arthur Marshak
Terri Rouse
Jeannine Stuart-Mendes
Antonio Valenzuela
Ardis Wazdatskey
Ivan Blazen (Faculty of Religion)
David Taylor (Faculty of Religion)
*ex officio

CHILD AND FAMILY ALLIANCE COMMITTEE

Arthur Kroetz, Chair
Cerise Bender
Kenneth Burke
Kent Chow
Noha Daher
Intithar Elias
Arthur Marshak
Diana Medal
Ernie Schwab
Brandon Spurgeon
Ardis Wazdatskey
Grenith Zimmerman

H AC L

ull time aculty

LAURA L. ALIPOON, Associate Professor, Department of Radiation Technology
Ed.D. La Sierra University 2001

RUEL A. ALIPOON, Instructor, Department of Cardiopulmonary Sciences
A.S. East Los Angeles College 1976

CAROL J. APPLETON, Assistant Professor, Department of Physical Therapy
M.P.H. Loma Linda University PH 1974

EDD JAN ASHLEY, Professor, Department of Physical Therapy
Ed.D. Boston University 1972

ALLAN M. BEDASHI, Assistant Professor, Department of Cardiopulmonary Sciences
M.P.A.S. University of Nebraska 1998

L. CHRISTINE BILLOCK, Assistant Professor, Department of Occupational Therapy
M.A. University of Southern California 1998

ROBERT S. BLADES, Instructor, Department of Health Information Management
M.B.A. Widner University 1977

KENRICK C. BOURNE, Assistant Professor, Department of Cardiopulmonary Sciences
Dr.P.H. Loma Linda University PH 1997

JANA D. BOWEN, Instructor, Department of Nutrition and Dietetics
B.S. Loma Linda University SAHP 2002

YASMIN C. BRACHO, Clinical Instructor, Department of Cardiopulmonary Sciences
M.P.A. Loma Linda University SAHP 2002

JAMES A. BRANDT, Instructor, Department of Clinical Laboratory Science
M.S. Loma Linda University GS 1982

KENNETH IBER BURKE, Emeritus Professor, Department of Nutrition and Dietetics
Ph.D. Florida State University 1973

KENNETH A. CANTOS, Assistant Professor, Department of Pathology and Human Anatomy SM
M.D. Loma Linda University SM 1993

LAWRENCE EDWIN CHINNOCK, Associate Professor, Department of Physical Therapy
Ed.D. La Sierra University 1996

KENT CHOW, Instructor, Department of Allied Health Studies
M.B.A. Claremont Graduate School 1995

MARK JAN CLEMENTS, Assistant Professor, Department of Radiation Technology
M.A. University of Colorado 1970

BERTRUM CLAUDE CONNELL, Professor, Department of Nutrition and Dietetics
Ph.D. University of Missouri, Columbia 1981

NOHA SALIM DAHER, Assistant Professor, Department of Allied Health Studies
M.S.P.H. Loma Linda University PH 1992

G. CHARLES DART, JR. Assistant Professor, Department of Allied Health Studies
M.B.A. La Sierra University 1994

MARILYN HOPKINS DAVIDIAN, Assistant Professor, Department of Health Information Management
M.A. Claremont Graduate School 1996

CAROL A. LUCY DAVIS, Clinical Instructor, Department of Radiation Technology
M.A. Loma Linda University GS 1997

NICCETA DAVIS, Associate Professor, Department of Physical Therapy
Ph.D. American University 1999

INTITHAR S. ELIAS, Assistant Professor, Department of Allied Health Studies
M.S. Loma Linda University GS 1979

ELAINE KUESTER FLEMING, Assistant Professor, Department of Nutrition and Dietetics
M.P.H. Loma Linda University PH 1975

BONNIE J. FORRESTER, Assistant Professor, Department of Physical Therapy
D.P.T.Sc. Loma Linda University AH 2002

MONIQUE K. GILBERT, Instructor, Department of Clinical Laboratory Science
B.S. Loma Linda University AH 1989

GERALD A. GLAVAZ, Assistant Professor, Department of Cardiopulmonary Sciences
M.P.A.S. University of Nebraska 2003

STEVEN M. GREEN, Assistant Professor, Department of Cardiopulmonary Sciences
M.D. University of California, San Diego 1985

SALLY S. GREENBECK, Assistant Professor, Department of Clinical Laboratory Science
M.P.H. Loma Linda University PH 1996

HELEN R. GREENWOOD, Instructor, Department of Allied Health Studies
M.A. University of Redlands, Whitehead
DepartmeD-0alth Studiesaboratory Science.H. Loma LL HOPL
DepartmeD-0alth fty iveHDNAZUMISaWITH 1992MARILYN HOPKINS DAVIDIAN, Assistant Profes

ERIC GLENN JOHNSON, Associate Professor, Department of Physical Therapy
D.P.T.Sc. Loma Linda University AH 2001

MARTINA KARUNIA, Assistant Professor, Department of Nutrition and Dietetics
M.P.H. Loma Linda University PH 2002

KEIKO INADA KHOO, Associate Professor, Department of Speech-Language Pathology and Audiology
M.S. Loma Linda University GS 1979
M.A. University of California, Los Angeles 1987

NORIECE R. KISINGER, Instructor, Department of Radiation Technology
B.S. University of Redlands 1989

CINDY L. KOSCH, Assistant Professor, Department of Nutrition and Dietetics
M.S. Loma Linda University GS 1986

ARTHUR WILLIAM KROETZ, Assistant Professor, Department of Radiation Technology
Ph.D. University of Southern California 1999

STEVEN L. LEBER, Instructor, Department of Radiation Technology
B.S. Loma Linda University AH 1985

KELLY CHI LIU, Clinical Instructor, Department of Clinical Laboratory Science
B.S. Loma Linda University AH 2002

EVERETT B. LOHMAN III, Associate Professor, Department of Physical Therapy
D.P.T.Sc. Loma Linda University AH 1998

DAVID LOPEZ, Associate Professor, Department of Cardiopulmonary Sciences
Ed.D. La Sierra University 2001

JEAN BOYD LOWRY, Professor, Department of Speech-Language Pathology and Audiology
Ph.D. Kent State University 1973

KAREN J. MAINESS, Assistant Professor, Department of Speech-Language Pathology
Ph.D. Teacher's College of Columbia University 2002

TRACI L. MARIN, Assistant Professor, Department of Cardiopulmonary Sciences
M.P.H. Loma Linda University PH 2003

ARTHUR BOHDAN MARSHAK, Instructor, Department of Cardiopulmonary Sciences
B.S. Loma Linda University AH 1988

HELEN HOPP MARSHAK, Associate Professor, Department of Physical Therapy
Ph.D. University of Washington 1991

BRADFORD D. MARTIN, Associate Professor, Department of Physical Therapy
Ph.D. Loma Linda University GS 1984

CLARO Y. MASANGCAY, Clinical Instructor, Department of Clinical Laboratory Science
B.A. University of California, Santa Barbara 1989

JAN MCFARLAND, Assistant Professor, Department of Speech-Language Pathology and Audiology
M.S. Loma Linda University GS 1995

DIANA S. MEDAL, Assistant Professor, Department of Health Information Management
M.A. California State University, San Bernardino 2001

JEANNINE STUART MENDES, Assistant Professor, Department of Physical Therapy
M.P.T. Loma Linda University AH 1995

EHREN B. NGO, Assistant Professor, Department of Cardiopulmonary Sciences
M.S. University of Maryland 1999

THUAN H. NGUYEN, Instructor, Department of Clinical Laboratory Science
M.P.H. Loma Linda University PH 1975

MARLENE M. OTA, Assistant Professor, Department of Cytotechnology
B.S. University of Redlands 1981

JUDITH A. PALLADINO, Assistant Professor, Department of Occupational Therapy
M.A. California State University, Long Beach 1984

JAMES M. PAPPAS, Associate Professor, Department of Clinical Laboratory Science
M.D. Loma Linda University SM 1985

SHARON LEE PAVLOVICH, Instructor, Department of Occupational Therapy
A.A. Loma Linda University AH 1992

KAREN MILLARD PENDLETON, Assistant Professor, Department of Occupational Therapy
M.A. La Sierra University 1997

JERROLD S. PETROFSKY, Professor, Department of Physical Therapy
Ph.D. St. Louis University 1974

TERESE R. PFEIFFER, Instructor, Department of Radiation Technology
B.S. Pacific Union College 1983

RONALD M. REA, Assistant Professor, Department of Physical Therapy
M.P.T. Loma Linda University AH 1994

GAIL T. RICE, Professor, Department of Allied Health Studies
Ed.D. Loma Linda University SE 1983

GAILE T. RITTENBACH, Clinical Instructor, Department of Clinical Laboratory Science
B.S. Loma Linda University AH 1996

RODNEY M. ROATH, Instructor, Department of Clinical Laboratory Science
M.B.A. California State University, San Bernardino 1991

TERI J. ROSS, Instructor, Department of Clinical Laboratory Science
B.S. Loma Linda University AH 1982

TERRI ROUSE, Clinical Instructor, Department of Health Information Management
B.S. Loma Linda University AH 1994

DAISY SANTA MARIA, Clinical Instructor, Department of Clinical Laboratory Science
B.S. Loma Linda University AH 1983

ERNEST R. SCHWAB, Associate Professor, Department of Allied Health Studies
Ph.D. Loma Linda University GS 1989

MICHAEL SCOFIELD, Assistant Professor, Department

LINDA JOHLMAN SHAIN, Clinical Instructor,
Department of Clinical Laboratory Science
B.S. Loma Linda University AH 1981

BRIAN DAVID SHARP, Assistant Professor, Department of Speech-Language Pathology and Audiology
M.S. University of Redlands 1995

PAIGE SHAUGHNESSY, Associate Professor,
Department of Speech-Language Pathology and Audiology
Ph.D. University of Utah 1985

CHARLES B. SPEARMAN, Assistant Professor,
Department of Cardiopulmonary Sciences
M.S.Ed. University of Southern California 1994

DAVID MORGAN STANTON, Assistant Professor,
Department of Cardiopulmonary Sciences
M.S. Loma Linda University GS 1991

SUSAN STEFFANI, Associate Professor, Department of Speech-Language Pathology and Audiology
Ph.D. University of Oregon 1992

HOWARD WINSTON SULZLE, Assistant Professor,

STEPHEN WILLIAM ZECHER, Assistant Professor, Department of Physical Therapy
M.P.T. Loma Linda University AH 1995

Clinical, oluntary, Ad unct aculty

CAROLINE ROSS ADAME, Clinical Instructor, Department of Nutrition and Dietetics
M.S. Loma Linda University GS 1975

RITA C. AGUILAR, Clinical Instructor, Department of Nutrition and Dietetics
M.P.H. Loma Linda University PH 1981

MOHAMMED R. AL FAGIH, Instructor, Department of Cardiopulmonary Sciences
M.B. CH.B. Baghdad Medical College 1971

NAOKI ANDO, Instructor, Department of Allied Health Studies
M.A. Nagoya University 1997

StuD.MSHIGRENOBU Nutrition and Dietetics (versi 74-1.A0l03P1D0R1TPLctom)a74(L)njdTaJ3nive4r0s7it4y1 A1b1gMEL, Instructor M.A. Nagoya University 141AtL3P0001 Pctor)74(,)]T

B Tc12.5 49.024 666.4552 Tm[(C831AtL3P0001 Pctor)74(,)]TJ(MELISSA KA1AtL De22-11B4070.00R11 TBACKSTRO

BETTY M. FITZSIMMONS, Clinical Instructor, Department of Clinical Laboratory Science
M.S. California State University Fullerton 1987

DANETTA FROST, Clinical Instructor, Department of Nutrition and Dietetics
B.S. Loma Linda University AH 1966

BARBARA JANE CHAN GANCHINGCO, Clinical Instructor, Clinical Laboratory Science
B.S. Loma Linda University AH 2001

HENRY GARCIA, Instructor, Department of Physical Therapy
A.S. Loma Linda University AH 1990

CONSTANCE L. GARRETT, Clinical Instructor, Department of Nutrition and Dietetics
M.S. Case Western Reserve University 1974

DOTTIE GIBSON, Clinical Instructor, Department of Nutrition and Dietetics
B.S. Pacific Union College 1966

JOEL C. GILLMORE, Clinical Instructor, Department of Clinical Laboratory Science
B.S. California State Polytechnic University, Pomona 1969

ALEIDA E. GORDON, Clinical Instructor, Department of Nutrition and Dietetics
M.P.H. Loma Linda University PH 1992

LUELLA M. GRANGAARD, Clinical Instructor, Department of Occupational Therapy
M.A. University of Puget Sound 1983

JEFF T. GRANGE, Adjunct Assistant Professor, Department of Cardiopulmonary Sciences
M.D. Loma Linda University SM 1994

JENNIFER L. GUERRERO, Clinical Instructor, Department of Health Information Management
B.S. Loma Linda University AH 1997

DIANE S. HARDY, Instructor, Department of Occupational Therapy
B.S. Loma Linda University AH 1979

MASAHIRO HASHIMOTO, Instructor, Department of Allied Health Studies
B.A. National Mie University 1983

RUBY SHIROMA HAYASAKA, Clinical Instructor, Department of Nutrition and Dietetics
M.A. University of Redlands 1986

SONDRA D. HENDERSON, Clinical Instructor, Department of Nutrition and Dietetics
M.P.H. Loma Linda University PH 1981

RONALD A. HERSHEY, Emeritus Associate Professor, Department of Physical Therapy
M.A. University of Southern California 1962

MELISSA HINGULA, Clinical Instructor, Department of Health Information Management
A.S. Cypress College 1987

PATRICIA AIKO HOKAMA, Clinical Instructor, Department of Physical Therapy
B.S. Loma Linda University AH 1969

BRENDA SUE HOLDEN, Clinical Instructor, Department of Radiation Technology
M.B.A. University of Redlands 1989

JULIETTE KAPUA HOLLANDS, Clinical Instructor, Department of Clinical Laboratory Science
B.S. California State University, Pomona 1984

NORMA C. HUCKABY, Voluntary Instructor, Department of Physical Therapy
B.S. Loma Linda University AH 1980

DYHALMA IRIZARRY, Adjunct Professor, Department of Occupational Therapy
Ph.D. Pennsylvania State University 1990

FUSAE ISHIBASHI, Instructor, Department of Allied Health Studies
M.O.T. Loma Linda University AH 2002

TAKEO ITOH, Professor, Department of Allied Health Studies
Ph.D. Kyushu University 1983

RICHARD A. JACOBS, Clinical Instructor, Department of Nutrition and Dietetics
Ph.D. University of Michigan 1971

RONALD SCOTT JOHNSON, Clinical Instructor, Department of Clinical Laboratory Science
B.S. University of California, Riverside 1981

JOHN WILLIAM KERR, JR., Assistant Clinical Professor, Department of Occupational Therapy
B.S. Loma Linda University AH 1971

JAMES D. KETTERING, Professor, Department of Clinical Laboratory Science
Ph.D. Loma Linda University GS 1974

DELFIN S. KHO, Clinical Instructor, Department of Clinical Laboratory Science
B.S. Centro Escobar University 1968

YOOMI SHOU KIM, Assistant Professor, Department of Speech-Language Pathology and Audiology
M.S. Loma Linda University GS 1995

TONIA A. KIMBER, Clinical Instructor, Department of Occupational Therapy
B.S. Loma Linda University AH 1992

HELEN J. KING, Clinical Instructor, Department of Radiation Technology
A.S. El Camino College 1967

MERRILL L. KING, Clinical Instructor, Department of Nutrition and Dietetics
M.P.H. Loma Linda University PH 1996

R. NADINE KNIGHT, Instructor, Department of Cardiopulmonary Sciences
B.S. Loma Linda University AH 1975

YOSHINORI KOIDE, Instructor, Department of Allied Health Studies
B.S. National Insitution for Academics 2003

SONIA D. LAING, Clinical Instructor, Department of Clinical Laboratory Science
M.S. California State University, Long Beach 1991

DOROTHY LAJOM, Clinical Instructor, Department of Clinical Laboratory Science
B.S. University of Santo Tomas, Manila 1970

ROBERT F. LANDEL, Associate Professor, Department of Physical Therapy
D.P.T. University of Southern California 1996

LEO M. LANGGA, Clinical Instructor, Department of Cardiopulmonary Sciences
B.S. Loma Linda University AH 1988

TUYHOA THI LE, Clinical Instructor, Department of Clinical Laboratory Science
B.S. Philippine University College, Philippines 1971

EVONNE J. LEISKE, Clinical Instructor, Department of Nutrition and Dietetics
B.S. Pacific Union College 1970

JOHN E. LEWIS, Clinical Professor, Department of Clinical Laboratory Science
Ph.D. Loma Linda University GS 1969

SUSAN K. LEWIS, Clinical Instructor, Department of Nutrition and Dietetics
M.P.H. Loma Linda University PH 1983

PHILLIP LIANG, Clinical Instructor, Department of Clinical Laboratory Science
M.B.A. University of Redlands 1994

BETTY LICCIARDO, Clinical Instructor, Department of Nutrition and Dietetics
M.P.H. Loma Linda University PH 1991

CARMEN G. LLERANDI-PHIPPS, Clinical Instructor, Department of Nutrition and Dietetics
B.A. Glassboro State College 1984

JON A. LORIEZO, Clinical Instructor, Department of Clinical Laboratory Science
B.S. Loma Linda University AH 1981

TRUDI L. MAASKANT, Assistant Professor, Department of Physical Therapy
M.P.T. Loma Linda University AH 1995

MERIJANE MALOUIN, Instructor, Department of Nutrition and Dietetics
B.S. California State Polytechnic University 1975

KATHLEEN L. MARSHALL, Clinical Instructor, Department of Occupational Therapy
B.S. Loma Linda University AH 1973

EVELYN L. MASSEY, Clinical Instructor, Department of Cardiopulmonary Sciences
M.D. Utesa University, Dominican Republic 1985

DEBORAH K. NELSON, Clinical Laboratory, Department of Clinical Laboratory Science
B.S. Quincy University 1978

WAGIH E. MIKHAIL, Assistant Clinical Professor, Department of Clinical Laboratory Science
M.B.A. cal State Univ, San Bernardino 1985

DONALD W. MILLER, Clinical Instructor, Department of Clinical Laboratory Science
B.S. Pacific Union College 1978

JANETTE L. MOREY, Clinical Instructor, Department of Occupational Therapy
B.S. University of North Dakota 1978

MIYAKO MURASE, Instructor, Department of Allied Health Studies
B.A. Japanese Social Welfare University 1978

DEANNA NAKAMURA, Clinical Instructor, Department of Nutrition and Dietetics
B.S. Pacific Union College 1962

DEBORAH K. NELSON, Clinical Instructor, Department of Clinical Laboratory Science
B.S. Quincy University 1978

RICHARD D. NELSON, Clinical Assistant Professor, Department of Cardiopulmonary Sciences
M.D. Angeles University 1995

STEVEN D. NEWTON, Assistant Professor, Department of Physical Therapy
M.B.A. University of Redlands 1993

CHRISTINE S. O'HAGAN, Clinical Instructor, Department of Occupational Therapy
B.S. Western Michigan University 1981

MELVIN A. ORSER, Clinical Instructor, Department of Physical Therapy
B.S. Loma Linda University AH 1950

LEH C. OTA, Clinical Instructor, Department of Nutrition and Dietetics
M.P.H. Loma Linda University PH 1978

LINDA M. PALMER, Clinical Instructor, Department of Health Information Management
B.S. Loma Linda University AH 1979

SHASHANK PATEL, Clinical Instructor, Department of Clinical Laboratory Science
B.S. Long Beach State University 1984

MARJORIE ELIZABETH QUIGLEY, Clinical Instructor, Department of Nutrition and Dietetics
B.A. Tufts University 1977

JENNIFER RADICE, Clinical Instructor, Department of Nutrition and Dietetics
B.S. California State University 1986

INHERLA H. RIVERA, Clinical Instructor, Department of Nutrition and Dietetics
D.H.Sc. Loma Linda University PH 1987

LIA MARGARET ROBINSON, Instructor, Department of Nutrition and Dietetics
B.S. California State University, Los Angeles 1976

MARK S. ROGERS, Clinical Instructor, Department of Cardiopulmonary Sciences
B.S. Loma Linda University AH 1988

GLENN A. ROUSE, Associate Professor, Department of Diagnostic Radiology SM
M.D. Loma Linda University SM 1976

RICHARD N. SAMPLE, Clinical Instructor, Department of Cardiopulmonary Sciences
A.S. Loma Linda University AH 1973

CAROL DEKOVEN SAMSKY, Clinical Instructor, Department of Clinical Laboratory Science
M.A. New York University 1970

DELFIN TAN SANTOS-KHO, Clinical Instructor, Department of Clinical Laboratory Science
B.S. Centro Escolar University, Philippines 1968

CAROL LYNN SATTERFIELD, Clinical Instructor, Department of Clinical Laboratory Science
B.S. Loma Linda University AH 1971

BORGE SCHANTZ, Professor, Department of Allied Health Studies
Ph.D. Fuller Theological Seminary 1983

STUART BENJAMIN SCHNEIDER, Clinical Instructor, Department of Clinical Laboratory Science
M.B.A. University of LaVerne 1991

JAMES RANDALL SCOTT, Clinical Instructor, Department of Cardiopulmonary Sciences
B.S. Loma Linda University AH 1988

LOREEN K. SCOTT, Clinical Instructor, Department of Cardiopulmonary Sciences
B.S. California State University, San Bernardino 1996

AUDREY J. SHAFFER, Assistant Clinical Professor, Department of Health Information Management
M.A. Central Michigan University 1982

NAOHITO SHINGU, Instructor, Department of Allied Health Studies

CLI ICAL ACILI I S

21st Century Therapy, Raytown, MO
Abbink Physical Therapy, Westraten, The Netherlands
Able Health Care Network, Tualatin, OR
ACIC/AORC Physical Therapy, Irvine
Active Physical Therapy, Bozeman, MT
Active Physical Therapy, Paradise
Active Rehab PT-Vallejo, Vallejo
Active Therapeutics, Inc., Anchorage, AK
Adams, Valerie S., M.A., OTR, Long Beach
Adventist Health, St. Helena Hospital and Health Center, Deer Park
Advance Rehabilitation & Physical Therapy, Sun City
Adventist Health System, Feather River Hospital, Paradise
Adventist Health System, Florida Hospital Waterman, Tamares/Eustis, FL
Adventist Health System, Loma Linda University Behavioral Health Center, Loma Linda
Adventist Health System, Loma Linda University Medical Center, Loma Linda
Adventist Health System, Tennessee Christian Medical Center, Madison, TN
Adventist Health System, Walla Walla, WA
Adventist Health Systems, San Joaquin Community Hospital, Bakersfield

Deloitte & Touche, Costa Mesa
Department of the Army Community Hospital, Fort Benning, GA
Department of the Navy, Naval Medical Center, San Diego
DePaul Medical Center, Norfolk, VA
Desert Knolls Convalescent, Premier Healthcare, Inc., Victorville
Desert Life Rehabilitation and Care Center, Tucson, AZ
Desert Medical Group, Inc., Palm Springs
Desert Regional Medical Center (Tenet Health System), Palm Springs
Desert Sands Unified School District, La Quinta
Desert Springs Therapy Center, Desert Hot Springs
Desert Valley Hospital, Victorville
DeSoto Memorial Hospital, Arcadia
Detroit Medical Center, Detroit, MI
Developing Aging Solutions with Heart, dba DASH, Redlands
Developmental Pathway for Kids, Detroit, MI
Devonshire Care Center/Locomotion Therapy, Hemet
Dewitt Physical Therapy, Merced
Diamondback Physical Therapy, Gilbert, AZ
Dimensions in Food and Nutrition, Inc., Burtonsville, MD
Doctors Hospital Medical Center, Montclair
Doctors Hospital of Sarasota, Sarasota, FL
Dolphin Human Therapy, Miami, FL
Dominican Hospital, Santa Cruz
Dos Caminos Physical Therapy and Sports Rehab, Camarillo
Downey Regional Medical Center, Downey
Downey Unified School District, Downey
Drayer Physical Therapy Institute, Hummelstow, PA
Dr. McDougall's Right Foods/*Veggie Life Magazine*, Concorde
Drs. Hayashi, Sakai, and Dahms, Thousand Oaks
Durango Sports Club PT, Durango, CO
Dynamic Performances Therpay, Huntsville, AL
Dynamics Spinal Cord Rehab Center, Los Angeles

East Jefferson General Hospital, Metairie, LA
East Pasco Medical Center, Zephyrillis, FL
East Valley, SELPA, Colton
Easter Seal Children's Guild Therapy Center, Salem, OR
Easter Seal Society, Sacramento
Easter Seal Society of Inland Counties, San Bernardino
Easter Seals–Central California, Fresno
Eclipse Therapies, Inc., San Rafael
Ed Ayub Ortho and Sports, San Diego
Egleston's Children's Hospital at Emory University, Inc., Atlanta, GA
Eisenhower Memorial Hospital, Rancho Mirage
El Centro Regional Medical Center, El Centro
El Paso Physical Therapy Services, El Paso, TX
Elite Performance, Newport Beach
Elkin's Park Hospital (Tenet Health System) Elkin's Park, PA
Elks Rehabilitation Hospital, Boise, ID
Elmhurst Memorial Hospital, Elmhurst, IL
Ember Healthcare, Pomona
Emerald Bay Physical Therapy, South Lake Tahoe
Emilie Gamelin Institute, Portland, OR
England Physical Therapy, Garden Grove
Enloe Medical Center, Chico
Etiwanda School District, Etiwanda
Eureka Physical Therapy, Inc., Eureka
Evergreen Ancillary Services, LLC, Vancouver, WA
Evergreen Hospital Medical Center, Kirkland, WA
Excel Physical Therapy, Walla Walla, WA
Explorabilities, Albuquerque, NM

Fairbanks Memorial Hospital, Fairbanks, AK
Fairview Training Center, Physical Medicine Department, Salem, OR
Fallbrook Hospital, Fallbrook
Fallbrook Physical & Occupational Therapy, Fallbrook
Fayetteville Therapy Services, Fayetteville, NC
Feather River Rehabilitation Center, Paradise
Felder Physical Therapy, Inc., Santa Ana
First Healthcare Corporation, Tacoma, WA
Fit for Life, Riverside
Fitness Center Health Park East, Brandenton, FL
Flagstaff Medical Center and Northern Arizona Rehab Center, Flagstaff, AZ
Flanders Physical Therapy Portland, OR
Florida Hospital Waterman, Tamares, FL
Focus on Health, Newport Beach
Focus Physical Therapy, Rancho Santa Marguerita
Fontana Unified School District, Fontana
Foothills Ortho & Sports Therapy, Loveland, CO
Foothills Provincial General Hospital, Calgary, Alberta, Canada
Fort Sanders Regional Medical Center, Knoxville, TN
Fortenase and Associates, Arcadia
Fountain Valley Regional Hospital and Medical Center, Fountain Valley
Fox Occupational Medicine Center, San Bernardino
Franciscan Health System–West, Tacoma, WA
Freeman Ortho and Sports Medicine Center, Joplin, MO
Fresno Community Hospital and Medical Center, dba California Cancer Care, Fresno
Fresno Fire Department, Fresno
Friends of Jefferson House, Riverside
Function Junction Rehabilitation Center, Crescent City
Future Rehabilitation, Santa Rosa
Futures Rehab and Heritage Healthcare, St. Helena
Fysiocur NV, Curacao, Netherlands

Galen of Kansas, Overland Park, KS
Galesburg Cottage Hospital, Galesburg, Illinois
Gambro Healthcare, San Bernardino
Gambro Health Care, Upland
Garfield Medical Center (Tenet Health System), Monterey Park
Gaspar Physical Therapy, Encinitas
Gateway Hospital & Mental Health Center, Los Angeles
Gateway Therapy Center, Poway
Gateways Hospital, Los Angeles
General Hospital, Eureka
Genesys Regional Medical Center Health Park, Grand Blanc, MI
Gentilly Physical Therapy & Sports Rehab, New Orleans, LA
Geri Care, Newport Beach
Gerontic Therapy Services, Seal Beach
Gila Regional Medical Center PT Department, Silver City, NM
Glendale Adventist Medical Center, Glendale

Glendale Memorial Hospital, Catholic Healthcare West, So Cal, Glendale
Glendale Unified School District, Glendale
Global Medical Center, Montclair
Glynn & Giordano PT, Bakersfield
Good Samaritan Hospital, San Jose
Good Samaritan Hospital and Rehabilitation Center, Puyallup, WA
Goodfellow Occupational Therapy, Fresno
Graciela Esquivel-Aguilar, MD, Fresno
Granada Hills Community Hospital, Granada Hills
Great Lakes Sports Medicine & Orthopaedics, Battle Creek, MI
Greater Victoria Hospital Society, Victoria, British Columbia, Canada
Green Hospital of Scripps, La Jolla
Gresham Sports Care PT, Gresham, OR
Guam Memorial Hospital, Tamuning, Guam
Guam SDA Wellness Center, Tamuning, Guam
Guardian Healthcare Group, Modesto
Guardian Rehabilitation Hospital, Modesto

H & W Therapy, Pueblo, CO
H & W Therapy, Soldotna, AK
Hairston and Daley Physical Therapy, Orange
Hale Makua, Kahului, HI
Hallmark Rehabilitation, Foothill Ranch
Hamilton Physical Therapy, Hamilton, MT
Hand Rehabilitation Clinic, Beverly Hills
Hands on Hands Rehabilitation Center, Costa Mesa
Hanford Community Hospital, Hanford
Harbor View Medical Center, Seattle, WA
Hardee PT/Rehab Service, Inc., Wauchula, FL
Hawaii State Hospital, Kaneohe, Oahu, HI
Hawaiian Electric Company, Honolulu, HI
Hawaiian Rehabilitation Services, Kailua-Kona, HI
HCA Healthcare-Good Samaritain, San Jose
Health Pro Physical Therapy, Walnut Creek
Health Services Agency, Modesto
Health South Corporation, Birmingham, AL
Health South Corporation, Las Vegas, NV
Health South Rehabilitation, Willowbrook, IL
Health South Western Rehabilitation Institute, Sandy, UT
HealthAlliance Hospital, Leominster, MA
Healthcare Partners Medical Group, Torrance
HealthSouth Community Re-Entry Center of South Florida, Ft. Lauderdale, FL
HealthSouth Community Re-Entry Center of Texas, Dallas, TX
HealthSouth Comprehensive Rehabilitation Unit, Birmingham, AL
HealthSouth Corporation—multiple sites
HealthSouth Dallas Rehabilitation Institute, Dallas, TX
HealthSouth Doctor's Hospital, Coral Gables, FL
HealthSouth Head Injury Rehabilitation Center, St. Louis, MO
HealthSouth Rehabilitation Center of Tucson, Tucson, AZ
HealthSouth Rehabilitation Center of Van Nuys, Van Nuys
HealthSouth Rehabilitation Corporation, dba Sea Pines, Birmingham, AL
HealthSouth Sub-Acute Hospital of North Houston, Conroe, TX
HealthSouth Sunrise Rehabilitation Hospital, Ft. Lauderdale, FL
HealthSouth Treasure Coast Rehabilitation Hospital, Vero Beach, FL
HealthSouth, Tustin Rehabiliation, Tustin
Healthwin Hospital–St. Clair Darden Health Systems, South Bend, IN
Heart Institute of the Desert, Rancho Mirage
Helix Healthcare, Inc, La Mesa
Hemet Healthcare, Hemet
Hemet Unified School District, Hemet
Hendrick Medical Center, Abilene, TX
Hesperia Physical Therapy, Hesperia
Hi Desert Medical Center, Joshua Tree
High Desert Physical Therapy, Victorville
Highland Physical Therapy, San Bernardino
Hillcrest Baptist Medical Center, Waco, TX
Hillcrest Medical Center, Tulsa, OK
Hillhaven–Alta Vista, Riverside
Hillhaven Fair Oaks, Carmichael
Hoag Memorial Hospital, Newport Beach
Hollywood Medical Center, Hollywood, FL
Hollywood Physical Therapy, Los Angeles
Holmes Regional Nursing Home, Melbourne, FL
Holy Family Hospital, Spokane, WA
Holy Rosary Medical Center, Ontario, OR
Horizon Physical Therapy, Redlands
Hospitale Maternidade de Jundiai, San Paulo, Brazil
Houston Rehabilitation Institution, Houston, TX
Howard Memorial Hospital, Willits
Hudson and Walker PT, Apple Valley
Huguley Memorial Medical Center, Ft. Worth, TX
Huntington Beach Hospital & Medical Center, Huntington Beach
Huntington Drive Skilled Nursing Center, Arcadia
Huntington East Valley Hospital, Glendora
Huntington Memorial Hospital, Pasadena
Huntsville Pool and Land Therapy, Huntsville, AL
Hurley Medical Center, Flint, MI
Hy-Lond Convalescent, Modesto

Idaho Physical Therapy, Nampa, ID
IHC Health Services/Primary Children's Medical Center, Salt Lake City, UT
IHC Rehab Services of St. George, St. George, UT
Immanuel Medical Center, Omaha, NE
Imperial Valley Therapy Centers, El Centro
In Balance, A Woman's Health & Wellness, San Juan
Independent PT–Torrance, Torrance
Inglish & Petersen PT, Mesa, AZ
Inland Empire Physical Therapy, Corona
Inland Hand Therapy, Rancho Cucamonga
Inland Mental Health Associates, Inc., Chino
Inland Surgery Center, Redlands
Inland Temporary Homes, Loma Linda
Inland Valley Regional Medical Center, Wildomar
Innovative Health Systems, Inc., Sacramento
Integris Baptist Medical Center, Oklahoma City, OK
Intergro Rehab Services, Huntington Beach
Interlink Rehabilitation, Van Nuys
Intermountain Health Care, Orem, UT
Island Physical Therapy Center, Anacortes, WA

Jack D. Close & Associates, Las Vegas, NV
Jayne Shover Easter Seal Rehabilitation Center, Elgin, IL

Jean Hanna Clark Rehabilitation Center, Las Vegas, NV
Jefferson County Health Department, Louisville, KY
Jefferson County Public Schools, Golden, CO
Jennie Edmundson Hospital, Council Bluffs, IA
J. F. Kennedy Memorial Hospital (Tenet Health System), Indio
Jim Thorp Rehabilitation, Oklahoma City, OK
John Breuer Rehab Services, Coos Bay, OR
Johns Hopkins Hospital, Baltimore, MD
Joyner Sports Medicine Institute, Division of Novacare, Harrisburg, PA
JP Therapy and Magnolia Rehabilitation and Nursing, Riverside
JP Therapy Villa Rehab Hospital, Riverside
Jump Start, Colton
June Weinstein and Associates, Villa Park
Jurupa Unified School District, Riverside

Kadlec Medical Center, Richland, WA
Kaiser Foundation Hospital–Baldwin Park, Baldwin Park
Kaiser Foundation Hospital–Bellflower, Bellflower
Kaiser Foundation Hospital–Fontana, Fontana
Kaiser Foundation Hospital–Los Angeles, Los Angeles
Kaiser Foundation Hospital–Panorama City
Kaiser Foundation Hospital–Riverside, Riverside
Kaiser Foundation Hospital–San Diego, San Diego
Kaiser Foundation Hospital–Woodland Hills
Kaiser Foundation Hospitals, Honolulu, HI
Kaiser Permanente Hospitals and the Permanente Medical Group, Oakland
Kaiser Permanente, Fresno Medical Center, Fresno
Kaiser Permanente Medical Group–North
Kaiser Permanente–Southern California Region, Pasadena
Kansas Rehabilitation Hospital, Topeka, KS
Kaweah Delta Healthcare District, Visalia
Kennebec Valley Medical Center, Augusta, ME
Kennewick General Hospital, Kennewick, WA
Kensington Physical Therapy, Inc., Gaithersburg, MD
Kentfield Rehabilitation Hospital, Kentfield
Kern Radiology, Bakersfield
Kern Valley Health District, Mt. Mesa
Kettering Medical Center, Kettering, OH
Keystone Vocational Services, San Francisco
Kimbro Medical Center, Cleburne, TX
Kindred Hospital, Vencor, Ontario
Kindred Hospital, Rehabiliation, Brea
Kingman Community Hospital, Kingman, KS
Kingston Hospital, Kingston, NY
Kitsap PT and Sports Clinic, Poulsbo, WA
Knight Physical Therapy, Garden Grove
Knollwood Psychiatric Center, Riverside
Knox Community Hospital, Mt. Vernon, OH
Kodiak Island Hospital and Care Center, Kodiak, AK
Kona Hospital, Kealakeua, HI
Kootenai Medical Center, Coeur d'Alene, ID
Kornhill Physiotherapy Centre, Quarry Bay, Hong Kong
KPMG Peat Marwick, Long Beach
Kruppa Physical Therapy/Rimrock Villa Convalescent, Barstow
Kyrene Elementary School District, Tempe, AZ

L & J Telesmanic & Associate (Horizon Subacute), Fresno
La Jolla Spine and Sport, La Jolla
La Palma Intercommunity Hospital, La Palma
La Pine Physical Therapy, La Pine, OR
Lake Arrowhead Physical Therapy/Mountains Community Hospital, Lake Arrowhead
Lake Centre for Rehabilitation, Leesburg, FL
Lake Chelan Community Hospital, Lake Chelan, WA
Lake Chelan Physical Therapy, Chelan, WA
Lake City Orthopedic & Sports Physical Therapy, Coeur d'Alene, ID
Lake Elsinore Unified School District, Lake Elsinore
Lake Forest Hospital, Lake Forest, WA
Lakeland Regional Health System, Berrien Center, MI
Lakeland Regional Health System, St. Joseph, MI
Lancaster Community Hospital, Lancaster
Lanternman Developmental Center, Pomona
LaPalma Intercommunity Hospital, La Palma
Las Encinitos Hospital, Pasadena
Las Virgenes Unified School District, Calabasas
LaSalle Medical Associates, San Bernardino
Laurie Lewis/Therapy 4 U, San Jacinto
Lawrence Hospital, Bronxville, NY
LDS Hospital Rehabilitation Center, Salt Lake City, UT
Learning Service Corp., Gilroy
LeBouheur Children's Medical Center, Memphis, TN
Legacy Rehabilitation Services, Portland, OR
Lehigh Valley Physical Therapy and Rehabilitation, Walnutport, PA
Lester E. Cox Medical Center, Springfield, MO
Lewis, Bower & Associates, Claremont
Life Care Center of Kennewick, Kennewick, WA
Life Care of Corona, Corona
Lifecare Center of Hawaii, Hilo, HI
Lifespan Wellness Clinic, Fullerton
Lifestyle Center of America, Sulphur, OK
Lihue PT & Sports Rehab of T.O.R.C.H., Hilo, HI
Lincoln Regional Center, Lincoln, NE
Linda Brown and Associates, Visalia
Linda Valley Care Center, Loma Linda
Locomotion Therapy, Covina
Locomotion Therapy, Inc., 3-Way Hemet Convalescent, Los Angeles
Loma Linda Fire Department, Loma Linda
Loma Linda University Behavioral Medical Center, Loma Linda
Loma Linda University Medical Center, Loma Linda
Long Beach Memorial Medical Center, Long Beach
Long Beach WIC Program, Long Beach
Lorien Columbia Nursing & Rehabilitation Center, Columbia, MD
Los Alamitos Medical Center, Los Alamitos
Los Angeles (County of) Children's Medical Services, El Monte
Los Angeles (County of) University of Southern California Medical Center, Los Angeles
Los Robles Regional Medical Center, Thousand Oaks
Louis A. Weiss Memorial Hospital, Chicago, IL
Lourdes Medical Center, Pasco, WA
Lutheran Community Health Services, dba Lutheran Rehab, Wheat Ridge, CO
Lutheran Social Services of Southern California, Riverside
Lynne K. Nishikawa, M.S., Inc., Colton

Macon Health Care, Macon, MO
Madera Community Hospital, Madera
Madonna Rehabilitation Hospital, Lincoln, NE
Magan Clinic, Covina
Magic Valley Regional Medical Center, Twin Falls, ID
Magnolia Physical Therapy, Huntington Beach
Magnolia Rehabilitation & Nursery Center, Riverside
Magro, Joseph, Do, San Bernardino
Manor Care Nursing & Rehabilitation Center, Hemet
Manor Care Nursing Center, Palm Desert
Marcus Daly Memorial Hospital, Hamilton, MT
Marguerite Physical Therapy Clinic, Inc., Mission Viejo
Marian Medical Center, Santa Maria
Mariners Rehabilitation, Costa Mesa
Mariposa Women's Center, Orange
Marshall Hospital, Placerville
Martin Army Community Hospital, Ft. Benning, GA
Martin Luther Hospital, Anaheim
Masada Homes, Gardena
Mater Misericordiae Hospital-Mercy Hospital, Merced
Matrix, Lodi
Matrix-Long Beach Sports Rehab, Long Beach
Maywood Health Care, Oxnard
Meadowbrook Rehabilitation Hospital, Tulsa, OK
Medford Sports Injury & Therapy Center, Medford, OR

Northwest Physical Therapy, Mt. Vernon, WA
Northwest Rehab Institute, Vancouver, WA
Northwest Therapy and Fitness, Pontiac, MI
Northwoods Rehab Associates/Howard Young Medical Center, Woodruff, WI
Norton Hospitals Inc., Louisville, KY
NOTAMI Hospitals of California, Inc., San Jose
NOVA CARE Contract Division, Genesco, IL
Nutrition and Lifestyle Medical Clinic, Calimesa
Nutrition Consultation (Margaret K. Heath), Loma Linda

Oasis Physical Therapy, Pasco, WA
O'Conner Hospital–Physical Medicine, San Jose
Occupational Therapy Training Program, Torrance
Oceania, Palo Alto
Odessa Physical Therapy, Odessa, TX
Ojai Unified School District, Ojai
Okanogan-Douglas District Hospital, Brewster, WA
Old Town Physical Therapy Forrest Grove, OR
Ontario-Montclair School District, Ontario
Orange County Health Care Agency, Santa Ana
Orange County Therapy Services, Laguna Hills
Orange Unified School District, Orange
Options, San Diego
Oregon Health Sciences University, Human Performance Laboratory, University Hospital, Portland, OR
Ortho Sports Physical Therapy, Mission Viejo
Orthopaedic and Neurological Rehabilitation, Inc., Sacramento
Orthopaedic Hospital, Los Angeles
Orthopaedic Sports, Inc., Stillwater, MN
Orthopedic & Sports PT, Santa Rosa
Orthopedic Associates, Silver Spring, MD
Orthopedic Hospital, Ltd., Houston, TX
Orthopedic Physical Therapy Institute, Riverside
Orthopedic Surgery and Sports Medicine Physical, La Habra
Osteopathic Medical Center of Texas, Ft. Worth, TX
OT for Kids, Belmont
Our Lady of Victory Home of Charity–Baker Victory Services, Buffalo, NV
Outback Physiotherapy, Redlands
Outreach Therapy Consultants, Spokane, WA

P.O.S.T. Rehabilitation Clinic, Moreno Valley
PACE Therapy–Christian Heritage, Upland
PACE Therapy–Claremont Care Center, Pomona
PACE Therapy, Inc.–Heritage Garden, Loma Linda
PACE Therapy–Las Villas Del Norte Health Professions, Escondido
PACE Therapy–Parkmont Care Center, Paramount
PACE Therapy–Rancho Encinitas, Encinitas
PACE Therapy–Vista Del Mar, Vista
PACE Therapy–Western Care Center, Pomona
Pacific Care Insurance Company, Cypress
Pacific Coast Healthcare, Encino
Pacific Gardens, Fresno
Pacific Health Education Center, Bakersfield
Pacific Physical Therapy, Monterey
Pacific Southwest Therapies, Inc., Las Vegas, NV
Pacific Therapies, Inc., Huntington Beach
Pain Management Clinic of Hawaii, Inc., Honolulu, HI
Palm Beach Medical Center, Palm Beach, FL
Palm Beach Medical Center, West Palm Beach, FL
Palm Springs Health Care, Palm Springs
Palm Springs Unified School District, Palm Springs
Palomar Pomerado Health System, San Diego
Paradise Valley Hospital SouthBay Rehab Center, National City
Park Manor Rehabilitation Center, Walla Walla, WA
Parkridge Centre, Saskatoon, Canada
Parkridge Hospital, Fletcher, NC
Parkview Community Hospital (Soderno Marriot), Riverside
Parkview Episcopal Medical Center, Pueblo, CO
Parkview Memorial Hospital, Brunswick, ME
Partners in Therapy, LLP, Ft. Worth, TX
Pasadena Department of Health WIC Program, Pasadena
Pasadena Rehabilitation Institute, Pasadena
Pass Physical Therapy, Beaumont
Paul Chang's Rehabilitation Services, Blue Springs, MO
Peace Arch Hospital, White Rock, British Columbia, Canada
PeaceHealth, Eugene, OR
Peachwood PT Sports and Spine Center, Glendora
Peak Performance, Chino
Pediatric Building Blocks, San Ramon
Pediatric Intervention Inc., San Jose
Pediatric Therapy Associates, Shrewsbury, MA
Pediatric Therapy Association, Plantation, FL
Performance Physical Therapy, Orem, UT
Performax PT, Littleton, CO
Perspective Therapy, Oceanside
Permian Regional Medical Center, Andrews, TX
Phoenix Memorial Hospital and NOVACARE, Phoenix, AZ
PhyCor, Inc., Honolulu, HI
Physical Rehabilitation Center of Orange, Westminster
Physical Therapy & Sports Rehabilitation Services,

PhavdisewdFP21 6Spoal0 rts aEldeTrj15ces,T(Pe)Tj0 -11 TD-0.0001 Tc(Riv

Samaritan Health System, Mesa, AZ
San Antonio Community Hospital, Upland
San Antonio Urology Medical Group, Inc., Upland
San Bernardino City Fire Department, San Bernardino
San Bernardino City Unified School District, San Bernardino
San Bernardino County Medical Center, San Bernardino
San Bernardino (County of) Mental Health Department, San Bernardino
San Bernardino (County of) Office of Aging, San Bernardino
San Bernardino County Preschool Services Department, San Bernardino
San Bernardino (County of) Public Health Department, San Bernardino
San Bernardino (County of) Superintendent of Schools, Colton
San Diego (County of) California Children's Services, San Diego
San Diego Hospital Association, San Diego
San Gabriel Valley Medical Center, San Gabriel
San Gorgonio Memorial Hospital, Banning
San Joaquin Community Hospital (an Adventist Hospital), Bakersfield
San Joaquin General Hospital, Stockton
San Joaquin Valley Rehabilitation Hospital, Fresno
San Jose Medical Center, San Jose
San Pedro Peninsula Hospital, San Pedro
Santa Ana Tustin Physical Therapy, Santa Ana
Santa Barbara County California Children's Center, Santa Barbara
Santa Monica Orthopedic Sports Medical Group, Santa Monica
Scottish Rite Children's Healthcare, Atlanta, GA
Scripps Clinic Wellness Program, La Jolla
Scripps Health Ornish Program, La Jolla
Scripps Memorial Hospital, Chula Vista
Scripps Memorial Hospital, Encinitas
Scripps Memorial Hospital, La Jolla
Scripps Memorial Hospital, San Diego
Scripps Mercy Hospital, San Diego
Seattle–King County Department of Public Health, Seattle, WA
Seattle Medical and Rehabilitation Center, Seattle, WA
Seattle Physical Therapy, Seattle, WA
Select Therapy, Inc., & Corona Meadows, Irvine
Sentara Bayside Hospital, Virginia Beach, VA
Sequoia Regional Cancer Center, Visalia
Seton Medical Center, Daly City
Shady Grove Adventist Hospital, Rockville, MD
Shady Grove Center for Sports Medicine & Rehabilitation, Rockville, MD
Shapewell, Inc., Palm Desert
Sharp Cabrillo Hospital, San Diego
Sharp Chula Vista Medical Center, San Diego
Sharp Coronado Hospital & Healthcare Center, San Diego
Sharp Grossmont Hospital, San Diego
Sharp Healthcare, Hospital Association, San Diego
Sharp Home Care, San Diego
Shawnee Mission Medical Center, Shawnee Mission, KS
Shea Health Center, San Bernardino
Shelley Cooper Physical Therapy, Palm Desert
Shoroye, Adeyinka, MD, Pediatrics, Riverside
Shrivers Hospital for Children, Los Angeles
Shriners Hospital for Crippled Children, Lexington, KY
Shriners Hospital for Crippled Children, Northern California, Sacramento
Sierra Ortho & Athletic Rehabilitation, Diamond Springs
Sierra Pediatric Clinic, Roseville
Silverlake Youth Services, Yucaipa
Simi Valley Adventist Hospital, Simi Valley
Simonean Pediatric Center for Child Development, San Jose
Siskin Hospital for Physical Rehabilitation, Chattanooga, TN
Sisters of Providence in California, Burbank
Sisters of Providence in Washington, Olympia, WA
Sisters of Saint Joseph of Orange Corp., Mission Viejo
Sky Life Ambulance, Fresno
SO CA Center for Sports Medicine, Long Beach
Sodexho Health Care Services at Desert Regional, Palm Springs
Sodexho Health Care Services at Good Samaritan, Los Angeles
Sonoma Valley Hospital, Sonoma
Sonora Community Hospital, Sonora
Sonora Physical Therapy Center, Sonora
South Bay Spine and Physical Therapy, Torrance
South Coast Medical Center, Laguna Beach
South County Orthopedic Specialists, Laguna Hills
South Haven Community Hospital, South Haven, MI
South Pacific Rehab Services, Encino
South Peninsula Hospital Homer, AK
South Umpqua Physical Therapy, Roseburg, OR
South Walton Physical Therapy & Rehabilitation, Santa Rosa Beach, FL
Southcentral Counseling Center Anchorage, AK
Southeast Rehabilitation Hospital, Dothan, AL
Southern Hills Medical Center, Nashville, TN
Southern Utah Physical Therapy, Cedar City, UT
Southill Physical Therapy/Sports Rehabilitation, Spokane, WA
Southside Regional Medical Center, Petersburg, VA
Southside Rehab Services, Colonial Heights, VA
Southwest Palm Control & Sports Therapy, Palm Desert
Southwest Physical Therapy, Littleton, CO
Southwest Texas Methodist Hospital, San Antonio, TX
Speech and Language Development Center, La Mirada
Special Kids, Murfreesboro, TN
Specialized PT Center, Orange City, FL
Specialty Hospital of Southern California, La Mirada
Spectrum Health East Campus, Grand Rapids, MI
Soectrum MRI Imaging Center, Chino
Speech and Language Development Center, Buena Park
Spine & Sports Medicine Institute, Concord
Spooner Physical Therapy, Scottsdale, AZ
Sport and Spine Physical Therapy, San Bernardino
Sports & Orthopedic Physical Therapy, Inc., Minneapolis, MN
Sports & Orthopedic Therapy Services, Silver Spring, MD
Sports Care of San Francisco Physical Therapy, San Francisco
Sports Fit P.T., San Ramon
Sports Medicine and Ortho Rehab Center, Vienna, VA
Sports Medicine Giant, Columbus, OH

Sports Medicine Hawaii Ltd., Honolulu, HI
Sports Medicine Institute, Orange
Sports Medicine Institute of Sinai Samaritan Medical Center, Mequon, WI
Sports Orthopedics and Rehabilitation, Tamuning, Guam
Sports Performance, Pleasant
Springdale Village, Mesa, AZ
Square One Rehabilitation, Kansas City, KS
SSM Health Care of Oklahoma, OK
St. Agnes Cancer Center, Fresno
St. Alexis Hospital and Medical Center, Cleveland, OH
St. Alphonsus Regional Medical Center, Boise, ID
St. Anthony Hospital, Oklahoma City, OK
St. Bernardine Medical Center/Community Hospital, San Bernardino
St. Charles Hospital, Port Jefferson, NY
St. Charles Medical Center, Bend, OR
St. Elizabeth Community Health Center, Lincoln, NE
St. Francis Healthcare Network, Honolulu, HI
St. Francis Medical Center, Lynwood
St. Francis Medical Center–West, Ewa Beach, HI
St. George Care & Rehab Center, St. George, UT
St. George Physical Therapy, Charlotte, NC
St. Helena Hospital and Health Center an Adventist Hospital, Deer Park
St. John's Health System, Lebanon, MO
St. John's Hospital & Health Center, Santa Monica
St. John's Medical Center, Tulsa, OK
St. John's Mercy Hospital, Washington, MO
St. John's Regional Medical Center, Oxnard
St. Joseph Health System, Eureka
St. Joseph Health Systems, Santa Rosa
St. Joseph Hospital, Lexington, KY
St. Joseph Hospital of Orange, Orange
St. Joseph Medical Center, Burbank
St. Joseph Regional Medical Center, Lewiston, ID
St. Joseph's Hospital of Atlanta, Atlanta, GA
St. Joseph's Medical Center of Stockton, Stockton
St. Jude Medical Center, Fullerton
St. Louis Health Care Network, St. Louis, MO
St. Luke's Hospital, Kansas City, MO
St. Luke's Hospital, Phoenix, AZ
St. Luke's Rehabilitation Institute, Spokane, WA
St. Mary Medical Center, Apple Valley
St. Mary Medical Center, Catholic Healthcare West, So Cal, Long Beach
St. Mary Medical Center and Turning Point Rehab, Walla Walla, WA
St. Mary Regional Medical Center, Apple Valley
St. Patrick Hospital, Missoula, MT
St. Rose Hospital, Hayward
St. Vincent Information Medical Center, Little Rock, AR
Salinas Valley Memorial Medical Center, Salinas
Sisters of Providence in California
Sisters of Providence in Washington
Stanford Hospitals & Clinics, Stanford
Star Rehabilitation, Corona
State of Alaska, Department of Health and Social Services, Division of Public Health, Anchorage, AK
Stein Education Center, San Diego
Stevens Memorial Hospital, Edmond, WA
Stewart Rehabilitation Center, McKay Dee Hospital, Ogden, UT
Storm Physical Therapy, Medford, OR
Strategic Health Services, Riverside
Straub Clinics Hospital, Lihue, HI
Summit Medical Center, Hermitage, TN
Summit Physical Therapy, Claremore, OK

Way Station, Inc., Frederick, MD
Wayne L. Shelton, PT, Spanish Fork, UT
Weed Army Community Hospital, Ft. Irwin
Well Tone Aquatics & Physical Therapy Centers, Riverside
Wellmont Health System, Bristol, TN
Wellton Health Systems, Bristol, TN
Wesley Woods Geriatric Hospital, Atlanta, GA
West Allis Memorial Hospital, Peak Performance Clinic, West Allis, WI
West Anaheim Extended Care, Anaheim
West Coast Spine Restoration Center, Riverside
West Coviifm CemTemods & PRn k, MD

CA LM AS SCI CS

CLASS	A.S.	B.S.	TOTAL
1972	7	–	7
1973	18	–	18
1974	15	2	17
1975	18	5	23
1976	16	3	19
1977	16	2	18
1978	15	6	21
1979	19	12	31
1980	22	15	37
1981	22	13	35
1982	20	13	33
1983	19	12	31
1984	12	5	17
1985	18	5	23
1986	11	9	20
1987	8	8	16

CLASS	A.S.	B.S.	M.P.A. M.S.	TOTAL
1988	23	12	–	35
1989	8	6	–	14
1990	9	8	–	17
1991	14	4	–	18

CLASS	CODING	CERT.	B.S.	TOTAL
1966	–	–	7	7
1967	–	–	3	3
1968	–	–	16	16
1969	–	–	12	12
1970	–	–	7	7
1971	–	–	4	4
1972	–	–	10	10
1973	–	–	12	12
1974	–	–	13	13
1975	–	–	11	11
1976	–	–	17	17
1977	–	–	16	16
1978	–	–	17	17
1979	–	–	15	15
1980	–	–	21	21
1981	–	–	13	13
1982	–	–	11	11
1983	–	–	9	9
1984	–	–	11	11

CLASS	CODING	CERT.	B.S.	M.H.I.S.	TOTAL
1985	–	–	5	–	5
1986	–	–	8	–	8
1987	–	–	7	–	7
1988	22	–	18	–	40
1989	40	–	15	–	55
1990	34	–	13	–	47
1991	42	–	2	–	44
1992	–	–	8	–	8
1993	26	–	10	–	36
1994	24	–	6	–	30
1995	10	1	10	–	21
1996	9	–	7	–	16
1997	15	3	10	–	28
1998	28	1	8	–	37
1999	26	–	13	6	45
2000	27	–	11	12	50
2001	27	–	8	6	41
2002	39	1	10	5	55
2003					

CC A I AL H A

CLASS	CERT.	B.S.	A.A.	M.O.T	P.P.M.O.T.	TOTAL
1961	–	3	–	–	–	3
1962	–	3	–	–	–	3
1963	–	9	–	–	–	9
1964	–	8	–	–	–	8
1965	–	10	–	–	–	10
1966	–	3	–	–	–	3
1967	–	9	–	–	–	9
1968	–	5	–	–	–	5
1969	–	9	–	–	–	9
1970	–	8	–	–	–	8
1971	–	6	–	–	–	6
1972	–	11	–	–	–	11
1973	–	20	–	–	–	20
1974	–	22	–	–	–	22
1975	–	16	–	–	–	16
1976	–	24	–	–	–	24
1977	–	22	–	–	–	22
1978	–	21	–	–	–	21
1979	–	24	–	–	–	24
1980	–	25	–	–	–	25
1981	–	23	–	–	–	23
1982	–	24	–	–	–	24
1983	–	25	–	–	–	25
1984	–	29	–	–	–	29
1985	–	22	–	–	–	22
1986	–	26	–	–	–	26
1987	–	22	–	–	–	22
1988	–	22	–	–	–	22
1989	3	36	8	–	–	47
1990	–	35	9	–	–	44
1991	3	33	19	–	–	55
1992	5	38	28	–	–	71
1993	9	34	35	–	–	78
1994	16	25	28	–	–	69
1995	15	37	49	–	–	101
1996	14	40	47	–	–	101
1997	15	39	52	–	–	106
1998	16	43	62	–	–	121
1999	4	48	41	–	–	93
2000	4	53	19	–	–	76
2001	6	34	4	–	6	50
2002	–	3	4	7	5	19
2003	–	–	7	25	2	34
2004	–	–	6	22	1	29

PHYSICAL THERAPY

CLASS	CERT.	A.S.	B.S.	Entry-Level M.P.T./D.P.T.	Post-Professional M.P.T./Dr.P.T./D.P.T.Sc.	TOTAL
1944	2	–	–	–	–	2
1945	8	–	1	–	–	9
1946	22	–	5	–	–	27
1947	11	–	3	–	–	14
1948	11	–	5	–	–	16
1949	2	–	5	–	–	7
1950	3	–	12	–	–	15
1951	9	–	9	–	–	18
1952	2	–	10	–	–	12
1953	9	–	2	–	–	11
1954	4	–	11	–	–	15
1955	5	–	8	–	–	13
1956	8	–	5	–	–	13
1957	5	–	12	–	–	17
1958	–	–	1	–	–	1
1959	1	–	22	–	–	23
1960	–	–	24	–	–	24
1961	–	–	31	–	–	31
1962						

1>-5777(5)-6278<D0>-6167<D088.1 0 0 9 378.1143 63

ALLIED HEALTH

CLASS	CERT.	A.S.	B.S.	TOTAL
1944	5	–	–	5
1945	5	–	–	5
1946	4	–	–	4
1947	2	–	–	2
1948	6	–	–	6
1949	6	–	–	6
1950	6	–	–	6
1951	7	–	–	7
1952	7	–	–	7
1953	6	–	–	6
1954	5	–	–	5
1955	9	–	–	9
1956	8	–	–	8
1957	8	–	–	8
1958	5	–	–	5
1959	6	–	–	6
1960	10	–	–	10
1961	4	–	–	4
1962	4	–	–	4
1963	4	–	–	4
1964	3	–	–	3
1965	5	–	–	5
1966	8	–	–	8
1967	6	–	–	6
1968	6	2	–	8
1969	1	11	–	12
1970	1	3	2	6
1971	2	10	1	13
1972	2	15	2	19
1973	6	12	1	19
1974	6	21	7	34
1975	8	19	3	30
1976	–	26	1	27
1977	19	23	1	43
1978	18	28	2	48
1979	14	22	4	40
1980	11	22	5	38
1981	13	25	3	41
1982	8	22	2	32
1983	19	15	2	36
1984	13	16	–	29
1985	13	15	5	33
1986	15	16	3	34
1987	15	15	1	31
1988	17	16	5	38
1989	14	17	2	33
1990	17	16	2	35
1991	27	15	6	48
1992	19	17	2	38
1993	23	24	5	52
1994	24	31	3	58
1995	24	36	4	64
1996	15	–	7	22
1997	12	–	2	14
1998	30	31	8	69
1999	27	21	8	56
2000	35	23	3	61
2001	–	18	5	23
2002	43	19	6	68
2003	50	14	6	70

SCHOOL OF ALLIED HEALTH PROFESSIONS

CLASS	B.S.
1967	7
1968	4
1969	4
1970	11
1971	7
1972	
1973	14
1974	8
1975	11
1976	7
1977	11
1978	8
1979	6
1980	7
1981	8
1982	11
1983	7
1984	11
1985	12
1986	5
1987	3
1988	13
1989	9
1990	12
1991	7
1992	12
1993	12
1994	9
1995	4
1996	22
1997	14
1998	13
1999	18
2000	14
2001	6
2002	10
2003	11

ACCREDITATION STATUS

HISTORY

Founded as College of Evangelists 1905-06. Chartered as College of Medical Evangelists by the state of California December 13, 1909. Accredited by Northwest Association of Secondary and Higher Schools April 7, 1937. Accredited by WASC (Western Association of Schools and Colleges) (prior to January 1962, Western College Association) February 24, 1960. Became Loma Linda University July 1, 1961. Professional curricula started and approved as indicated.

HEALTH PROFESSIONS

ALLIED HEALTH SCHOOL: Started in 1954. Accredited through University accreditation.

SCHOOL OF ALLIED HEALTH PROFESSIONS

CLINICAL LABORATORY SCIENCE (formerly: Medical Technology): Started in 1937. Approved by the Council on Medical Education of the American Medical Association since August 28, 1937. Currently approved by the Commission on Accreditation of Allied Health Education Programs in collaboration with the National Accrediting Agency for Clinical Laboratory Sciences.

CYTOTECHNOLOGY: Started in 1982. Initial approval by the Commission on Accreditation of Allied Health Education Programs in collaboration with the Cytotechnology Programs Review Committee January 20, 1983.

DIAGNOSTIC MEDICAL SONOGRAPHY: Started in 1976 as diagnostic medical sonography. Approved by the Joint Review Committee on Education in Diagnostic Medical Sonography October 24, 1985.

DIETETIC TECHNOLOGY: Started in 1988. The Dietetic Technology Program is currently granted continuing accreditation by the Commission on Accreditation for Dietetics Education of the American Dietetic Association April 25, 1988.

EMERGENCY MEDICAL CARE: Started in 1993 as a baccalaureate degree program for paramedics, respiratory therapists, and other allied health professionals desiring education, science, or management credentials in emergency medical services.

HEALTH INFORMATION MANAGEMENT: Started as medical record administration in 1963. Approved by the Council on Medical Education of the American Medical Association since December 1, 1963. Currently approved by the Commission on Accreditation of Allied Health Education Programs in collaboration with the American Health Information Management Association.

MEDICAL RADIOGRAPHY: Started in 1941 as radiological technology. Approved by the Council on Medical Education of the American Medical Association November 19, 1944. Currently approved by the Joint Review Committee on Education in Radiologic Technology and the California State Department of Health Services.

NUCLEAR MEDICINE TECHNOLOGY: Started in 1970. Approved by the Council on Medical Education of the American Medical Association June 23, 1973. Currently approved by the Joint Review Committee on Educational Programs in Nuclear Medicine Technology.

NUTRITION AND DIETETICS: Started in 1922 as a certificate program; baccalaureate degree conferred 1932-54; graduate program offered since 1954. Internship program continuously approved by The American Dietetic Association from 1957 through 1974; reestablishment of baccalaureate degree program authorized October 1971. Since 1974 the Coordinated Program in Dietetics has been granted accreditation by the Commission on Accreditation for Dietetics Education of the American Dietetic Association.

OCCUPATIONAL THERAPY: Started in 1959. Initial approval by the Council on Medical Education of the American Medical Association June 10, 1960. Full approval March 30, 1962. Currently approved by the Accreditation Council for Occupational Therapy Education.

OCCUPATIONAL THERAPY ASSISTANT: Started in 1988. Approved by the Commission on Accreditation of Allied Health Education Programs in collaboration with The American Occupational Therapy Association (AOTA) April 13, 1989. Currently accredited by the Accreditation Council for Occupational Therapy Education of the AOTA.

PUBLIC HEALTH LABORATORY: Started in 1994. Accredited/approved April 1997 both by the California Department of Health, Laboratory Field Services and by the National Accrediting Agency for Clinical Laboratory Science (NAACLS); with continuing state approval, reaccredited April 2001 by NAACLS.

PHYSICAL THERAPY ASSISTANT: Started in 1989. Approved by the American Physical Therapy Association April 4, 1990.

PHYSICAL THERAPY: Started in 1941. Initial approval by the Council on Medical Education of the American Medical Association June 6, 1942. Currently approved by the American Physical Therapy Association.

PHYSICIAN ASSISTANT: Started in 2000. Provisional accreditation granted October 20, 2000, by the Commission on Accreditation of Allied Health Education Programs (CAAHEP). Effective January 1, 2001, CAA-HEP was succeeded by the Accreditation Review Commission on Education for the Physician Assistant, Inc. (ARC-PA). Accredited March 2002 by ARC-PA.

ADIA ION A : Approved by the Council on Medical Education of the American Medical Association December 1, 1974. Currently approved by the Joint Review Committee on Education in Radiologic Technology.

I A O CA : Started in 1971. Initial approval by the Council on Medical Education of the American Medical Association September 1972. Full approval June 1973. Currently approved by the Commission on Accreditation of Allied Health Education Programs in collaboration with the Joint Committee on Accreditation for Respiratory Care Education.

C -LAN UA A OLO AND AUDIOLO : Approved by the American Speech-Language-Hearing Association June 1, 1991.

SCH L IS Started in 1953. Approved by the Commission on Dental Accreditation of the American Dental Association since May 23, 1957.

D N AL I N : Started in 1959. Approved by the Commission on Dental Accreditation of the American Dental Association since September 7, 1961.

NDODON IC : Started in 1967. Approved by the Commission on Dental Accreditation of the American Dental Association since December 1969.

O AL AND MA ILLO ACIAL U : Started in 1964. Approved by the Commission on Dental Accreditation of the American Dental Association since 1967.

O ODON IC AND D N O ACIAL O O-DIC : Started in 1960. Approved by the Commission on Dental Accreditation of the American Dental Association since May 1965.

DIA IC D N I : Started in 1993. Approved by the Commission on Dental Accreditation of the American Dental Association since December 1993.

IODON IC : Started in 1961. Approved by the Commission on Dental Accreditation of the American Dental Association since December 1967.

O ODON IC : Started in 1993. Approved by the Commission on Dental Accreditation of the American Dental Association since February 1995.

SCH L M ICI Started in 1909. Approved by the Association of American Medical Colleges and the Council on Medical Education of the American Medical Association since November 16, 1922.

SCH L SI Hospital school started at Loma Linda in 1905. Hospital school added at Los Angeles in 1924. Collegiate program in nursing organized in 1948. Accredited by the National Nursing Accrediting Service December 10, 1951, with approval continuing under the National League for Nursing until 2001. Initial 1917 approval of the California State Board of Health extended until college program approved July 1, 1952, by the California Board of Registered Nursing. California Board of Registered Nursing approval since 1952. Public health nursing preparation recognized in 1959. School accredited by the Commission on Collegiate Nursing Education (CCNE) since 1999.

SCH L LIC H AL H Started in 1948; reorganized in 1964. Approved by the American Public Health Association June 23, 1967. Currently approved by the Council on Education for Public Health.

ACC I A CI S H I SI

Loma Linda University is accredited by WASC.

Accrediting Commission for Senior Colleges and Universities of the Western Association of Schools and Colleges (WASC)
985 Atlantic Avenue, Suite 100
Alameda, CA 94501
Phone: 510 / 748-9001
FAX: 510 / 748-9797
Web site: www.wascweb.org
Email: wascsr@wascsenior.org

WASC is an institutional accrediting agency recognized by the U.S. Secretary of Education and the Commission on Recognition of Postsecondary Accreditation.

In addition to WASC, the following agencies accredit specific University schools or programs:

A A SCH L

rug and Alcohol Counselin
California Association of Alcoholism and Drug Abuse Counselors (CAADAC)
3400 Bradshaw Road, Suite A5
Sacramento, CA 95827
Phone: 916 / 368-9412
FAX: 916 / 368-9424
Web site: www.caadac.org
Email: caadac@jps.net

Marital and amily herapy
Commission on Accreditation for Marriage and Family Therapy Education of the American Association for Marriage and Family Therapy
1133 15th Street, NW, Suite 300
Washington DC 20005-2710
Phone: 202 / 467-5111 or 452-0109
FAX: 202 / 223-2329
Web site: www.aamft.org
Email: coamfte@aamft.org

All entry-level de rees are a redited y their respe tive professional a reditin asso iations.

sychology

American Psychological Association
750 First Street NE
Washington, DC 20002-4242
Phone: 202 / 336-5500
FAX: 202 / 336-5978
Web site: www.apa.org
Email: education@apa.org

Social or

Council on Social Work Education
Division of Standards and Accreditation
1600 Duke Street, Suite 500
Alexandria, VA 22314-3457
Phone: 703 / 683-8080
FAX: 703 / 683-8099
Web site: www.cswe.org
Email: info@cswe.org

Speech Language athology

Speech-Language Pathology
Educational Standards Board
American Speech-Language-Hearing
Association
10801 Rockville Pike
Rockville, MD 20852
Phone: 301 / 897-5700
FAX: 301 / 571-0457
Web site: www.asha.org
Email: accreditation@asha.org

SCH L ALLI H AL H SSI S

Cardiopulmonary Sciences

espiratory Care

Committee on Accreditation for Respiratory Care
1248 Harwood Road
Bedford, TX 76021-4244
Phone: 800 / 874-5615 or 817 / 283-2835
FAX: 817 / 354-8519 or 817 / 252-0773
Web site: www.coarc.com
Email: richwalker@coarc.com

hysician Assistant

Accreditation Review Commission on Education for the
Physician Assistant (ARC-PA)
Medical Education Department 1R6
1000 North Oak Avenue
Marshfield, WI 54449-5778
Phone: 715 / 389-3785
FAX: 715 / 387-5163
Web site: www.arc-pa.org
Email: mccartyj@mfldclin.edu

Clinical Laboratory Science

hlebotomy Certificate

National Accrediting Agency for Clinical Laboratory
Sciences (NAACLS)
8410 West Bryn Mawr Avenue, Suite 670
Chicago, IL 60631-3415
Phone: 773 / 714-8880
FAX: 773 / 714-8886
Web site: www.naacls.org
Email: naaclsinfo@naacls.org

California Department of Health, Laboratory Field
Services
2151 Berkeley Way, Annex 12
Berkeley, CA 94707-1011
Phone: 510 / 873-6449

Clinical Laboratory Science

hysical herapy

Commission on Accreditation in Physical Therapy Education
American Physical Therapy Association (APTA)
1111 North Fairfax Street
Alexandria, VA 22314
Phone: 703 / 706-3245
FAX: 703 / 838-8910
Web site: www.apta.org
Email: see Web site

adiation echnology

Medical adiography, A S
adiation herapy echnology, Certificate

Joint Review Committee on Education in Radiologic Technology (JRCERT)
20 North Wacker Drive, Suite 900
Chicago, IL 60606-2901
Phone: 312 / 704-5300
FAX: 312 / 704-5304
Web site: www.jrcert.org

iagnostic Medical Sonography, Certificate

Commission on Accreditation of Allied Health Education Programs (CAAHEP)
35 East Wacker Drive, Suite 1970
Chicago, IL 60601-2208
Web site: www.caahep.org
Email: sharonworthing@coarc.com

Joint Review Committee on Education in Diagnostic Medical Sonography (JRCE-DMS)
1248 Harwood Road
Bedford, TX 76021-4244
Phone: 817 / 685-6629
FAX: 817 / 354-8519
Web site: www.jrcdms.org
Email: sharonworthing@coarc.com

uclear Medicine echnology, Certificate

California Department of Health Services
Radiologic Health Branch
P. O. Box 942732
Sacramento, CA 94234-7320
Phone: 916/322-5096
FAX: 916/324-3610
Web site: www.csrt.org
Email: RKubiak@dhs.ca.gov

Speech Language athology and Audiology

American Speech-Language-Hearing Association
10801 Rockville Pike
Rockville, MD 20852
Phone: 301 / 897-5700
FAX: 301 / 571-0481
Web site: www.asha.org
Email: accreditation@asha.org

SCH L IS

Commission on Dental Accreditation of the American Dental Association
211 East Chicago Avenue
Chicago, IL 60611
Phone: 800 / 621-8099
FAX: 312 / 440-2915
Web site: www.ada.org
Email: accreditation@ada.org

SCH L M ICI

Liaison Committee on Medical Education
Association of American Medical Colleges
2450 N Street NW
Washington, DC 30037
Phone: 202 / 828-0596
FAX: 202 / 828-1125
Web sites: www.lcme.org; www.aamc.org
Email: lcme@aamc.org

SCH L SI

Board of Registered Nursing
1170 Durfee Avenue, Suite G
South El Monte, CA 91733
Phone: 626 / 575-7080
FAX: 626 / 575-7090
Web site:www.rn.ca.gov

Commission on Collegiate Nursing Education (CCNE)
One Dupont Circle NW, Suite 530
Washington, DC 20036-1120
Phone: 202 / 887-6791
FAX: 202 / 887-8476
Web Site:www.aacn.nche.edu/accreditation

SCH L LIC H AL H

Council on Education for Public Health
800 Eye Street NW, Suite 202
Washington, DC 20001-1397
Phone: 202 / 789-1050
FAX: 202 / 789-1895
Web site: www.ceph.org
Email: jconklin@ceph.org

Health romotion and ducation

Certified Health ducation Specialist CH S

National Commission for Health Education Credentialing, Inc.
944 Marcon Boulevard, Suite 310
Allentown, PA 18109
Phone: toll free 888 / 624-3248 or 673-5445
FAX: 800 / 899-4817
Web site: www.nchec.org
Email: nchec@fast.net

n ironmental and ccupational Health

egistered n ironmental Health Specialist

State of California
Environmental Health Specialist Registration Program
601 North 7th Street, MS 396
P.O. Box 942732
Sacramento, CA 94234-7320
Phone: 916 / 324-8819
FAX: 916 / 323-9869
Web site: www.dhs.ca.gov
or www.dhs.cahwnet.gov
Email: rhook1@dhs.ca.gov

utrition

Commission on Accreditation for
Dietetics Education (CADE) of the
American Dietetic Association
120 South Riverside Plaza, Suite 2000
Chicago, IL 60606-6995
Phone: 312 / 899-0040, ext. 5400 or
800 / 877-1600, ext. 5400
FAX: 312 / 899-4817
Web site: www.eatright.org/cade
Email: education@eatright.org

H I SL LI A I S

Ma or library resources

Four major library resources on campus support the University's academic programs. These are:

- the Del E. Webb Memorial Library, including the Jorgensen Learning Resources,
- the Jesse Medical Library and Information Center, and
- the Veterans Administration Library Services.

In addition to these facilities, specialized libraries are located in various medical and school departments on campus.

Central library

The Del E. Webb Memorial Library is the central library of Loma Linda University. Its historical roots go back to 1907, when a small library collection was started in a room of the old Loma Linda Sanitarium. In 1953 the growing collection was moved to its own building on the Loma Linda campus. Then in 1981, a new library building was built from a grant by the Del E. Webb Foundation, giving the library a total floor space of 87,670 square feet. This structure now houses the main library, while the old structure is now shared between the Department of Archives and Special Collections and the bound retrospective journals. According to <http://www.llu.edu/llu/library/about/libstats2001-2002.htm> as of June 2002, the library has:

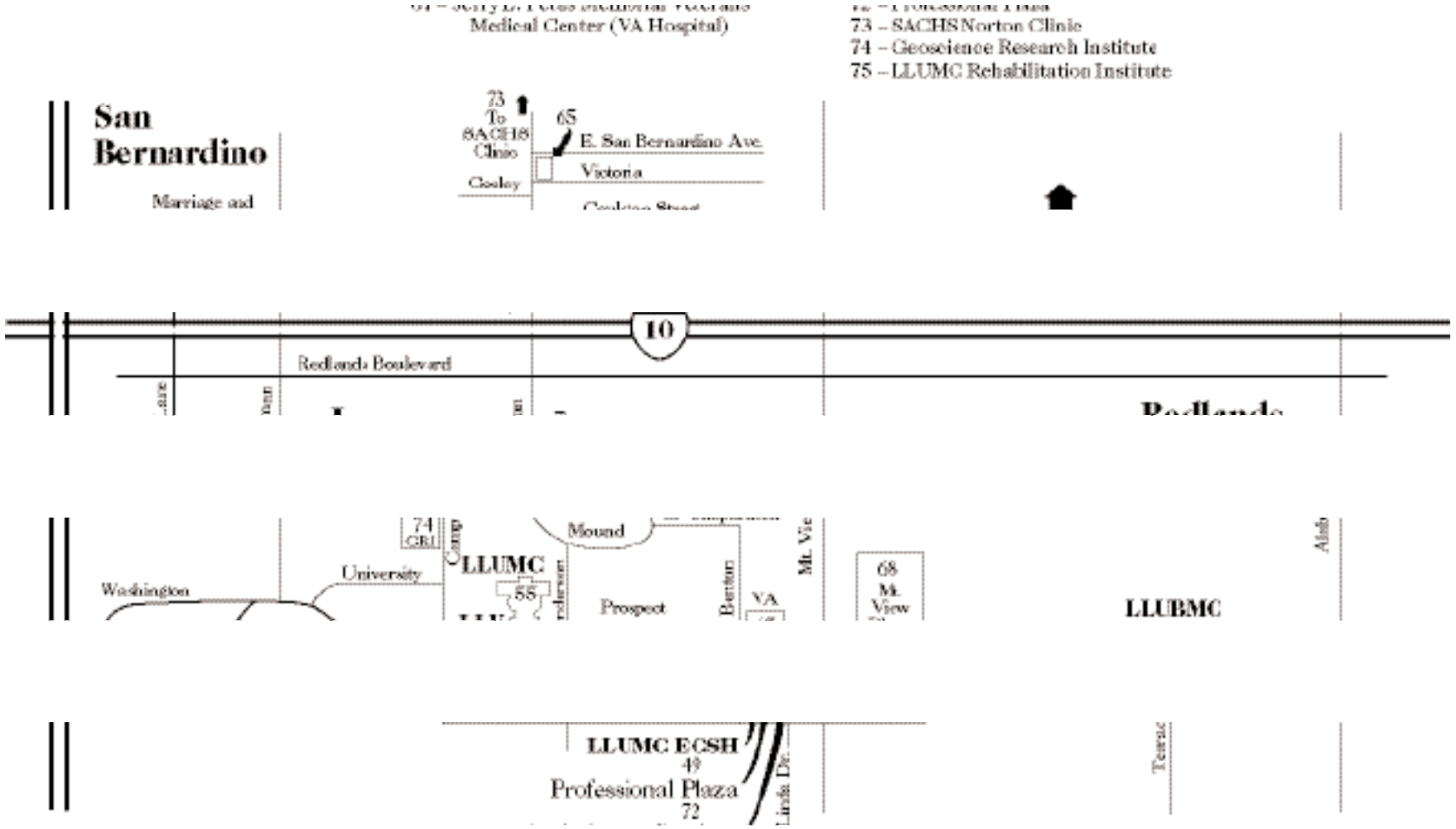
- 31 databases; and
- a total of 335,848 books, bound and current journals/periodicals, and media items, including:

156,041 mo8ft-r/periodicaibrary has:hnd meitllec(prI3 houseeeeesdold Loeampus. Thu(includinNo)'T*0 I3 houslu

bbr vi i ns nd s mb ls

- - - - - - - - - - - - - - - - - - - -

o update information on maps or legends, please con tact Academic ublications, t


Medical Center (VA Hospital)
73 – SACHS Norton Clinic
74 – Geoscience Research Institute
75 – LLUMC Rehabilitation Institute
San Bernardino
Marriage and
73 To SACHS Clinic
65
E. San Bernardino Ave.
Victoria
Cooley
10
Redlands Boulevard
Redlands
74 GRI
Mound
University
LLUMC
55
Washington
Prospect
Benton
VA
68 Mt. View
LLUBMC
LLUMC ECSH
49
Professional Plaza
72

INDEX

C MM ICA I H LL

MAIL
Loma Linda ni ersity
Anderson Street
Loma Linda CA

L I
http llu edu

H
or information about LL LL
dialing from Canada

Area Code
S itchboard

SI MAIL