# College of Health Related Professions



# Catalog 2006-2007

University of Arkansas for Medical Sciences

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# **GENERAL INFORMATION**

### THE UNIVERSITY OF ARKANSAS FOR MEDICAL SCIENCES

#### **MISSION STATEMENT**

To Teach--The University of Arkansas for Medical Sciences prepares excellent health care professionals and scientists who are committed to high ethical and professional standards, life-long learning, and skill advancement in health care for Arkansas, the nation, and the world

To Heal–The University of Arkansas for Medical Sciences provides comprehensive, nationally and internationally recognized, health care in many specialties and disciplines for Arkansas, the nation, and the world

To Search--The University of Arkansas for Medical Sciences conducts pioneering research that leads to new knowledge with application and integration into the health care disciplines, systems of care public policy, and economic progress for all people

To Serve-The University of Arkansas for Medical Sciences provides leadership and service in the health care disciplines and in public health policy for the benefit of the citizens and communities of Arkansas.

#### **ROLE AND SCOPE**

The mission of the University of Arkansas for Medical Sciences is to provide excellent educational opportunities for students of the health care professions in a stimulating environment of basic and clinical research, integrated with the delivery of superb, comprehensive health care services.

The University of Arkansas for Medical Sciences (UAMS) is Arkansas' only institution of professional and graduate education devoted solely to the health and biological sciences. First founded as a School of Medicine in 1879, UAMS became a medical sciences campus in 1951 with the addition of the College of Pharmacy. The College of Nursing was established in 1953, and the University Hospital was built in 1956. The College of Health Related Professions was organized as a separate college within UAMS in 1971. The College of Public Health was established in 2001. The Graduate Program was organized as an extension of the Graduate School of the University of Arkansas at Fayetteville in 1943, and was approved for independent status by the Board of Trustees in 1995. The Area Health Education Centers (AHECs) Program was established in 1973. The Arkansas Cancer Research Center (ACRC) was established in 1984. The Harvey and Bernice Jones Eye Institute (HBJEI) was established in 1993. The Donald W. Reynolds Center on Aging was established in 1996. Today, UAMS is one of eight campuses of the University of Arkansas. It has grown into an academic health sciences center that encompasses broad aspects of education, research, and service. The institution offers programs that improve the physical, economic, and intellectual well-being of the citizens of Arkansas.

In fulfilling its educational mission, the six academic units of UAMS—the Colleges of Medicine, Nursing, Pharmacy, Health Related Professions, and Public Health, and the Graduate School—as well as the University Hospital, the Area Health Education Centers, the Arkansas Cancer Research Center, the Harvey and Bernice Jones Eye Institute, the Donald W. Reynolds Center on Aging, the Myeloma Institute for Research and Therapy, and the Jackson T. Stephens Spine & Neurosciences Institute—provide the environment and opportunities for students and practitioners alike to learn and maintain the knowledge and skills they need. These programs integrate the liberal arts with the biological, physical, and behavioral sciences, and emphasize life-long learning for practitioners in the health professions.

UAMS is the principal biomedical research center for the state of Arkansas. In its programs of research, UAMS seeks to stimulate and support scholarly inquiry for both faculty and students aimed at maintaining and preserving knowledge, and making discoveries that address the health needs of the state, nation, and world.

These research programs enhance the economic and educational progress of Arkansas through technology transfer and collaborative arrangements with other qualified individuals, groups, companies, and institutions. The research mission involves the quest for new information, the organization of known information in new ways, and the sharing of this information with the scientific community.

The service mission of UAMS is fulfilled by providing comprehensive health care services to meet both the educational needs of students and the special health care needs of the state. As the only academic medical center in Arkansas, the unique role of UAMS is to provide services requiring highly specialized personnel and technology. These services are delivered in an interdisciplinary environment to all Arkansans regardless of their ability to pay.

In addition, comprehensive services in health, wellness, and rehabilitation are offered in a statewide context. The service mission is enhanced by affiliations with Arkansas Children's Hospital (ACH), John L. McClellan Memorial Veterans Administration Medical Center, the Arkansas Rehabilitation Institute, the Central Arkansas Radiation Therapy Institute (CARTI), and the Arkansas State Hospital. Additional cooperative programs are offered with other hospitals and practitioners affiliated with the AHEC Programs. UAMS has a responsibility to provide health care services in a manner that ensures the long-range financial viability and continued quality of its programs, while providing the most cost-effective care for its patients.

The UAMS mission encompasses a responsibility to its alumni and other health care practitioners of Arkansas to help them continue to improve their professional knowledge and skills. All schools and departments offer lifelong learning opportunities as appropriate to their missions. The UAMS Library also serves as a resource for all health professionals by maintaining a portfolio of information services needed to support their information needs.

UAMS values its role of service to the general welfare of the state of Arkansas. This service includes action as a partner in science and health areas to all levels of the educational systems of the state. As the leader in health care, the institution provides educational programs, consultation, and technical advice to other institutions, agencies, and local communities for the purpose of improving and maintaining the health of citizens.

The role of UAMS in the economic life of the community is significant. A major element of the central Arkansas economy, the salaries of a highly educated work force contribute substantially to the regional economy.

UAMS fulfills its mission through coordinated action of the following units:

- College of Medicine
- College of Pharmacy
- College of Nursing
- College of Health Related Professions
- College of Public Health
- Graduate School
- Area Health Education Centers
- Arkansas Cancer Research Center
- Donald W. Reynolds Center on Aging
- Harvey and Bernice Jones Eye Institute
- University Hospital of Arkansas
- Myeloma Institute for Research and Therapy
- Jackson T. Stephens Spine & Neurosciences Institute

### THE COLLEGE

#### MISSION OF THE COLLEGE

The College of Health Related Professions (CHRP) serves the state of Arkansas as the primary arm of the University of Arkansas in offering programs that provide education, service, and research in the allied health professions. The College was organized as a separate college within the University of Arkansas for Medical Sciences in 1971.

In fulfilling its mission, the College of Health Related Professions offers education and training opportunities for students of the allied health professions to prepare them as graduates to assume the roles of the professional. The College curricula coordinate the professional course work with the arts, humanities, and basic and social sciences into a total educational experience that emphasizes life-long learning in the allied health professions.

Patient and public health education is an important part of the mission of the College of Health Related Professions. In its public service role, programs in the College render patient care services as part of their educational efforts under the supervision of faculty. Technical advice and consultative services are available from the College to institutions and agencies throughout the state. The professional service mission of the College includes the offering of continuing education courses to practitioners to enhance teaching, administration, and professional skills.

Research in the College of Health Related Professions involves the educational process as well as professional fields. The research mission involves the quest for new information which addresses the health and health care educational needs of the state, and the sharing of this information with the scientific community.

#### **CHRP ROLE AND SCOPE**

The CHRP mission is achieved through the varied offerings of its departments. The College, the only one of its kind at an academic health science center in Arkansas, has as its main role the education of allied health professionals to serve in the health care delivery system in the state. The specific educational programs currently offered within the College of Health Related Professions are provided by ten academic departments. They include: Audiology and Speech Pathology; Dental Hygiene; Dietetics and Nutrition; Emergency Medical Sciences; Genetic Counseling; Health Information Management; Imaging and Radiation Sciences (Diagnostic Medical Sonography, Medical Dosimetry, Nuclear Medicine Imaging Sciences, Radiation Therapy, Radiologic Imaging Sciences); Laboratory Sciences (Cytotechnology, Medical Technology); Ophthalmic Technologies; and Respiratory and Surgical Technologies. Programs range from academic requirements of one semester to programs that require four or more years. Academic awards include the certificate and the associate, bachelor, master, and doctoral degrees. Nearly all the programs stipulate prerequisites for admission that must be completed at another (general undergraduate) institution.

Other roles of the College of Health Related Professions include public and professional service, and research. The College offers professional continuing education opportunities to enhance the abilities of practicing allied health professionals; serves as a resource center for allied health planning, education, and delivery systems in Arkansas, and develops applied research programs in allied health. All of these roles combine to support the overall mission of the College. The University of Arkansas for Medical Sciences fully supports, both in spirit and practice, Titles VI and VII of the Civil Rights Act of 1964m Title IX of the Education Amendments of 1972, Executive Order 11246, the Rehabilitation Act of 1973 (Sections 503 and 504), Titles I and II of the Americans with Disabilities Act of 1990, and Section 402 of the Vietnam Era Veterans Readjustment Assistance Act of 1974, which prohibit discrimination on the basis of race, sex, color, national origin, religion, age, marital status, ethnic origin, disability and/or disabled veterans and veterans of the Vietnam Era. Student complaints concerning any policy, procedure or practice prohibited by these Acts should be addressed to the Associate Dean for Academic and Student Affairs in the College of Health Related Professions Dean's Office (501-686-5732) for assistance in addressing such concerns. The UAMS Office of Human Relations, Room M1/112, is also available to assist with these concerns.

#### **DEPARTMENT LISTING**

The following departments comprise the College:

Audiology and Speech Pathology Dental Hygiene Dietetics and Nutrition Emergency Medical Sciences Genetic Counseling Health Information Management Imaging and Radiation Sciences Laboratory Sciences Ophthalmic Technologies Respiratory and Surgical Technologies

#### **CERTIFICATES AND DEGREES**

These certificates and degrees are awarded by departments in the College:

#### **Certificates:**

Diagnostic Medical Sonography Emergency Medical Sciences Surgical Technology Medical Dosimetry

#### Associate of Science (A.S.) Degrees:

Dental Hygiene Emergency Medical Sciences Health Information Management Medical Radiography Respiratory Therapy Surgical Technology

#### Bachelor of Science (B.S.) Degrees:

Cardio-Respiratory Care Cytotechnology Dental Hygiene Diagnostic Medical Sonography Medical Dosimetry Medical Technology Nuclear Medicine Imaging Sciences Ophthalmic Medical Technology Radiation Therapy Radiologic Imaging Sciences

#### **Post-Bachelor's Certificate:**

Dietetic Internship (Joint UAMS—CAVHS)

Master of Imaging Sciences (M.I.S.) Degree: Radiologist Assistant

#### Master of Science (M.S.) Degrees: Clinical Nutrition

Communicative Disorders (Speech Pathology) Genetic Counseling

#### Doctor of Audiology (Au.D.) Degree

**Doctor of Philosophy (Ph.D.) Degree:** Communication Sciences and Disorders

#### **PROFESSIONAL ROLES**

The following briefly describes the professional roles of the various health professionals.

#### Audiology and Speech Pathology

Evaluation and therapeutic procedures for clients with auditory and speech-language disorders

#### Cytotechnology

Microscopic interpretation of cancer and other diseases from cells obtained from various body sites

#### **Dental Hygiene**

Dental health procedures and education concerned with the treatment and prevention of dental disease

#### Diagnostic Medical Sonography

Use of high frequency sound waves for diagnosis of disease

#### **Dietetics and Nutrition**

Assessment, management, and counseling concerning nutritional care in hospital, business, and community settings

#### **Emergency Medical Sciences**

Assessment, evaluation, and treatment of acutely ill and injured patients in the prehospital setting

#### **Genetic Counseling**

Counseling of individuals who have disorders which may have a genetic basis, such as cancer, mental illness, and birth defects

#### Health Information Management

Compilation, coding, analysis, and preparation of health information for members of the healthcare team and patients

#### **Medical Dosimetry** Design radiation treatment plans for cancer patients

**Medical Technology** Definitive analyses of blood, spinal, and other body fluids which provide data essential to diagnosis and treatment

#### **Nuclear Medicine Imaging Sciences**

Use of radionuclides in conjunction with various imaging modalities for the diagnosis of disease

#### **Ophthalmic Medical Technology**

Assisting Ophthalmologists in assessment and care of patients with eye disorders

#### **Radiation Therapy** Treatment of patients with cancer using radiation

#### **Radiologic Imaging Sciences**

Employment of various imaging radiographic (x-ray) modalities for the diagnosis and treatment of disease

#### **Radiologist Assistant**

Assisting Radiologists in the performance of complex imaging procedures

#### **Respiratory Care**

Treatment, evaluation, and management of patients with cardiopulmonary deficiencies and abnormalities

#### **Surgical Technology**

Technical procedures in settings requiring aseptic techniques and the use of surgical equipment and instrumentation

#### PRIMARY AFFILIATIONS

A unique partnership in health manpower training exists between the College; the Department of Veterans Affairs, Central Arkansas Veterans Healthcare System; and the University of Arkansas at Little Rock. Each institution strives to coordinate and complement the resources necessary for the student's total education.

#### **CLINICAL SITES**

The following is a list of the major clinical sites.

#### Arkansas Children's Hospital

Children's Hospital, located at 804 Wolfe Street in Little Rock, is Arkansas' only pediatric hospital providing medical care for children from each of the state's 75 counties.

#### **Baptist Health**

Baptist Health is a non-profit, private, general hospital located at 9600 Interstate 630 with a second facility located in North Little Rock.

#### Central Arkansas Radiation Therapy Institute, Inc.

CARTI is a community facility operated by a non-profit organization. CARTI's primary purpose is to provide the most sophisticated and technically modern radiation therapy to cancer patients in Arkansas.

#### St. Vincent Infirmary Medical Center

St. Vincent Infirmary Medical Center is a general hospital located at Markham and University Streets.

#### **UAMS Medical Center--University Hospital**

University Hospital of Arkansas, located at 4301 West Markham, serves as the principal clinic for several programs in the College. This hospital is primarily a teaching and referral hospital.

#### Department of Veterans Affairs, Central Arkansas Veterans Healthcare System

The Department of Veterans Affairs, Central Arkansas Veterans Healthcare System (CAVHS) plays a vital role as a major affiliate and in provision of financial support to the CHRP programs. Full-time instructors, classrooms, laboratories, offices and equipment are provided. Professional and administrative resources are shared. CAVHS full-time staff are given faculty appointments with the UAMS. The CAVHS is a jointly accredited sponsor of the Dietetic Internship Program. The Education Office of the CAVHS, headed by the Associate Chief of Staff for Education who serves his role with UAMS as Associate Dean of the CHRP for VA Affairs, plays an important role in the planning, administration, and supervision of the programs.

Additional sites for various programs in the College are:

Advance Care Hospital Alliance Homecare Equipment Area Health Education Center-Southwest Arkansas Cardiology Clinic Arkansas Central Cancer Registry Arkansas Department of Education, Child Nutrition Program Arkansas Department of Health and Human Services Arkansas Eye Center Arkansas Foundation of Medical Care Arkansas Health Center Arkansas Heart Hospital Arkansas Hospice Arkansas Nephrology Services, TLD Arkansas Pathology Associates Arkansas Regional Organ Recovery Agency Arkansas Renal Systems Arkansas Reproductive Health Monitoring System Arkansas Specialty Orthopedics Arkansas State Hospital Baird, Kurtz, & Dobson Baptist Health Medical Center--Heber Springs Baton Rouge General Medical Center Baxter Regional Medical Center **Baylor Regional Medical Center** Benton Fire Department Benton School District Beverly Healthcare and Rehabilitation of North Little Rock **Bridgeway Hospital** Cardinal Health Nuclear Pharmacy Center-Tulsa Cardinal Health Nuclear Pharmacy Services-Jonesboro Cardinal Health Nuclear Pharmacy Services-Little Rock Cardinal Health Nuclear Pharmacy Services-Springdale Cardinal Health Nuclear Pharmacy Services-Springfield Cardiology Consultants of Texas, LLP Central Arkansas Cardiology Central Arkansas Cardiovascular Institute Certi-Med Transcription of Arkansas Children's Medical Center Christus Schumpert Health System Christus St. Michael Health System Christus St. Michael Rehabilitation Hospital **Collum-Carney Clinic Conway Public Schools** Conway Regional Health & Fitness Center **Conway Regional Medical Center** Cooper Clinic, Dallas Cox Health Systems Delta Memorial Hospital **DeQueen Regional Medical Center Doctors Anatomic Pathology Services Dubuis Hospital** 

East Texas Medical Center Elite H.I.M. Professionals, Inc. Essent Healthcare, Inc. Fairfield Memorial Hospital Freeman Hospital Good Samaritan Healthcare Center Health Park Hospital Healthsouth Little Rock Surgery Center Heart Clinic Arkansas Helena Regional Medical Center Highland Oncology Group Hot Springs County Medical Center Jacksonville Fire Department Jefferson Regional Medical Center **Iohnson Regional Medical Center** Kilgore Vision Center, Inc. Laboratory Corporation of America Lawrence Memorial Health Services Lee, Mimi, M.D., P.A. LifeNet, Inc. Little River Memorial Hospital Little Rock Cardiology Clinic Little Rock Community Mental Health Center, Inc. Little Rock Diagnostic Clinic Little Rock Family Practice Clinic Central Little Rock Family Practice Clinic West Little Rock Surgery Center Louisiana State University Health Sciences Center Magnolia City Hospital Major Hospital Mallinckrodt Radiopharmacy Med-Select Southern Clinic Medical Center of Lewisville Medical Center of South Arkansas Medical Park Hospital Medical Services of Northwest Arkansas Medscript Mena Medical Center Mercy Health System Mercy St. Mary's Hospital Methodist Behavioral Hospital Methodist Hospital Metropolitan Emergency Medical Sciences Mother Frances Hospital Regional Health Care Center National Park Medical Center NEA Medical Center Nebraska Medical Center Newport Hospital and Clinic North Arkansas Regional Medical Center North Little Rock School District Northeast Regional Medical Center Northridge Healthcare & Rehabilitation Center Northwest Arkansas Heart & Vascular Center Northwest Arkansas Pathology Northwest Arkansas Radiation Therapy Institute Northwest Health System NuTech, Inc. Our Lady of the Lake Regional Medical Center

**Ozarks Medical Center** P.E.T. Imaging Center, Biomedical Research Foundation PET-Net Pharmaceuticals, Inc. Phelps County Regional Medical Center Pike County Memorial Hospital Pinnacle Point Hospital Pleasant Valley Living Center Presbyterian Hospitals of Dallas Radiology Associates, P.A. **Radiology Center of Paris** Rebsamen Medical Center, Inc. Renal Care Group **Respiratory Plus** Saline Memorial Hospital Searcy Special School District Select Specialty Hospital SemperCare Hospital of Little Rock SemperCare Hospital of Pine Bluff Siloam Springs Memorial Hospital Southeastern Cardiology Consultants Southwest Regional Medical Center Sparks Regional Medical Center Springhill Surgery Center St. Bernards Regional Medical Center St. Edward Mercy Medical Center St. Francis Hospital St. John Health System St. John's Clinics St. John's Regional Health Center St. Joseph's Mercy Health Center St. Mary's Regional Medical Center St. Vincent Health Clinic East St. Vincent Medical Center-Sherwood Stuttgart Regional Medical Center Surgical Hospital of Jonesboro Surgical Pavilion Texarkana PET Imaging Institute, LP Texas Cardiology Consultants of Texarkana The Dubuis Hospital Tyler Cardiovascular Consultants UALR Share America/Wakefield Elementary University Medical Center, Inc. University of Arkansas Cooperative Extension Service University of Nebraska Medical Center University of Texas Health Center at Tyler University of Texas Southwestern Medical Center Veterans Affairs Medical Center-Dallas Veterans Affairs Medical Center--Favetteville Veterans Affairs Medical Center-Shreveport Vista Health, Forth Smith Wadley Regional Medical Center Washington Regional Medical Center White County Medical Center White River Health System Willis Knighton Health System Woodland Hills Healthcare and Rehabilitation Center

#### THE CAMPUS AND FACILITIES

The University of Arkansas for Medical Sciences campus is located in western Little Rock near War Memorial Park. The four hundred bed University Hospital of Arkansas is the focal point of the campus. South of the Hospital are the Ambulatory Care Center, Jeff Banks Student Union, the Education South Building, and the John L. McClellan Memorial Veterans Hospital.

The Shorey, Education II, and College of Public Health Buildings are located to the west, with Barton Institute for Medical Research, the Arkansas Cancer Research Center, the Biomedical Research Center, the Donald W. Reynolds Center on Aging and the Harvey and Bernice Jones Eye Institute on the east side of campus. Area Health Education Centers (AHECs) are located at Fort Smith, Fayetteville, Harrison, Jonesboro, Pine Bluff, El Dorado and Texarkana and provide out-reach training sites for the health professions represented on the UAMS campus.

#### ACCREDITATION

The University of Arkansas for Medical Sciences is accredited by the Higher Learning Commission of the North Central Association of Colleges and Schools and the departments are accredited as appropriate by their national and state agencies.

#### **EQUAL OPPORTUNITY**

Applicants are considered without regard to race, color, creed, age, marital status, national origin, or sex. Otherwise qualified individuals with disabilities receive equal consideration. Students who have concerns should contact Dr. David Shelledy, the CHRP Associate Dean for Academic and Student Affairs.

## ADMISSION/ACADEMIC INFORMATION

### ADMISSION TO THE COLLEGE

# Individuals who have not decided upon a specific health career may obtain counseling through the Dean's Office. Telephone (501) 686-5730 for an appointment.

Admission to all programs is by formal application only and is selective, as enrollment for each program is limited. **Early consideration** will be given to those who have completed the application process by the published **early consideration** deadline. Completing the application process includes submission of the application form and fee, all official transcripts to date, all references, and any other materials required by the department to which application is being made. Departmental admissions committees establish predetermined criteria for selection from this early consideration group and admit no more than a specified percentage of the total class capacity from early applicants who meet these criteria. The specified percentage, early consideration deadline, and application deadline follow in the table entitled, "2007–2008 Admission Deadlines."

Applicants not selected at the time of early consideration (first round), but who meet or exceed the College's and the respective department's minimum criteria (published by department), and complete the application process will be so notified and continue to be considered for the remaining positions along with all other individuals who have submitted complete applications by the published application deadline (second round). If the class is filled by second round applicants, but vacancies subsequently develop before the start of the first semester's classes (e.g., due to withdrawal of previously accepted students), third round applicants (those who applied after the published deadline) will be combined with any second round applicants who may be on the waiting list and that entire list will be ranked. Programs may consider applicants from that combined list who will be offered admission in rank order until the class is filled. See individual department descriptions to determine to which programs the third application round applies. Applications and its accompanying fee received by the published application deadline will be assured consideration in the second round.

Students of potential merit as future health professionals are accepted into the College of Health Related Professions without regard to race, sex, color, religion, age, marital status, or ethnic origin. Otherwise qualified individuals with disabilities receive equal consideration.

In admissions reviews, first consideration is given to Arkansas residents. In recognition of the significant support of CHRP programs by private and federal health care facilities, however, highly qualified applicants who are residents of another state or citizens of a foreign country may successfully compete for admission. Prior to their first semester's registration, all individuals admitted must submit proof of a physical examination using the UAMS Physical Examination Form. This examination is used by the Student and Employee Health Service to verify required immunizations and to establish a baseline for treating illnesses occurring after admission.

Students are strongly encouraged to get the Hepatitis B vaccine. If the student does not wish to take the vaccine, he/she must sign a waiver accepting responsibility for that decision. The waiver must be completed and turned in at registration. The waiver must be signed by the student.

Applicants who are not United States citizens or permanent resident aliens or for whom English is not their native language must take the Test of English as a Foreign Language (TOEFL). A total score of at least 570 on the TOEFL or the equivalent score of 230 on the computer version, with no less than 55 on the paper version or 20 on the computer version in each of the three subtest scores (listening, structure/writing, and reading) that comprise the total score must be earned for the applicant to be eligible for consideration for admission. An official report of these scores must be received by the College of Health Related Professions prior to the date(s) on which admission decisions are made for the program(s) to which the applicant has applied. To obtain the Bulletin of Information to register to take the TOEFL, write directly to: The Education Testing Service, PO Box 6155, Princeton, New Jersey 08541-6155. The applicant should indicate on his/her application for the examination that results should be sent to institution code number #R6901-3. A student may petition for waiver of the TOEFL requirement if he/she has completed all primary, secondary, and higher education in the United States or one of its English-speaking protectorates.

# 2007-2008 ADMISSION DEADLINES

| Program  | ogram Maximum % To Be Early Consideration<br>Selected Early Deadline |                    | Application Deadline  |  |  |
|--|--|--------------------|---|--|--|
| Audiology (Au.D.)  | Not Applicable   | Contact Department | March 1, 2007   |  |  |
| Communication Sciences and Disorders (Ph.D.)                         | Not Applicable   | Contact Department | Contact Department  |  |  |
| Communicative Disorders (M.SSpeech<br>Pathology)                     | Variable   | Contact Department | March 1, 2007   |  |  |
| Biotechnology  | Not Applicable   | Not Applicable     | March 1, 2007   |  |  |
| Cytotechnology   | Variable   | Variable           | May 15, 2007  |  |  |
| Dental Hygiene   | Not Applicable   | Not Applicable     | March 1, 2007   |  |  |
| Diagnostic Medical Sonography  | Not Applicable   | Not Applicable     | March 1, 2007   |  |  |
| Dietetics and Nutrition: Internship                                  | Not Applicable   | Not Applicable     | February 15, 2007   |  |  |
| Dietetics and Nutrition: (MSCN)                                      | Not Applicable   | Not Applicable     | Contact Graduate Office                                       |  |  |
| EMT (Fall Semester)  | Variable   | Not Applicable     | Contact Department  |  |  |
| EMT (Spring Semester)  | Variable   | Not Applicable     | Contact Department  |  |  |
| EMT-Paramedic  | Variable   | March 31, 2007     | June 15, 2007   |  |  |
| Genetic Counseling   | Not Applicable   | Contact Department | Contact Department  |  |  |
| Health Information Management  | Not Applicable   | Not Applicable     | July 1 for fall admission<br>Decemeber 1 for spring admission |  |  |
| Medical Dosimetry  | Not Applicable   | Not Applicable     | March 1, 2007   |  |  |
| Medical Technology   | Variable   | March 1, 2007      | May 15, 2007  |  |  |
| Nuclear Medicine Imaging Sciences                                    | Not Applicable   | Not Applicable     | March 1, 2007   |  |  |
| Ophthalmic Medical Technology  | Variable   | April 15, 2007     | May 15, 2007  |  |  |
| Radiation Therapy  | Variable   | Not Applicable     | March 1, 2007   |  |  |
| Radiologic Imaging Sciences  | 80%  | January 31, 2007   | March 1, 2007   |  |  |
| Radiologist Assistant  | Not Applicable   | Not Applicable     | Contact Department  |  |  |
| <b>Respiratory Care</b><br>Therapist-B.S., Little Rock and Texarkana | Variable   | Variable           | May 15, 2007  |  |  |
| Surgical Technology  | Not Applicable   | Not Applicable     | March 31, 2007  |  |  |

\*Applications must be post-marked no later than the application deadline.

#### HIGH SCHOOL GRADUATE/GED APPLICANTS

**Minimum Criteria:** Individuals who have completed no college/university course work and are applying to programs with no prerequisite (transfer credit) requirements must meet the following minimum criteria:

- 1. A 2.0 Cumulative Grade Point Average (CGPA) based on all high school course work.
- 2. The applicant must be a high school graduate who has completed a minimum of 15 high school units including at least three (3) units of English, one (1) unit of mathematics, and two (2) additional units of mathematics and/or science.
- 3. Satisfactory scores on the General Education Development Test (GED) may be substituted for the above criteria. (The GED is administered through various armed forces and state agencies).
- 4. Conditional Admission: Students seeking A.S. and/or B.S. degrees who do not complete the core high school requirements, graduate with a GED, graduates from out-of-state or private schools, and graduates after 1999 may be admitted conditionally to the CHRP programs. For the most current information, contact the CHRP Office of Student Affairs.

#### **Application Procedures:**

- 1. Obtain an Application for Admission Form from the Office of Student Affairs. Telephone (501) 686-5730, or go to the College Webpage (see: www.uams.edu/chrp).
- 2. Return the completed application, with a nonrefundable application fee of \$10.00 to the address listed on the form.
- 3. Arrange for each high school attended to forward an official transcript to the Office of Student Affairs.
- 4. Consult the Program Information section in this catalog for further specific requirements of the department to which applying. Applicants who are not United States citizens or for whom English is not their native language must also consult the Foreign Applicants section for additional requirements.

#### TRANSFER APPLICANTS

**Minimum Criteria:** The following apply to applicants who have completed academic credits at other colleges or universities:

1. A 2.0 (on a 4.0 scale) Cumulative Grade Point Average (CGPA) based on all college and university course work (excluding remedial courses) completed at regionally accredited institutions.\*

- 2. Only courses in which a grade of C (2.0 on a 4.0 scale) or higher was earned are accepted in transfer to meet prerequisite and/or graduation requirements.
- 3. The CHRP college transcript will list prerequisite courses accepted in transfer (consult the Evaluation of Transcripts for Transfer section) and all professional and concurrent courses completed while enrolled in the CHRP.
- 4. Transfer credit is granted only for course work completed at a regionally accredited institution of higher education. Departments reserve the right to disallow credit for course work completed more than seven (7) years before the date of anticipated entry into their program(s).

\*Some programs may require a CGPA greater than 2.0 for consideration. Contact the department for specific program requirements.

#### **Application Procedures:**

- 1. Obtain an Application for Admission Form from the Office of Student Affairs. Telephone (501) 686-5730, or go to the College Webpage. www.uams.edu/chrp
- 2. Return the completed application, with a nonrefundable application fee of \$10.00 to the address listed on the form.
- 3. Arrange for each college and university attended to forward an official transcript to the Office of Student Affairs. <u>Transcripts mailed or hand-delivered by students are not acceptable</u>.
- 4. Consult the Program Information section in this catalog for further specific requirements of the department to which applying. Applicants who are not United States citizens or for whom English is not their native language must also consult the Foreign Applicants section for additional information.

#### NONDEGREE/NONCERTIFICATE STUDENTS

**Minimum Criteria:** Department chairmen (with approval of the Dean or his designee) may elect to admit nondegree/noncertificate students to selected courses in their department on a space available basis. The Dean may elect to admit nondegree/noncertificate students to CHRP interdisciplinary courses. Nondegree/noncertificate students are students who register for one or more courses, but who do not want to pursue a formal credential or follow the entire curriculum of a professional program in the College.

1. Applicants who are accepted as nondegree/ noncertificate students may enroll in no more than one course each semester and may not accumulate more than 10 semester credits in a given program while in this status. Nondegree/noncertificate students may earn some or all of those 10 semester credits by successful performance on challenge examinations, recognizing that not more than 25% of a program's total professional credit hours may be taken by examination. Each department reserves the right to determine which, if any, of its professional courses may be challenged by examination. There is no limit to the number of approved courses that may be challenged by examination in a given semester, provided the "10 SC/25% of the total" rule is observed. Nondegree/noncertificate students challenging a course or courses by examination in a given semester may also be enrolled in not more than one course during that semester.

- 2. There is no assurance that courses completed by a nondegree/noncertificate student will be transferred toward degree or certificate program requirements should the student later be admitted as a candidate for a degree or certificate, nor does completion of courses by nondegree/noncertificate students in any way obligate the College to admit those students to a particular professional program.
- 3. While a nondegree/noncertificate student may, at the discretion of the department chairman, be excused from program prerequisite requirements, the student must otherwise complete all course prerequisites prior to enrollment in the given course.
- 4. Admission to nondegree/noncertificate status will be based on the applicant's objective, the appropriateness of the course sought to meet the objective, the applicant's academic qualifications, and the space available, if any, in the course in question.

#### **Application Procedures:**

- 1. Obtain an Application for Admission Form from the Office of Student Affairs. Telephone (501) 686-5730, or go to the College Webpage. www.uams.edu/chrp
- 2. Return the completed application, with a nonrefundable application fee of \$10.00 to the address listed on the form.
- 3. If requested by the chairman of the department, arrange for all colleges and universities attended to forward an official transcript to the Office of Student Affairs. If no college/university level course work has been completed, arrange for each high school attended to forward an official transcript to the Office of Student Affairs.
- 4. Forward to the Office of Student Affairs a letter outlining the course(s) sought and the objective to be achieved through completion of the course(s).

5. Forward to the Office of Student Affairs a signed statement that indicates the applicant has read, understands, and agrees to the requirements governing nondegree/noncertificate applicants. A standard form is available from the Office of Student Affairs for this purpose.

#### HIGH SCHOOL SENIORS

**Minimum Criteria:** The College of Health Related Professions welcomes qualified high school seniors to enroll on a space-available basis in specified courses as nondegree/noncertificate students (see criteria and procedures in the preceding section). The following conditions apply:

- 1. Each student must be recommended by the principal of the high school in which the student is enrolled.
- 2. The student must document that his/her score on the portion of the ACT, PSAT, or SAT in the subject matter area of the course(s) is at the 80th percentile or higher based on national norms. If the subject matter area is not related to a portion of one of these tests, a composite score no less than the 80th percentile will be required. Scores may be documented on an official high school transcript or sent directly from the testing agency.
- 3. The student must document (via an official high school transcript) a grade point average (GPA) of at least 3.5 (on a 4.0 scale) in high school courses in the relevant subject matter or a cumulative grade point average (CGPA) of at least 3.5.
- 4. Exceptions to any part of the above policy are considered on an individual basis.

#### APPLICANTS FOR A CHRP BACCALAUREATE DEGREE WHO ALREADY HOLD A CHRP ASSOCIATE DEGREE OR CERTIFICATE IN THE SAME DISCIPLINE

**Minimum Criteria:** The following conditions apply to applicants who have completed a certificate or an associate's degree in a CHRP discipline and want to complete the next highest award (*i.e.*, the associate's or the baccalaureate degree) in the same discipline.

1. If a degree plan for the next highest award was filed while the student was enrolled in the initial program, the student must complete the remaining requirements within the time limits specified in the degree plan, forward official transcripts which verify the completion of all requirements, file an application for graduation, and pay the graduation fee. The application and fee for graduation must be received by the College Registrar at least 30 days prior to the end of the semester in which the student wants to graduate. If the student wants to participate in the annual UAMS Commencement, the application and fee for graduation must be received by the Registrar no later than January 31 of the year in which the commencement exercises are to occur.

If a degree plan was not filed, or if one was filed, 2. but requirements were not completed within the specified time limits, the former CHRP student must apply for admission to the program which offers the next highest degree award. Upon acceptance, the student must complete a degree plan in accordance with the degree requirements stated in the catalog in force at the time of the most recent admission. To ensure that these students will have knowledge and skills comparable to those with whom they graduate, the admitting department evaluates each applicant's level of knowledge and clinical In addition competence. to catalog current standards for the requirements, profession will be used to determine if any general education, science, or professional courses are necessary. The degree plan will include these additional requirements. Upon completion of all requirements specified in the degree plan, the student must arrange for official transcripts, file an application for graduation, and pay the graduation fee. The application and fee for graduation must be received by the College registrar at least 30 days prior to the end of the semester in which the student wants to graduate. If the student wants to participate in the annual UAMS Commencement, the application and fee for graduation must be received by the Registrar no later than January 31 of the year in which the commencement exercises are to occur.

#### FOREIGN APPLICANTS

**Minimum Criteria:** As nearly **all undergraduate applicants** who complete the application process must be interviewed as part of the selection process, the College of Health Related Professions encourages prospective foreign students residing outside the United States to apply first for admission to a general college or university in this country, complete any science and/or general education prerequisite requirements that they lack, then apply for admission to the College of Health Related Professions. Foreign students who meet the other requirements and who **present themselves for an interview, if invited,** will be considered for admission.

All applicants who are not United States citizens or permanent resident aliens or for whom English is not their native language must meet the following admission requirements in addition to those stated in the Program Information section of the College's catalog.

- If an applicant is basing his/her eligibility on credits from a foreign university, the official transcript or copy must first be evaluated by the Education Credential Evaluators, Inc., P.O. Box 514070, Milwaukee, WI, 53203-3470. An official copy of the evaluation from the Education Credential Service must be submitted with the application. A fee list and application forms for this service may be obtained from the above agency.
- A total score of at least 570 on the Test of 2. English as a Foreign Language (TOEFL) or the equivalent score of 230 on the computer version, with no less than 55 on the paper version or 20 on the computer version in each of the three subtest scores (listening, structure/writing, and reading) that comprise the total score must be earned for the applicant to be eligible for consideration for admission. An official report of these scores must be received by the College of Health Related Professions prior to the date(s) on which admission decisions are made for the program(s) to which the applicant has applied. To obtain the Bulletin of Information to register to take the TOEFL, write directly to: The Education Testing Service, P.O. Box 6151, Princeton, New Jersey 08541-6151, U.S.A. The applicant should indicate on his/her application for the examination that results should be sent to institution code number #R6901-3. A student may petition for waiver of the TOEFL requirement if he/she has completed all primary, secondary, and higher education in the United States or one of its Englishspeaking protectorates.
- 3. There are currently no student aid funds available at UAMS to support foreign students. Completion of a financial affidavit and documentation indicating that the applicant has sufficient funding to pay for his/her educational and personal expenses while enrolled are required. The United States Department of Justice's Immigration and Naturalization Service Affidavit of Support form must be used. It currently costs a student with no dependents approximately \$25,000 in United States currency for each full calendar year (12 months) of study.
- 4. Because accidents and sickness can require expenses for which many persons are not prepared, all students are required to purchase health insurance through a program approved by the University of Arkansas for Medical Sciences or an equivalent coverage from a private source. Applicants who choose not to purchase appropriate insurance will not be allowed to register.

5. Those applicants selected for admission must arrange through the Immigration and Naturalization Service of the United States Department of Justice for the transfer of their Certificate of Eligibility (I-20) to the University of Arkansas for Medical Sciences.

In admissions reviews, first consideration is given to Arkansas residents. In recognition of the significant support of CHRP programs by private and federal health care facilities, however, highly qualified applicants who are residents of another state or citizens of a foreign country may successfully compete for admission.

#### **REAPPLYING TO THE COLLEGE**

Students who have been denied admission, withdrew their application prior to an admission decision being made, or were admitted but decided not to matriculate must reapply the next year with a new application and may not need to pay another application fee. Students who reapply must submit a request in writing to the Office of Student Affairs. Students may be required to provide additional documentation in support of their candidacy. If more than one year has passed since the original application, students must file a new application, pay the application fee, and, if accepted, pay the enrollment deposit of \$50.00. Each department or program has a readmission policy. Contact the department chairman for specific requirements for readmission.

#### **EVALUATION OF TRANSCRIPTS FOR TRANSFER**

Only officially signed and sealed transcripts received directly from another academic institution are accepted for evaluation by the College. Transcripts are evaluated for:

- 1. Course subject and content equivalency to the department requirements.
- 2. Grade point acceptability per credit. Only courses in which a grade of C (2.0 on a 4.0 scale) or higher was earned are accepted in transfer.
- 3. Course content equivalency to degree requirements. Only courses that count toward the total credits for a degree at the institution offering the courses will be accepted in transfer ("remedial" and "developmental" courses are not acceptable). Not more than one course in the following group will be accepted in transfer to meet degree requirements: band, studio, physical education, military science, English as a second language (ESL), manual skills.
- 4. Accreditation of institution. Transfer credit is granted only for course work completed at a regionally accredited institution of higher education.

Applicants must include complete records of course work from all institutions attended. In no case is the application process complete until all official transcripts are on file. Upon request, an appropriate catalog for the years covered by a transcript must be submitted before evaluation can take place. Applicants who have attended another college on the UAMS campus but did not graduate must submit a letter from that College stating that they are eligible for readmission to that program.

#### ADVANCED PLACEMENT

The following mechanisms for advanced placement in a program may be available. Contact the respective department chairman for additional information.

**Program Evaluation:** A department's admissions committee may sometimes recommend advanced placement upon consideration of an applicant's background and experience, subject to approval by the Dean.

**Military Service:** A student who has been in active military service may submit a copy of his/her separation notice for possible award of credit for satisfactory completion of relevant course work taken as part of military training.

**Credit by Examination and Correspondence:** With departmental approval, credits established by examination and/or correspondence appearing on an official transcript of a regionally accredited college or university may be transferred to fulfill elective and general education requirements with the exception of speech and laboratory science courses.

A maximum of 15 semester credits (SC) earned by examination may be applied to meet certificate and associate's degree program requirements. A maximum of 30 SC earned by examination may be applied to meet baccalaureate program requirements. A maximum of nine (9) SC earned by correspondence, not more than six (6) of which may be earned from an institution outside of the University of Arkansas system, may be applied to meet certificate, associate's degree, or baccalaureate elective and general education program requirements. (Internet courses are not considered correspondence courses and can be applied to meet program requirements if they are earned from regionally accredited institutions and are included on official transcripts from the institutions.)

**Credit by Challenge Examination of Professional Courses:** A student who is enrolled in or admitted to a department in the College may establish professional credit by challenge examination in courses approved by the department. Such credit will be limited to a maximum of 25% of the total professional credits required for the specific certificate or degree. Professional credits may not be established by CLEP or correspondence credit. A fee of one-half of the SC registration fee will be charged for courses challenged by examination.

When credits are earned by challenge examination, "CR" will be entered into the student record. This credit will not be used in computing GPA or CGPA.

The total semester credits established by correspondence, CLEP, and challenge examinations are limited to 25% of the total credits required for the specific certificate or degree.

### ACADEMIC REGULATIONS

#### **COURSE LOAD**

The maximum load is 20 semester credits for the Fall or Spring Semester, and a total of sixteen (16) SC for the Summer Sessions. To take a course load exceeding the maximum, approval by the department chairman is required.

Students may enroll for classes on other campuses in the University of Arkansas system as a part of their normal course load, but such concurrent enrollment must be approved by the appropriate CHRP department chairman prior to registration.

Students receiving financial aid through student loans, grants, or Department of Veterans Affairs benefits are required to maintain specified course loads to continue eligibility for aid. For specific information about loans or grants, students should contact: **Director of Student Aid, University of Arkansas for Medical Sciences, Room 3U/04. Telephone: (501) 686-5454.** For specific information about Department of Veterans Affairs benefits, students should contact the **CHRP Office of Student Affairs, Room 1S/04. Telephone: (501) 686-5730**.

#### REGISTRATION

Formal admission by the department/college as well as completion of registration in accordance with instructions issued by the Office of Student Affairs is a prerequisite to class attendance. Registration after the close of the announced registration period requires the payment of a late registration fee of ten (10) percent of the applicable tuition. Registration is not permitted after the fifth day of classes. A student is not considered registered until the appropriate forms have been filed with the CHRP Office of Student Affairs and payment or special arrangements regarding tuition and fees have been made with the UAMS Treasurer.

#### **CHANGE OF REGISTRATION**

A student may change registration (add or delete a course) only by written request on the appropriate form with approval by the department chairman and filed with the CHRP Office of Student Affairs. A \$10.00 fee per change will be charged to the student.

#### **REPEATING A COURSE**

When a course is repeated, the grade earned in the repeated course is used to assess the student's fulfillment of the academic plan. Though all enrollments, original and repeated, will be shown on the student's transcript, only the grade in the repeated course (even if it is lower than the first) will be used to calculate the cumulative grade point average.

#### WITHDRAWAL

A student withdrawing from one or more courses will pay a \$10 fee for each course. A student withdrawing from the University must sign the Student Action Form, complete the Student Clearance Certificate, and have an exit interview with a staff member in the College's Office of Student Affairs. If a student does not formally withdraw by following the above procedures, a grade of "F" will be assigned in all courses in which the student has not completed all requirements.

#### WITHHOLDING OF GRADES AND TRANSCRIPTS

The Registrar is authorized to withhold grades and transcripts and refuse registration to any student or former student or who fails to complete a degree plan in the first semester of attendance in a program, or who fails to return return athletic, military, library, or other University property entrusted to his or her care, or who fails to comply with rules governing the audit of student organization accounts, or who has failed to pay any fees, tuition, room and board charges, fines or other charges assessed against him or her by a University official or by the campus judicial system, or who fails to officially withdraw from the University prior to graduation.

#### GRADUATION

The student must file an application for graduation and pay the graduation fee at least 30 days prior to the end of the semester in which the student wants to graduate. If the student wants to participate in the annual UAMS Commencement, the application for graduation and the graduation fee must be received by the Registrar no later than January 31 of the year in which Commencement occurs. Forms are provided for this purpose at registration and may also be requested from the CHRP Office of Student Affairs.

Students must complete by the end of Spring Semester all degree or certificate requirements, except for professional (*i.e.*, CHRP) courses that will be taken in the following summer session, in order to be eligible to participate in Commencement as a candidate for that degree or certificate. All transcripts should be forwarded to the CHRP Registrar prior to the end of the semester in which the student is scheduled to graduate. Only transcripts sent directly from the institution are official. <u>Transcripts mailed or hand-delivered by students are not acceptable</u>.

At the conclusion of the semester in which degree/certificate requirements are completed, the student must complete the Student Clearance Certificate. Failure to do so will result in withholding of grades, transcripts, and diploma. Degrees are awarded by the University on designated dates each Fall, Spring and Summer. Diplomas are issued on those dates.

#### **CLASSIFICATION OF COURSES**

A four-digit numbering system is used to classify each course. The first digit identifies the level of the course content (difficulty of course content, not necessarily the year in which the course is taught): 1 for freshman; 2 for sophomore; 3 for junior; 4 for senior; 5, 6, or 7 for graduate. The second digit is the number of semester credit hours. (Courses with greater than nine [9] semester credit

hours will be identified by the letter "X" in place of the second digit.\* Courses with a variable number of semester credit hours will be identified by the letter "V" in place of the second digit). The third and fourth digits are assigned by the department to identify specific courses.

\*In cases where the letter "X" replaces the second digit, the number of semester credit hours will be indicated in the course descriptions.

#### **CREDIT HOURS**

The standard unit of measurement for course work in the College is the semester credit. One semester credit hour is equal to 750–800 minutes of classroom instruction, 2250–2400 minutes of laboratory instruction, or 3750–4000 minutes of clinical instruction.

#### **CHANGE OF NAME/ADDRESS**

The student must report in writing any change in his/her name or address to the department chairman and to the CHRP Office of Student Affairs within ten (10) days of the change.

#### **GRADES AND MARKS**

#### Grades

Final course grades are recorded and preserved in the Office of Student Affairs. The following Grades and Grade Point (GP) values are used in the College:

| GRADE | DENOTATION    | GP |
|-------|---------------|----|
| А     | Outstanding   | 4  |
| В     | Above Average | 3  |
| С     | Average       | 2  |
| D     | Poor          | 1  |
| F     | Failure       | 0  |

The grade of "A" is given for superior achievement to excellent scholars. "B" represents above average achievement. "C" represents average achievement. "D" (poor achievement) is considered the minimum passing grade; while academic credit is awarded for a D grade, some CHRP departments (see departmental policies) do not accept D grades for progression into subsequent semesters. (Note that a minimum of a 2.0 Cumulative Grade Point Average is required in order to qualify for graduation, and similar standards described in the following pages apply to progression as well. Departments reserve the right to establish higher standards.) The grade of "F" denotes failure and is given for unsatisfactory performance. No credit is earned for courses in which the grade of F is recorded.

**GPA:** Grade Point Average (GPA) refers to the average Grade Point (GP) value achieved in graded courses in a given semester. Only courses in which regular letter grades (see above) are earned are used in GPA calculations. To calculate the GPA for a semester, the number of grade points for each letter grade earned is multiplied by the number of credit hours for that course, and the products are summed for all graded courses in the given semester. This sum of weighted grade points is then divided by the total number of graded credit hours for which the student was registered, and the subsequent quotient is the GPA.

**CGPA:** Cumulative Grade Point Average (CGPA) refers to the average Grade Point (GP) value achieved in all graded courses appearing on the CHRP transcript. Only courses in which regular letter grades (see above) are earned are used in CGPA calculations. CGPA is calculated similarly to the calculation of GPA (above), except that all graded courses on the transcript are used in the calculation.

**PGPA:** Program Grade Point Average (PGPA) refers to the average Grade Point (GP) value achieved for the CHRP courses taken in a given program. Only courses in which regular letter grades (see above) are earned are used in PGPA calculations. PGPA is calculated similarly to the calculation of GPA (see above) except that only graded courses taken in the program at UAMS/CHRP are used in the calculation.

In determining "Candidates for Undergraduate Degrees with Honors," all grades recorded on the CHRP transcript will be utilized. This includes all professional and concurrent course grades and grades in all courses accepted in transfer. Undergraduate students with a CGPA equal to at least 3.5 will be identified as graduating with "Honors" while those with a CGPA of at least 3.7 will be identified as graduating with "High Honors."

#### Marks

The following marks are used in the College:

| MARK | DENOTATION       |
|------|------------------|
| I    | Incomplete       |
| IP   | In Progress      |
| AU   | Audit            |
| CR   | Credit           |
| NC   | No Credit        |
| S    | Satisfactory     |
| U    | Unsatisfactory   |
| W    | Withdrew         |
| WP   | Withdrew Passing |
| WF   | Withdrew Failing |

A mark of "I" may be assigned to a student who has not completed all course requirements, but has demonstrated work of passing quality. It is the student's responsibility to arrange completion of the course requirements with the instructor. The "I" mark must be removed from the student's transcript by the last day of the semester subsequent to the scheduled completion of the course, or it is automatically replaced by the grade of "F." An extension of time past the the last day of the semester subsequent to the scheduled completion of the course is permitted only in unusual circumstances and must be approved in advance by the course instructor and department chairman. Students who are members of military reserve or national guard units who must arrange an "I" as a result of activation authorized by the President of the United States are governed by a separate policy (see Military Duty Policy in the CHRP Student Handbook).

For a course requiring more than one semester to complete and where evaluation of the student's performance is deferred until a subsequent semester, a mark of "IP" may be assigned for the initial semester (the student does not register for the course in question during subsequent semesters while completion of assignments is in progress). The "IP" mark will be replaced by the final course grade when the student completes all course requirements.

A mark of IP:

- 1. May be assigned only in a course officially designated for such a mark.
- 2. May persist on a student's transcript for no more than three consecutive semesters in a given course, including summer session.
- 3. Must be replaced by a letter grade on the student's transcript by the last day of the fourth consecutive semester or it will be automatically replaced by the grade of "F". [An extension of time to remove the mark of "IP" past the last day of the fourth semester for the course may occur only in unusual circumstances and must be approved in advance by the course instructor and department chairman.]

The mark of "AU" (audit) denotes participation in a course for which no grades are assigned nor credit given. Students auditing a course pay full semester credit fees. Entry into an audited course and scoring of examinations while enrolled are at the discretion of the instructor. Neither grade points nor credits are assigned upon completion of audited course work.

The marks "CR" (credit) and "NC" (no credit) may be used in seminar and CHRP elective courses. Performance in courses taken CR/NC is rated as credit (C or higher level work) or no credit (D or F level work). CR is also used in denoting successful challenge of a course by examination. Courses with marks of CR or NC are not computed in a student's CGPA.

The marks "S" (satisfactory) and "U" (unsatisfactory) may be used in practicum and clinical courses. Courses offered only on a S/U basis are so designated in this Catalog. Performance in courses taken S/U is rated as satisfactory (C or higher level work) or unsatisfactory (D or F level work). A mark of U in a required course precludes progression to the next semester. Courses taken under the S/U option are not computed in a student's CGPA.

The marks of "W," "WP," or "WF" will be assigned upon official withdrawal from a course. W is assigned up to the midpoint of a course. Afterwards, either WP (Withdrew Passing) or WF (Withdrew Failing) is assigned until the date of the scheduled final examination for the course. At that time, a grade of F is assigned where official withdrawal procedures have not been completed (for students who have not finished course requirements nor completed arrangements for assignment of a temporary mark of "I" for the course). Students who repeat a course will have only the last grade received used in computing GPA and CGPA. Students requiring additional information should contact their department chairman.

**Inspection of Records:** Students may review their academic records which qualify as "educational records" under the Privacy Act. Exceptions are:

- Personal notes of faculty/staff
- Employment records
- Medical and counseling records used solely for treatment
- Department of Public Safety records
- Financial records of parents
- Confidential recommendations regarding admission, employment, or honorary recognition

#### ACADEMIC REQUIREMENTS

**Progression:** For a student to progress in a CHRP professional program from one semester to the next, including progression from one year to the next, each semester he/she must achieve a grade of "C" or higher in all professional courses designated by the respective program (see individual departmental sections of this catalog) as prerequisite to progression to subsequent course work. In addition, students are required to maintain a program grade point average (PGPA) of at least 2.0 with the following stipulations:

- 1. A **first semester** student who meets the specific course grade(s) and other program requirements but has **not** maintained a PGPA of 2.0 for all courses taken since entering the program **will** be allowed to progress **on probation** to the second semester. Since a student cannot be on probation for two consecutive semesters, however, a student on probation because of insufficient PGPA at the end of the first semester must raise his/her PGPA to at least 2.0 by the end of the next (probationary) semester in order to remain in the program. Students failing to do so will be dismissed from the College.
- 2. For a student who is in the **second or subsequent semester** of a program to continue to progress, however, he/she must maintain a PGPA of not less than 2.0 for all courses taken since entering the program, including both professional and concurrent courses. These students, therefore, are not eligible for probation if their PGPA falls below 2.0 (eligibility for probation on other grounds is described elsewhere in this catalog, in the CHRP Student Handbook, and in various program materials). Students who fail to meet this requirement will be dismissed from the College.

Academic Probation and Dismissal: A student who fails to achieve a GPA of at least 2.0 in any given semester will be placed on academic probation for the following semester, providing that student meets the CHRP Progression Requirements (see above). At the end of the probationary semester:

- 1. Students who achieve at least the minimum CGPA will be reinstated in good standing.
- 2. Students who fail to achieve at least the minimum CGPA (*i.e.*, 2.0) will be dismissed from the College.

Departments reserve the right to impose more stringent requirements beyond these minimal provisions for the College as a whole. Students who fail to meet departmental regulations pertaining to academic standing will be placed on academic probation or dismissed and are subject to the policies regarding progression within their respective departments to regain or retain student status.

**Denial of Entry into Clinical Phases:** A grade of C or higher is required for designated courses which are prerequisites to subsequent clinical course work. Students failing to achieve this requirement may be denied entry into subsequent course work.

**Drug Testing and Criminal Background Checks:** A critical part of health professions education involves learning experiences in hospitals and other health care facilities. Use of these facilities for instruction is essential, and students must be able to complete their assigned rotations. Many hospitals and health care facilities have policies requiring drug testing and/or criminal background checks for employees, students, and volunteers. Facilities that provide instruction to College of Health Related Professions students may have, or may adopt in the future, drug testing and/or criminal background checks for employees students who test positive for drugs, or who have certain types of information in their criminal background checks, are ineligible to work in that facility.

Because the use of these health care facilities is part of the curriculum and essential to health professions education, students should be prepared to comply with the policies and procedures at any facility where they engage in rotations or other learning experiences. Students may not request facility assignments in an effort to avoid criminal background checks or drug screening requirements. Students may not refuse to participate in educational activities at these facilities because they do not want to submit to drug testing and/or criminal background checks. Students who fail to attend assigned activities, or who are terminated from rotations in these facilities because they violate the drug testing or drug use policies of the facilities, or who are found to have objectionable information in their criminal background checks, will be unable to complete the college requirements for graduation and will be subject to dismissal from the College of Health Related Professions on academic grounds.

**Clinical Probation and Dismissal:** Since patient well-being is a major concern of the University, action will be taken when a student's clinical practice poses a potential threat to patient health, welfare, or safety. Students, therefore, are subject to the department's specific regulations governing clinical practice and may be placed on clinical probation by the department and/or dismissed from the department and the College for unsatisfactory clinical behavior as defined by his/her department. The specific regulations are contained in the respective departmental handbook and/or clinical course syllabi and distributed to students prior to their entering the clinical area.

### CERTIFICATE AND DEGREE REQUIREMENTS

**Preprofessional and Professional Course Requirements:** Students enrolled in certificate or degree programs in the College of Health Related Professions must complete both Preprofessional and Professional program components in order to graduate.

**Preprofessional Course Work:** Course work required as a prerequisite for admission, varies by program but is a required program component for most certificate and degree programs of the College. Students should consult the individual program section of the CHRP catalog for specific program information.

**Professional Course Work:** Course work required as part of each student's program area or area of specialization, also varies by program. For certificate, associate's, and bachelor's degree programs, students must complete at least 32 SC of professional course work in residence at the College.

# GENERAL EDUCATION COURSE REQUIREMENTS

Students enrolled in associate's and bachelor's degree programs, in addition to preprofessional and professional course requirements, must also fulfill a general education component for graduation. General education requirements for both associate's and bachelor's degree programs are outlined below.

Associate's Degree General Education Requirements: A minimum of 23 SC of general education course work is required for graduation and must include:

| Area                                    | Semester Credits   |
|---|--------------------|
| COMMUNICATION<br>Speech                 | 2                  |
| LIBERAL ARTS                            |                    |
| English Composition                     | 6                  |
| American History or National Govern     | ment <u>3</u><br>9 |
| SOCIAL SCIENCES                         |                    |
| Sociology                               | 3                  |
| Psychology                              | <u>3</u><br>6      |
|   | 6                  |
| HUMANITIES                              | 3                  |
| FINE ARTS                               | 3                  |
| COMPUTER SCIENCE                        |                    |
| Computer Fundamentals/Applications      | 3                  |
| MATHEMATICS                             |                    |
| College Algebra (or higher level mathem | atics) <u>3</u>    |
| TOTAL                                   | 29*                |

Under Arkansas law or regulations, no associate's degree may be granted without a three (3) SC course in American history or national government, a three (3) SC course in computer fundamentals/ applications, and a three (3) SC course in college algebra or higher level mathematics. It is recommended strongly that prospective CHRP students contact the CHRP program of their interest to determine the acceptability of all preprofessional and general education courses before enrolling in them.

The student entering with a baccalaureate or higher degree from an accredited college or university must complete the following requirements for a CHRP associate's degree: (a) 32 SC in residence; (b) all specific program mathematics, biological and physical science prerequisites; (c) all program-specific professional requirements; (d) if not completed as part of a previous degree program, a three (3) SC college/university course in American history or national government, a three (3) SC course in computer fundamentals/applications, and a three (3) SC course in college algebra or higher level mathematics.

\*The additional courses required in Humanities and Fine Arts apply to programs established after 2000. (See department listing for specific requirements.)

**Bachelor's Degree General Education Requirements:** A minimum of **32 SC** of general education course work is required for graduation and must include:

| Area  | Semester Credits         |
|---|--------------------------|
| COMMUNICATION<br>Speech   | 2                        |
| FINE ARTS*<br>Art (including architecture and film),<br>Music, or Theatre Art | 3                        |
| HUMANITIES**  |                          |
| Philosophy, Political Science, Literatu<br>or Humanities                      | ire,<br>3                |
| LIBERAL ARTS  |                          |
| English Composition   | 6                        |
| History of Civilization or World Histo  | ory 6                    |
| American History or National Govern   | 15 ment                  |
| SOCIAL SCIENCE***   |                          |
| Sociology, Anthropology, Geography,<br>Economics, or Psychology               | , 6                      |
| MATHEMATICS<br>College Algebra (or higher level math                          | (ematics) $\frac{3}{32}$ |
|   |                          |

\*The Fine Arts requirement cannot be fulfilled with a studio course.

\*\*Humanities requirements may be selected from the courses in the subject areas of philosophy, political science, literature and the humanities. The course in National Government, if selected to meet the US History/National Government requirement, cannot also be used to meet the Humanities requirement in Political Science. Acceptable courses in literature must be broad survey courses; world literature is especially recommended.

\*\*\*The CHRP departments/programs of Dental Hygiene, Medical Dosimetry, Radiation Therapy, Radiologic Technology, and Respiratory Care require sociology (3 SC) and psychology (3 SC) to fulfill the Social Science requirements.

For those students coming to the college from out-of-state schools, these general education requirements must be completed as part of their preprofessional course work.

Under Arkansas law or regulations, no baccalaureate degree may be granted without a three (3) semester credit (SC) course in American history or national government, a three (3) SC course in college algebra or higher level mathematics, and a three (3) SC course in either philosophy or the humanities. Students entering with a baccalaureate or higher degree from an accredited college or university must complete the following requirements for a CHRP bachelor's degree: (a) 32 SC in residence; (b) all program-specific mathematics, biological and physical science prerequisites; (c) all program-specific professional requirements; (d) if not completed as part of a previous degree program, a 3 SC college/university course in American history or national government, a 3 SC course in college algebra or higher level mathematics, and a 3 SC course in humanities.

It is strongly recommended that prospective CHRP students contact the CHRP program of their interest to determine the acceptability of all preprofessional and general education courses before enrolling in them.

#### **REQUIREMENTS FOR PROGRAM COMPLETION**

**Certificate Programs:** Students enrolled in certificate programs of the College must successfully complete approved preprofessional and professional course work composed of at least 32 SC.

Associate's Degree Programs: A minimum of 64 approved SC of preprofessional, professional, and general education course requirements must be successfully completed in order for a student to be awarded an associate degree.

**Bachelor's Degree Programs:** Students are required to complete successfully at least 124 SC of approved preprofessional, professional, and general education course work in order to be eligible for graduation in a bachelor's degree program in the College. In addition, at least 45 SC of the total must be taken from upper-level (*i.e.*, 3000 and 4000: junior and senior) courses.

The above semester hour requirements for program completion are the College's minimum requirements and do not represent specific degrees. Individual programs in the College may require additional semester credit hours.

# FINANCIAL INFORMATION

### FEES

Shown below are fees for **2006-07**. Fees are subject to change without notice by action of the Board of Trustees, so contact the department chairman <u>prior to registration</u> to learn the exact fees. **Note that payment of all fees is due upon registration**.

#### **REGISTRATION FEES**

Undergraduate and graduate students enrolled in CHRP programs, including post-bachelor's degree certificates and the M.I.S. and Au.D. degree programs, pay an hourly rate for tuition. Graduate students enrolled in the UAMS Graduate School, including M.S. and Ph.D. degree programs, and who are enrolled in 9 SC or fewer pay an hourly rate, with 10 SC or more considered a full-time load.

|               |                   | Fee/Semester     |
|---------------|-------------------|------------------|
| Status        | Classification    | Credit           |
| Undergraduate | Arkansas Resident | \$162.00-170.00* |
| Undergraduate | Non-resident      | \$391.00         |
| Graduate      | Arkansas Resident | \$252.00-257.00* |
| Graduate      | Non-resident      | \$540.00-555.00* |

\*Tuition rates vary by program. Please contact the department of the individual programs to determine tuition rate.

**Note:** Some undergraduate CHRP programs admit only full-time students (at least 12 SC).

For the latest information on registration fees, please call the CHRP Office of Admissions (501) 686-5730.

The classification of Arkansas resident vs. non-resident is determined on the basis of the legal domicile of students. In general, an applicant must be a *bona fide* resident of Arkansas for at least six (6) consecutive months prior to registration to be classified as a resident student. Complete regulations and forms for requesting a change in classification may be obtained from the **Office of the Vice Chancellor for Academic Affairs. Telephone: (501) 686-5689.** 

Native Americans in other states belonging to tribes which formerly lived in Arkansas before relocation, and whose names are on the rolls in tribal headquarters, shall be classified as in-state students of Arkansas for tuition and fee purposes (but not for consideration for admission) on all campuses of the University of Arkansas. Tribes so identified include the Caddo, Cherokee, Choctaw, Osage, and Quapaw.

For off-campus programs, students residing in certain counties in Texas, Mississippi, Louisiana, and Oklahoma may be eligible for in-state tuition and fees (but are not considered Arkansas residents for purposes of admission). For more information about registration fees, contact the CHRP Office of Student Affairs, S1/05 Shorey Building. Telephone: (501) 686-5730.

University Administrative Memorandum 540.1 allows waiving of tuition and fees for dependents of Arkansas citizens who are prisoners of war or missing or killed in action. "Dependent" means a spouse of prisoner of war or person declared to be missing or killed in action, or any child born before or during the period of time its father served as a prisoner of war or was declared a person missing or killed in action, or any child legally adopted or in the legal custody of the father prior to and during the time the father served as a prisoner of war or was declared to be a person missing or killed in action. Contact the Dean's Office for details.

#### **SPECIAL FEES**

Special fees, subject to change, which may be charged by the College are as follows:

| Application Fee\$10.00                                    |
|---|
| Drop/Add Fee per course\$10.00                            |
| Duplicate Transcript Fee \$2.00                           |
| Graduation Fee (Certificate, AS and BS)\$50.00            |
| Student Health Fees\$100.00                               |
| Technology Fee\$75.00                                     |
| Late Registration Fee 10% of applicable tuition           |
| Anatomical Rental Fee\$11.00/semester                     |
| Microscope Rental Fee\$100.00/year                        |
| Credit by Examination Fee $\ldots$ of SC registration fee |
| Student Liability Insurance\$15.00–75.00/year,            |
| depending upon program                                    |

The application fee is assessed to defray costs associated with initiating and maintaining applicant records and must accompany the application form.

The first transcript is provided without cost to the student. The duplicate transcript fee applies to subsequent transcript requests.

#### HOUSING

On-campus housing for students is not available at UAMS at this time. A new student residence hall is planned for completion for fall 2006 (see: <a href="https://www.uams.edu/studentlife/student\_housing.asp">www.uams.edu/studentlife/student\_housing.asp</a>). Information regarding housing options may be found at the UAMS student activities and housing Webpage at: <a href="https://www.uams.edu/studentlife/default.asp">www.uams.edu/studentlife/default.asp</a>.

For further information contact: Director of Student Activities and Housing, University of Arkansas for Medical Sciences, 4301 West Markham, Slot 536, Little Rock, Arkansas 72205. Telephone: (501) 686-5850.

#### LABORATORY FEES

Laboratory fees are charged by some departments and vary by semester and program as follows:

| Department/Program                          | Fall     | Spring  | Summer  |
|---|----------|---------|---------|
| Audiology and Speech Pathology              | \$50.00  | \$50.00 | \$50.00 |
| Cytotechnology                              | \$30.00  | \$30.00 | \$30.00 |
| Dental Hygiene                              | \$50.00  | \$50.00 | \$50.00 |
| Diagnostic Medical Sonography               | \$25.00  | \$25.00 | _       |
| Dietetics and Nutrition*                    | _        | \$75.00 | _       |
| Dietetic Internship                         | \$25.00  | \$75.00 | _       |
| Emergency Medical Sciences                  |          |         |         |
| (Paramedic)                                 | \$25.00  | \$25.00 | \$25.00 |
| Emergency Medical Sciences (EMT)            | \$40.00  | \$40.00 | _       |
| Health Information Management               | \$40.00  | \$40.00 | \$40.00 |
| Medical Dosimetry                           | _        | _       | _       |
| Medical Technology                          |          |         |         |
| (Junior year only)                          | \$25.00  | \$25.00 | _       |
| Nuclear Medicine Imaging Sciences           | \$30.00  | \$30.00 | \$30.00 |
| Ophthalmic Medical Technology               | _        | _       | _       |
| Radiation Therapy                           | _        | _       | _       |
| Radiologic Imaging Sciences                 | \$30.00  | \$30.00 | \$30.00 |
| Radiologist Assistant **                    | \$100.00 | _       | _       |
| Respiratory Care (B.S.) (Junior year, only) | \$40.00  | \$40.00 | _       |
| Surgical Technology                         | \$80.00  | —       | —       |
| *This fac is smalleship for students w      |          |         | F110    |

\*This fee is applicable for students registering for NUTR 5112 or 5233.

\*\*Semester may vary depending on when courses are offered.

#### **ENROLLMENT DEPOSIT**

Although not a fee, an enrollment deposit of \$50.00 is due upon acceptance into the College and is not refundable, but is applied to the first term tuition. (Contact the department chairman for further information.) If a student who has been accepted has submitted the enrollment deposit and is unable to enroll, the deposit will be held for application to the first term tuition of the next year should the student reapply and receive acceptance. If more than one year has passed, the deposit is forfeited.

#### **REFUND OF FEES**

Students officially withdrawing may be eligible for a refund calculated as a percentage of the registration fees. (See next column for definition of class days.) Such refunds are determined according to the schedules below. Special fees are not refundable. Refund of housing deposits and overpayment of rental fees are made after the occupant has checked out of University Housing and after all Housing Policy requirements have been met.

Students officially withdrawing from the University during a Fall or Spring semester shall be entitled to a refund of registration fees as follows:

|   | Fraction    |
|---|-------------|
| Registration, Tuition, & Fees                   | Refunded    |
| Up to and including five class days*            | 100%        |
| From the sixth class day* - the tenth class day | 50%         |
| The eleventh class day* and after               | . No Refund |

Students officially dropping one or more courses and who continue to be enrolled in the University during a Fall or Spring semester shall be entitled to individual course refunds as follows:

|   | Fraction  |
|---|-----------|
| Registration, Tuition, & Fees           | Refunded  |
| Up to and including five class days*    |           |
| The sixth class day* and after $\ldots$ | No Refund |

Students who drop a course or officially withdraw from the University during a summer session shall be entitled to an adjustment as follows:

| Registration, Tuition, & FeesFractionRefunded  |
|--|
| 1-4 week courses         Prior to start of classes         After classes begin         No Adjustment |
| 5-6 week courses<br>Prior to start of classes  |
| 7–9 week courses<br>Prior to start of classes  |
| <b>10–12 week courses</b> Prior to start of classes  |
| The date you file a completed Application for Official   |

Withdrawal at the Dean's Office governs the amount of your refund. An Application for Official Withdrawal is not considered complete without all necessary signatures.

\*Class days start on the date shown on the General College Calendar, and for purposes of refunds, the number of class days specified above refer to the number of calendar days following the day on which classes started (exclusive of weekends and holidays) regardless of how many, if any, class sessions in a particular course were held.

Withdrawing from a course without doing so officially will adversely affect your transcript and grades. See the section on Grading for details.

### **INSURANCE**

Health Insurance: Students admitted to a CHRP degree or certificate program must file evidence of health insurance coverage with the University each semester before registration is considered complete. Students may purchase coverage through the University group plan or sign a form attesting to insurance coverage through a private source for the academic year. If the dates of coverage do not extend through the academic year, the student must purchase at registration insurance which will be in force for the full year. If insurance is allowed to lapse after registration, the University will assume no responsibility for expenses incurred for health care services rendered to the student or his/her dependents.

...

Students admitted as Nondegree/Noncertificate students are strongly encouraged, though not required, to purchase health insurance if not covered through a private source. The university will assume no responsibility for expenses incurred for health care services rendered to these students or their dependents.

**Student Liability Insurance:** The College of Health Related Professions requires all students to purchase liability insurance effective during their enrollment in any course requiring active participation in a patient care setting. Students should contact the department chairman for current information regarding this requirement.

### FINANCIAL AID

The resources available to the College in any year determine how many students can be assisted and to what extent. Funds to assist students are provided by state and federal governments, philanthropic organizations, alumni, and other individuals. To be eligible for any form of financial aid, one must have been accepted for admission or be currently enrolled. Current and prospective students who plan to apply for financial aid should request the UAMS Consumer Information Guide which outlines the financial aid process, defines eligibility requirements, and gives a complete description of the various financial aid programs available. Contact: **Financial Aid Office, University of Arkansas for Medical Sciences, 4301 West Markham Street, Slot #601, Little Rock, Arkansas 72205. Telephone: (501) 686-5451.** 

The Financial Aid Office is located in Room 359-2 of the Biomedical Building 2.\* The hours are 8:00 a.m. to 4:30 p.m., Monday through Friday. It is not necessary to make an appointment to visit with the Financial Aid Officers.

In order to be considered a full-time student for financial aid purposes, undergraduate students must be enrolled in a minimum of 12 credit hours per semester (fall and spring) and six (6) semester credit hours in summer session; CHRP graduate students must be enrolled in at least 10 semester credit hours per semester (fall and spring) and six (6) semester credit hours in the summer session.

All students receiving financial aid are required to maintain satisfactory academic progress in order to continue receiving funds. If a student fails to maintain the academic progression standards set forth by the College and is subsequently dismissed, the student must petition the Financial Aid Office for any reinstatement of aid at a future date. This is done through an appeals process.

\*It is anticipated that the Financial Aid Office will relocate before the end of the spring semester, 2006. For more information, check the student financial aid Web site at: www.uams.edu/studentfinancialaid/.

#### FINANCIAL NEED DETERMINATION

The Free Application for Federal Student Aid (FAFSA) is used to evaluate the needs of students who are applying for financial assistance. This application is available in the Financial Aid Office. An attempt will be made to provide, from one source or another, the difference between the reasonable cost of attending UAMS and the amount of resources already available to the student. If aid requests exceed available funds, a selection process will be necessary to insure that the most deserving and best qualified students' needs are met first.

#### DATES OF APPLICATION

Students are encouraged to make application for financial assistance between January and March of the academic year they plan on attending (acceptance in a program of study is not required to apply for financial aid, and it is suggested that students complete the application as soon as they decide to pursue their education). Applications which are complete prior to May 1 each year will receive first consideration. All other applications will be reviewed in the sequence in which they are completed. Funds will not be disbursed prior to registration. Financial aid is not automatically renewed; therefore, students must reapply for aid every year.

#### **TYPES OF AID**

The University of Arkansas for Medical Sciences participates in the full range of financial aid opportunities to include:

| Grants: | Federal Pell Grant<br>Federal Supplemental Educational<br>Opportunity Grant<br>Arkansas Student Assistance Grant<br>Academic Challenge Scholarship<br>Governor's Scholarship |
|---------|--|
| Loans:  | Federal Carl Perkins Loans<br>Federal Stafford Student Loans<br>Federal Parent Loan for Undergraduate<br>Students  |

Employment: Federal Work Study

A detailed description concerning all aspects of these and other available programs is contained within the UAMS Consumer Information Guide which can be obtained through the Financial Aid Office.

In addition, a limited number of academic scholarships are awarded each year by the College of Health Related Professions and some of its departments. Consideration is given to scholastic merit, potential for professional development, and financial need. For information about these awards, please contact the chairman of your department.

A number of the CHRP students are eligible for the workforce education on loan forgiveness program. For information about this program, including eligible disciplines, contact the Financial Aid Office.

Also, the Financial Aid Office coordinates financial aid provided through local agencies such as the Job Training Partnership Act (JTPA). Students who are eligible to receive benefits from the Veterans Administration should contact the College of Health Related Professions VA Certifying Official (the College registrar) in the College office and their VA Regional Office representative.

## **PROGRAM INFORMATION**

### AUDIOLOGY (Au.D.) PROGRAM\* Department of Audiology and Speech Pathology

The Audiology and Speech Pathology Programs are accredited by the Council on Academic Accreditation of the American Speech-Language-Hearing Association.

Laura Smith-Olinde, Ph.D., C.C.C.-A.; Director of the Audiology Program Department of Audiology and Speech Pathology University of Arkansas for Medical Sciences University of Arkansas at Little Rock Speech, Language and Hearing Clinic 2801 South University Avenue, Little Rock, Arkansas 72204 Telephone: (501) 569-3155 E-mail: Iso@uams.edu

**Faculty:** J. Beard, B. Eaton, C. Franklin, B. Gentry, B. Gregg, T. Guyette, P. Highley, T. Hutton, D. Kelly, S. Mahurin, P. Monoson (Emeritus), J. Montague (Emeritus), N. Nicholson, C. Pelletier, S. Pine (Emeritus), G. Robinson, L. Smith-Olinde, M. Weatherton (Emeritus), R. Zraick

**Clinical Faculty:** J. Brucks, K. Douglas, C. Ford, A. Harmon, A. Hedges, C. Henderson, B. Hildebrand, L. Karpe, P. Martin, B. McWeeny, T. Sowell

Thomas W. Guyette, Ph.D., Chairman and Professor, Department of Audiology and Speech Pathology

#### THE PROFESSION

Audiologists are health care professionals who are experts in the non-medical management of the auditory and balance systems. Audiologists evaluate hearing and hearing loss; recommend, fit, and verify personal amplification systems; and assist in school-based amplification decisions as well as many other activities. Graduates of this program are prepared for positions in a variety of professional settings including hospitals and private clinics; private practice; community speech, language, and hearing centers; college and university programs; rehabilitation centers; residential institutions; school systems; and industrial settings.

#### THE PROGRAM

The Department of Audiology and Speech Pathology offers a Doctor of Audiology (Au.D.) degree program through the College of Health Related Professions at the University of Arkansas for Medical Sciences in a consortium with the College of Professional Studies at the University of Arkansas at Little Rock. This unique educational consortium combines the academic and clinical resources of a major medical sciences campus with those of a large, comprehensive, metropolitan, university. The curriculum is designed to emphasize the science of hearing, speech, and language; the acquisition of knowledge about human communication disorders; and the study and practice of methods for evaluation and treatment. Practicum experiences are provided in a number of different settings, primarily in the central Arkansas area. Two program tracks are offered to students, a post-bachelor's degree track and a post-master's degree track.

#### ACCREDITATION, LICENSURE, AND CERTIFICATION

The Au.D. degree program is accredited by the American Speech-Language-Hearing Association (ASHA). Graduates of the Au.D. program will be eligible to apply to the Arkansas Board of Examiners in Speech Pathology and Audiology for a license to practice audiology in the state. Graduates will also be eligible to apply for optional certification through the ASHA and/or for certification through the American Board of Audiology (ABA). Successful completion of the program does not itself ensure licensure and/or certification. It is the student's responsibility to be familiar with licensure and certification requirements.

#### FINANCIAL ASSISTANCE

In addition to the financial aid opportunities described in the Financial Aid Information section of the College of Health Related Professions Catalog, the department has a limited number of program-specific financial assistance opportunities; these awards do not include tuition remission or tuition waivers. Contact the department at (501) 569-3155 for further information regarding aid which may be available to qualified, full-time, audiology graduate students. For other forms of financial aid students should contact the UAMS Financial Aid Office (501-686-5451).

#### PREPROFESSIONAL REQUIREMENTS

Students applying for admission to the Au.D. program in the post-bachelor's degree track must have earned at least a bachelor's degree from a regionally-accredited college or university. If the major is in an area other than communication sciences and disorders (CSD), 12 hours of specified pre-professional undergraduate course work in CSD are required prior to admission (Phonetics, Language Acquisition, Hearing Science, Introduction to Audiology). These pre-professional undergraduate CSD courses are offered at the University of Arkansas at Little Rock. For more information on this option, contact the department.

#### APPLICATION PROCEDURES AND DEADLINES

Application for the Au.D. program is made through the College of Health Related Professions, University of Arkansas for Medical Sciences, 4301 West Markham Street, #619, Little Rock, Arkansas, 72205-7199. Completed applications and all application materials must be received by **March 1** of each year for admission the following fall semester. Earlier submission of applications is strongly recommended. Students are admitted for the fall semester only. Application procedures for the post-baccalaureate track are delineated below.

- 1. <u>All</u> application materials should be sent to CHRP-UAMS, 4301 West Markham Street, #619, Little Rock, Arkansas, 72205-7199.
- 2. The CHRP Application for Admission is required. A copy of the application can be found at http://www.uams.edu/chrp/OurCollege/Graduate Application.pdf. Please contact the department office or the CHRP Office of Student Affairs for information.
- 3. A non-refundable application fee of \$10.00 is required and must accompany the UAMS CHRP application.
- 4. Arrange for each college or university attended to forward two official transcripts to the CHRP office. Applicants whose bachelor's degree is not completed at the time of application will be considered for admission. If accepted, the applicant must submit a supplementary transcript showing completion of the degree before registration. <u>Transcripts provided to CHRP must be official and sent directly to CHRP from the issuing institution(s). A transcript "issued to the student" or received from the student is not acceptable.</u>
- 5. Three (3) letters of recommendation on the official recommendation form (http://www.uams.edu/chrp/ audiospeech/) are required for consideration for admission. References should be mentors/professors with whom you have worked and who are familiar with your ability and academic performance. Reference letters must be sent to the CHRP Admissions Office directly by the recommending individual.
- 6. Official Score-General Test of the Graduate Record Examination (GRE). Arrange for an <u>official copy</u> of your GRE score to be sent to the UAMS College of Health Related Professions, Institution Code 6146.
- 7. An application letter addressed to the Audiology Admissions Committee; the letter should be

printed (12-pt font and  $\leq$  2 pages). The letter should be in business format and should include:

- a. An explanation of your interest in audiology
- b. Your short- and long-term goals
- c. Other information you consider relevant to the admission committee's decision-making.

Application procedures for the post-master's degree track. Follow steps 1.-5. above. GRE scores are not required of individuals applying to the post-master's degree Au.D. track. In addition, provide proof of current Arkansas licensure in Audiology and/or national certification in Audiology (CCC-A or ABA).

#### **PROFESSIONAL CURRICULUM**

The program requires a minimum of 118 graduate semester credit (SC) hours. A degree is awarded upon successful completion of all academic and practicum requirements for the College of Health Related Professions at the University of Arkansas for Medical Sciences. More specific information about program requirements can be obtained by contacting the Department of Audiology and Speech Pathology (501-569-3155).

#### **POST-BACCALAUREATE TRACK**

- 80 SC of classroom coursework
- 6 SC in directed research and successful completion of a research project
- 20 SC of clinical laboratory work/practicum
- 12 SC of clinical externship during the final academic year
- Practical examinations at the end of each academic year (must be successfully completed to continue in program)
- Written examinations at the end of each academic year (must be passed to continue in program)
- Successful completion of a comprehensive examination

The post-baccalaureate Au.D. degree is designed to be completed in four years (including three summers, with a common entry point in the fall semester). Exceptions to these timelines may occur on an individual basis. All work must be completed within eight (8) calendar years of initial admission.

#### **POST-MASTER'S TRACK**

- A minimum of 118 semester credits (SC) are required for graduation (28 SC of clinical practicum will be waived for those who can provide proof of ASHA certification, and up to 30 SC may be transferred from ASHA accredited programs)
- Current, full, state licensure or national certification in audiology is required prior to admission
- Completion of a master's degree program in audiology, communication sciences and disorders, or the equivalent approved by the Council on Academic Accreditation of the American Speech-Language-Hearing Association. To be eligible for the post-master's degree track, applicants must have completed at least 36 SC of graduate-level courses specified by the department; contact the department for specific requirements.

• A research project will be required if evidence of satisfactory completion of a Master's thesis is not provided (completion of a master's level research project will not satisfy the research requirement).

Admission to the post-master's Au.D. degree program can occur in any semester. The time to complete the program will vary depending on individual requirements. All work must be completed within eight (8) calendar years of initial admission.

#### **PROFESSIONAL COURSE WORK\*\***

The first number listed for courses is for the UAMS College of Health Related Professions; the second (in parenthesis) is for the University of Arkansas at Little Rock.

# ASP 5013 (7360)—Research Methods in Communication Disorders

Introduction to research methodologies in audiology and speech pathology. Includes prospectus development, funding sources, data collection and analysis, and professional research writing and editing in communication disorders and/or speech sciences.

#### ASP 5023 (7380)—Basic Diagnostic Audiology

Principles and techniques for basic audiologic evaluation, including pure tone testing, speech audiometry, and the clinical application of masking, immittance, and otoacoustic emissions. Relevant calibration issues will also be discussed.

#### ASP 5041 (7181)—Clinical Laboratory

Introduction to the equipment used in clinical evaluation of clients, as well as its maintenance and calibration. Perform evaluation procedures under faculty supervision.

### ASP 5043 (7331)—Anatomy and Physiology of the Auditory and Vestibular Systems

Detailed information of the anatomy, physiology, electrophysiology, and neurophysiology of the auditory and vestibular systems.

#### ASP 5053 (7332)—Acoustics and Psychoacoustics

Basic information regarding the physics of sound, the measurement of sound and an introduction to the psychoacoustic basis of hearing and its clinical applications.

#### ASP 505V (7091)—Practicum

Applied, supervised practicum experiences for graduate students that encompass the breadth of the current scope of practice with both adults and children from culturally diverse backgrounds.

#### ASP 5063 (7333)—Auditory Processing

Theoretical overview, differential assessment, and treatment of adults and children with auditory processing disorders (APD). Intended to blend theoretical knowledge with practical clinical methods and techniques. Prerequisites: ASP 5023/7380.

# ASP 5083 (7382)—Electrophysiologic Assessment of the Auditory System

Principles and techniques in the use of evoked potentials to assess auditory function. Includes case studies and analysis of waveforms. Lecture and laboratory.

#### ASP 5103 (7383)—Medical Audiology

Introduction to the major pathologies of the auditory and vestibular systems, as well as medical/surgical treatment of

those pathologies. Audiologic assessment and management of the disorders will also be discussed. Prerequisites: ASP 5023 (7380) and ASP 5043 (7331).

# ASP 5112 (7221)—Instrumentation in Audiology & Speech Pathology

Introduction to basic principles of electronics and electrical safety and to proper use and care of equipment used in the evaluation and treatment of the auditory and vestibular systems.

#### ASP 516V (7092)—Independent Research

Research or individual investigation for graduate students. Credits earned may be applied toward meeting degree requirements if the program approves and if a letter grade is given. Repeated registration is permitted. Prerequisite: ASP 5013.

#### ASP 5123 (7335)—Advanced Psychoacoustics

Advanced information regarding how listeners with normal hearing and those with hearing loss process sound. Topics include: loudness, frequency selectivity, temporal processing, pitch perception, space perception, object/pattern perception, speech perception, experimental design, and signal detection theory. Prerequisites: ASP 5053/7332.

#### ASP 5132 (7222)—Speech Perception

Production and perception of speech sounds and the prosodic features of speech. Several theories of speech perception presented and discussed, and the effects of hearing loss on speech production and perception explored.

# ASP 5142 (7223)—Electrophysiologic Assessment of the Auditory System II

Principles and techniques in the use of mid- and lateevoked potentials to assess auditory function. Includes case studies and analysis of waveforms. Lecture and laboratory. Prerequisite: ASP 5083/7382.

#### ASP 5153 (7334)—Pediatric Audiology

Normal auditory development and theoretical, clinical, and practical issues involved in screening, assessment, and management of children with hearing loss. Prerequisite: ASP 5023/7380.

#### ASP 5162 (7224)—Genetics of Hearing Loss

Basic information on the genetic basis of hearing loss and an overview of syndromic and non-syndromic hearing losses. Strategies for referral to genetic counselors and other health care professionals will be included. Prerequisite: ASP 5103/7383.

ASP 5163 (7320)—Auditory Based Speech/Language Intervention Auditory-based speech and language intervention with infants and toddlers who are deaf and hard of hearing. Emphasis is on the principles of the normal development sequence of the listening skills, assessment of skills obtained within the hierarchy, and intervention aimed at teaching skills not yet acquired. Auditory based intervention for infants and toddlers requires family participation; therefore, learning styles of parents and caregivers will be discurssed.

#### ASP 5172 (7225)—Implant Device Technology

Overview of history of cochlear implants, corporation technology in the cochlear-implant industry, and contemporary speech processing strategies for cochlear implants. Discussion of surgeries, audiological evaluation procedures used pre- and post-operatively, patient performance, counseling, and current research topics. Prerequisite: ASP 5223/7384.

#### ASP 5173 (7365)—Counseling in Communication Disorders

Principles of counseling for working with persons with communication disorders and their families throughout the life span. Students will review major theories of counseling and will select those most useful for the various settings and practices of audiology and speech pathology.

#### ASP 5182 (7226)—Outcomes Research and Evidence-Based Practice

Principles of outcomes research, and the levels of evidence supporting clinical practice. Students will understand the principles of critical evaluation of diagnostic procedures and critical evaluation of the evidence for treatment efficacy and effectiveness as well as the importance of practice guidelines that define best practices. Prerequisites: ASP 5013/7360; ASP 5313.

#### ASP 520V (7087)—Topics in Audiology

Graduate seminar with emphasis on topics related to clinical or rehabilitative audiology. May be repeated for additional credit not to exceed 6 hours total. Prerequisite: Consent of instructor.

#### ASP 5212 (7227)—Hearing Conservation

Noise measurement, OSHA requirements, occupational noise management, recreational audiology, and designing and implementing hearing conservation programs for adults and children. Prerequisites: ASP 5112/7221; 5023/7380.

## ASP 5222 (7228)—Professional Issues in Audiology & Speech Pathology

Personal and professional ethical values and their applications to dilemmas encountered in the clinical practices of audiology and speech pathology will be explored with students. Preferred practices and criteria for quality services will be topics for discussion.

#### ASP 5223 (7384)—Amplification

Effective use of hearing aids and auditory training equipment. Includes their component parts, electroacoustic analysis, hearing aid orientation/counseling, and approaches to hearing aid evaluation. Prerequisite: ASP 5023.

#### ASP 5232 (7229)—Audiology: Practice Management

Roles of audiologists in meeting the needs of the communicatively impaired. Students will understand preferred practices, criteria for quality services and quality improvement through the evaluation of service delivery models and exploration of the laws affecting service delivery in health care and educational settings.

#### ASP 5233 (7385)—Audiologic Rehabilitation: Children

Audiometric evaluation procedures and the habilitation/rehabilitation of infants and children with hearing loss. Emphasis is placed on the determination of appropriate remediation, language and speech therapy, auditory training and counseling parents for home programming.

#### ASP 5243 (7386)—Audiologic Rehabilitation: Adult

Principles of audiologic rehabilitation for adults, including diagnosis, counseling, use of amplification and other assistive devices, and communication strategies. Various models of audiologic rehabilitation will be presented. Prerequisite: ASP 5023/7380.

#### ASP 5253 (7351)—Amplification II

Advanced study of amplification systems, including strategies to assess benefit and satisfaction, binaural/bilateral considerations, alternatives to conventional hearing aids, and speech perception issues related to hearing loss. Prerequisite: ASP 5223/7384.

ASP 5263 (7350)—Evaluation & Treatment of the Balance System Basic information on the evaluation and treatment of balance disorders. Topics: anatomy and physiology of the vestibular, oculomotor, and proprioceptive systems; clinical tests of electronystagmography, dynamic posturography, and rotary chair. Medical and surgical treatments and rehabilitation strategies for vestibular/balance pathologies. Prerequisite: ASP 5043/7331.

# ASP 5293 (7392)—Multicultural Issues in Communicative Disorders

A framework for systematically analyzing cultural similarities and differences will be provided. This course will serve as a model to examine cultural differences, verbal and nonverbal, in the clinical setting.

#### ASP 5313 (BIOM 5013)—Biometrical Methods

Introductory topics in descriptive biostatistics and epidemiology, database principles, basic probability, diagnostic test statistics, tests of hypotheses, sample-size estimation, power of tests, frequency cross-tabulations, correlation, non-parametric tests, regression, randomization, multiple comparisons of means and analysis of variance for one and two-factor experiments. Prerequisite: Consent of instructor.

## TDHH 7302—Language Development for Deaf/HH Students (UALR)

In-depth empirical study of several theories of language acquisition, with a focus on educational applications with deaf children. Multiple pathways to language learning will be emphasized in this course. Students will develop skills necessary to assess language development and provide language instruction to learners who are deaf or hard of hearing. Various methods and philosophies of language development for the deaf or hard of hearing will be discussed.

<sup>\*</sup>Students pursuing the Doctor of Audiology degree should consider the College of Health Related Professions Catalog the primary catalog. All provisions (including grievance procedures) in the catalog of the College of Health Related Professions are the authority applicable to students pursuing the Doctor of Audiology degree.

<sup>\*\*</sup>Courses listed are for the post-bachelor's degree track. The post-master's degree track course requirements will vary, depending on the applicant's previous course work and clinical experience.

### COMMUNICATION SCIENCES AND DISORDERS (Ph.D.) PROGRAM\* Department of Audiology and Speech Pathology

The Audiology and Speech Pathology Programs are accredited by the Council on Academic Accreditation of the American Speech-Language-Hearing Association.

Susan Moss-Logan, Ph.D.; Director of the Ph.D. Program Department of Audiology and Speech Pathology University of Arkansas for Medical Sciences University of Arkansas at Little Rock Speech, Language and Hearing Clinic 2801 South University Avenue, Little Rock, Arkansas 72204 Telephone: (501) 569-3155 E-mail: susanml@uca.edu

**Faculty:** J. Beard, B. Eaton, L. Edwards, C. Franklin, B. Gentry, B. Gregg, T. Guyette, P. Highley, T. Hutton, D. Kelly, S. Mahurin, P. Monoson (Emeritus), J. Montague (Emeritus), S. Moss-Logan, N. Nicholson, C. Pelletier, S. Pine (Emeritus), G. Robinson, L. Smith-Olinde, M. Weatherton (Emeritus), R. Zraick

Clinical Faculty: J. Brucks, K. Douglas, C. Ford, A. Harmon, A. Hedges, C. Henderson, B. Hildebrand, L. Karpe, P. Martin, B. McWeeny, T. Sowell

Thomas W. Guyette, Ph.D., Chairman and Professor, Department of Audiology and Speech Pathology

#### THE PROGRAM OBJECTIVE

The objective of the Ph.D. program in Communication Sciences and Disorders is to prepare individuals to conduct research, teach, and/or to participate in leadership roles in the evaluation and treatment of persons with speech, language, hearing, voice, literacy and fluency disorders. Graduates of this Ph. D. program are prepared for careers involving teaching and research in communication sciences and disorders, as well as positions in a variety of professional settings including school systems, community speech, language, and hearing centers, private practice, physician's offices, hospital clinics, and rehabilitation centers.

#### THE PROGRAM

The Department of Audiology and Speech Pathology offers the Doctor of Philosophy degree in a consortium with the College of Health Related Professions at the University of Arkansas for Medical Sciences, the College of Professional Studies at the University of Arkansas at Little Rock, and the Department of Speech-Language Pathology at the University of Central Arkansas. This unique educational consortium combines the academic and clinical resources of a major medical sciences campus with those of two large, comprehensive, universities. The curriculum is designed to emphasize the science of speech, language, and hearing, the acquisition of knowledge through research about human communicative disorders, and the advanced study and practice of methods for evaluation and treatment of those disorders.

#### FINANCIAL ASSISTANCE

In addition to the financial aid opportunities described in the Financial Aid Information section of the UAMS Graduate School Catalog, the department has programspecific financial assistance for doctoral students. Contact Dr. Jacki McMurtrey at (501) 450-3310 for further information regarding financial aid which may be available to qualified Ph.D. students.

#### **REQUIREMENT FOR ADMISSION**

Students applying for admission to the Doctor of Philosophy program are required to have earned a master's degree in audiology or speech pathology from a program accredited by the American Speech-language Hearing Assocation.

#### **PROFESSIONAL CURRICULUM**

The Doctor of Philosophy degree program requires satisfactory completion of a minimum of 70 semester credit hours of specified course work. The curriculum emphasizes the development of research skills and advanced study of communication sciences and disorders. Students must pass a comprehensive examination and successfully defend their dissertations. Degrees are awarded upon successful completion of all academic and research requirements.

#### **APPLICATION PROCEDURES**

Application for the Doctor of Philosophy degree program is made through the Graduate School Office, University of Arkansas for Medical Sciences, 4301 West Markham Street, # 601, Little Rock, Arkansas, 72205. In addition, applicants for the Doctor of Philosophy degree must complete a Ph.D. program application. This application is submitted to the Admissions Committee, c/o Dr. Robert Logan, UCA Speech-Language Pathology Department, 201 S. Donaghey Ave., UCA Box 4985, Conway, AR 72035-0001.

#### **PROFESSIONAL COURSE WORK**

#### ASP 6003 (8300)—Advanced Research Methods

Introduces theory, principals and practices of research design in communication sciences and disorders. Emphasis on methodology of collecting, organizing, analyzing and presenting both qualitative and quantitative data. Topics will include: research questions and problems, literature and background review, group and single-subject research design, data organization and manipulation, scientific writing, and the publication and presentation process.

#### ASP 6023 (8302)—Special Topics in Speech

Engages students in the exploration and evaluation of current research, practice, and technology related to speech development and disorders. Content reflects recent developments in the literature and specific interests of participants. Relevant topics may include motor speech disorders, physiological speech science, and neurophysiological bases of speech production, voice, dysphagia, fluency, articulation, phononlogy, phonological theory, craniofacial anomalies, gerontology, AAC, multicultural issues. May be repeated for up to 15 semester credit hours.

#### ASP 604V (8104)—Research Project

This course covers skills necessary to complete a research project consisting of a research question, review of the literature, methodology, data collection, data analysis and written report.

#### ASP 6052 (8205)—Grant Writing Pedagogy

Covers strategies for identifying funding agencies appropriate for research and special programs. Emphasis will be on techniques for writing grant proposals for both private and public funding.

#### ASP 6062 (8206)—Supervision Pedagogy

Familiarizes students with the art and science of clinical teaching, supervision of clinical services, management of clinical programs, and instruction in communication disorders. Emphasis on clinical problem solving, maximizing student and client feedback, supervisory conferencing, evaluating student and client performance, clinical scheduling/record keeping, and clinical and program efficacy.

#### ASP 6091 (8109)—Grant Writing Internship

Involves the student in the development, completion, and submission of a grant proposal to a private or public funding agency.

#### ASP 6033 (8303)—Special Topics in Language

Engages students in the exploration and evaluation of current research, practice, and technology related to language development and disorders. Content reflects recent developments in the literature and specific interests of participants. Topics may include child language development and specific developmental disorders, neurophysiological bases of language and communication, neurogenic cognitive-linguistic disorders, AAC, multicultural issues, gerontology. May be repeated for up to 15 semester credit hours.

#### ASP 6072 (8207)—Teaching Pedagogy

Introduces students to principles and practices of course development and teaching skills in communication sciences and disorders. Emphasizes understanding and integrating course content, targeted levels of learning, specific objectives, instructional strategies, and assessment to enhance the learning experience. Additional topics include motivating students, attributes of good teaching, professional development in teaching, distance education, and team/interdisciplinary teaching.

#### ASP 6083 (8305)-Multicultural Issues

This course will engage students in discussions of multicultural and linguistic variables that must be recognized and applied in teaching, research, and clinical supervision in the field of speech-language pathology and audiology.

#### ASP 610V (8110)—Teaching Internship

Provides students with supervised experience in academic instruction.

#### ASP 611V (8111)—Supervision Internship

Provides students with supervised experience in clinical supervision and instruction.

#### ASP 6013 (8301)—Special Topics in Hearing

Engages students in the exploration and evaluation of current research and practice related to hearing science, hearing disorders, evaluation and remediation. Content reflects recent developments in the literature and specific interests of participants. Topics may include the anatomical basis of hearing science, acoustics and instrumentation, psychoacoustics, physiological acoustics, physiological evaluation of hearing, hearing conservation, amplification, and aural habilitation and rehabilitation. May be repeated for up to 15 semester credit hours.

#### ASP 700V (9199-9999)—Dissertation

Completion of an original research project in collaboration with the dissertation advisor and committee. Successful completion of an oral defense to the dissertation committee. Continual enrollment is required until all related requirements are completed.

<sup>\*</sup>Students pursuing the Doctor of Philosophy degree are considered to be students in the UAMS Graduate School who are taking courses offered by the faculty of the UAMS College of Health Related Professions, the faculty of the UALR College of Professional Studies, and the faculty of the UCA Department of Speech-Language Pathology. All provisions (including grievance procedures) in the UAMS Graduate School Catalog and the UAMS Graduate School Handbook are the authority applicable to students pursing the Doctor of Philosophy degree in Communication Sciences and Disorders.

### COMMUNICATIVE DISORDERS (M.S.-SPEECH PATHOLOGY) PROGRAM\* Department of Audiology and Speech Pathology

The Audiology and Speech Pathology Programs are accredited by the Council on Academic Accreditation of the American Speech-Language-Hearing Association.

**Terri J. Hutton, M.F.A.;** Graduate Coordinator Department of Audiology and Speech Pathology University of Arkansas for Medical Sciences University of Arkansas at Little Rock Speech, Language and Hearing Clinic 2801 South University Avenue, Little Rock, Arkansas 72204 Telephone: (501) 569-3155 E-mail: huttonterrij@uams.edu

**Faculty:** J. Beard, B. Eaton, C. Franklin, B. Gentry, B. Gregg, T. Guyette, P. Highley, T. Hutton, D. Kelly, S. Mahurin, P. Monoson (Emeritus), J. Montague (Emeritus), N. Nicholson, C. Pelletier, S. Pine (Emeritus), G. Robinson, L. Smith-Olinde, M. Weatherton (Emeritus), R. Zraick

**Clinical Faculty:** J. Brucks, K. Douglas, C. Ford, A. Harmon, A. Hedges, C. Henderson, B. Hildebrand, L. Karpe, P. Martin, B. McWeeny, T. Sowell

Thomas W. Guyette, Ph.D.; Chairman and Professor, Department of Audiology and Speech Pathology

#### THE PROFESSION

Speech-language pathologists evaluate and treat people who have communication disorders of speech, language, voice, literacy, and/or fluency. Because speech and/or hearing problems are both communication disorders, audiologists and speech-language pathologists work together to determine sources of communication problems and to coordinate programs of rehabilitation. Graduates of this program are prepared for positions in a variety of professional settings including school systems; community speech, language, and hearing centers; private practice; physician's offices; hospital clinics; rehabilitation centers; day care centers; collegetraining programs; and residential institutions.

#### THE PROGRAM

The Department of Audiology and Speech Pathology offers a Master of Science degree in Communicative Disorders with an emphasis in speech-language pathology through the College of Health Related Professions at the University of Arkansas for Medical Sciences in a consortium with the College of Professional Studies at the University of Arkansas at Little Rock This unique educational consortium combines the academic and clinical resources of a major medical sciences campus with a large, comprehensive, urban university. The curriculum is designed to emphasize the science of speech, language, and hearing; the acquisition of knowledge about human communicative disorders; and the study and practice of methods for evaluation and treatment. Practicum experiences are provided at a large number of settings in the central Arkansas area.

#### **CERTIFICATION AND LICENSURE**

Graduates of the Master of Science degree program are academically and clinically eligible to apply for the Certificate of Clinical Competence through the American Speech-Language-Hearing Association and to apply for licensure in Speech Pathology with the Arkansas Board of Examiners in Speech Pathology and Audiology. Successful completion of the program does not itself insure certification and/or licensure. All students are responsible for familiarizing themselves with the applicable certification and licensure requirements.

#### FINANCIAL ASSISTANCE

In addition to the financial aid opportunities described in the Financial Aid Information sections of the UAMS CHRP and Graduate School Catalogues, the department has program-specific financial assistance for master's degree program students. Contact Ms. Terri Hutton at (501) 569-3155 for further information regarding aid which may be available to qualified full-time, master's level, speech pathology graduate students.

#### PREPROFESSIONAL REQUIREMENTS

Students applying for admission to the Master of Science graduate program must have earned a baccalaureate from a regionally accredited college or university. If the major is other than Communicative Disorders or Speech-Language Pathology, 27 hours of specified preprofessional undergraduate course work in these areas are required prior to admission to the Master of Science degree program. The department offers an undergraduate program at the University of Arkansas at Little Rock (UALR).

#### **PROFESSIONAL CURRICULUM**

The Master of Science degree program requires a minimum of 47 graduate semester credit hours. Students choosing the thesis option can count up to six (6) credit hours of ASP 600V-Thesis toward the 47 graduate credit hour minimum. Those choosing the research project option can count up to three (3) credit hours of ASP 516V-Independent Research toward the 47 semester hour minimum. Students must pass comprehensive examinations. A degree is awarded upon successful completion of all academic and practicum requirements for the University of Arkansas for Medical Sciences. More specific information about program requirements can be obtained by contacting the department.

#### APPLICATION PROCEDURES AND DEADLINES

Application for the Master of Science degree program is made through the **Graduate School Office**, **University of Arkansas for Medical Sciences**, **4301 West Markham Street**, **#601**, **Little Rock**, **Arkansas**, **72205**. All completed applications and application materials must be received by March 1 of each calendar year (see page 8). Earlier submission of applications is recommended. Admission for the Master of Science degree program is for the fall semester only.

#### **PROFESSIONAL COURSE WORK**

The first number listed for courses is the UAMS listing; the second (in parenthesis) is the University of Arkansas at Little Rock listing.

## ASP 5013 (7360)—Research Methods in Communication Disorders

Introduction to research methodologies in audiology and speech pathology. Includes prospectus development, funding sources, data collection and analysis, and professional research writing and editing in communicative disorders and/or speech sciences.

**ASP 5042 (7294)**—Augmentative and Alternative Communication Theory, design, and organization of nonverbal communication systems. Emphasis on considerations for choosing specific devices for particular clients. Includes manual, graphic, electronic, and mechanical systems.

#### ASP 505V (7091)—Practicum

Applied, supervised practicum experiences for graduate students that encompass the full current scope of practice with both adults and children from culturally diverse backgrounds.

ASP 5073 (7366)—Advanced Anatomy and Physiology for Speech Investigates the anatomy and physiology of speech and language. Topics include respiration, phonation, articulation, and neurological control of speech and language, and embryological development of the speech structures.

#### ASP 5093 (7371)—Neurogenic Language Disorders

Assessment procedures and intervention techniques for acquired neurogenic language disorders in adults. Covers language disorders secondary to cerebrovascular accident, traumatic brain injury, and dementia.

#### ASP 5113 (7364)—Language Assessment and Therapy

Acquisition of first language competence in relationship to language behavior. Includes the phonological, morphological, syntactical, and semantic components of language. Language deviations-emphasis on symptomology, etiology, evaluation, and therapy. Language testing and therapy explored in the second half of the course.

#### ASP 5122 (7270)—Fluency Disorders

Procedures, theories, and therapeutic techniques in the treatment of various types and degrees of stuttering and cluttering in adults and children.

#### ASP 5133 (7367)—Infant-Toddler Communication: Development-Assessment

Investigates prelinguistic/early linguistic communication and feeding/swallowing development. Multidisciplinary assessment and intervention for infants and toddlers (birth to five) with special needs and their families. Current formal and informal assessment tools and techniques, current intervention strategies, enhancing the therapeutic process across environments, utilizing team collaboration, and facilitating parent-infant interaction.

#### ASP 513V (7093)—Topics in Speech-Language Pathology

A seminar offered for special projects or topics related to procedures and instrumentation, theoretical foundations, assessment, clinical, or rehabilitative speech-language pathology. May be repeated for additional credit not to exceed nine (9) semester credit hours.

#### ASP 5152 (7261)—Organization and Administration

Organization, administration and accreditation of school, university, and community programs. Private practice and billing procedures. Various and alternative career opportunities including corporate speech pathology practice. Issues related to medicaid, medicare and other third party payers, as well as current legislation. Governmental and professional practice issues.

#### ASP 516V (7092)—Independent Research

Research or individual investigation for master's level graduate students. Credits earned may be applied toward meeting degree requirements if the program approves and if a letter grade is given. Repeated registration is permitted, but only three (3) SC hours can apply toward the 47 hour minimum requirement. Prerequisite: ASP 5013.

ASP 5163 (7320)—Auditory Based Speech/Language Intervention Auditory-based speech and language intervention with infants and toddlers who are deaf and hard of hearning. Emphasis is on the principles of the normal development sequence of the listening skills, assessment of skills obtained within the hierarchy, and intervention aimed at teaching skills not yet acquired. Auditory based intervention for infants and toddlers requires family participation; therefore, learning styles of parents and caregivers will be discurssed.

#### ASP 5173 (7365)—Counseling in Communication Disorders

Principles of counseling for working with persons with communication disorders and their families throughout the lifespan. Students review major theories of counseling and select those most useful for the various settings and practices of audiology and speech pathology. Students demonstrate their understanding of the counseling process through case presentations.

#### ASP 5183 (7372)—Advanced Articulation Disorders

Advanced study of functional and organic articulation disorders, variables related to articulation, assessment and diagnosis of articulation disorders, and therapeutic procedures.

#### ASP 5192 (7273)—Neurogenic Speech Disorders

Assessment procedures and intervention techniques for acquired neurogenic speech disorders in adults, especially dysarthria and verbal and oral apraxia.

#### ASP 5213 (7368)—Dysphagia

Examines normal oral, pharyngeal, and esophageal swallowing function in adults and children, including neurology, physiology, and the effects of aging. Swallowing disorders discussed with an emphasis on oral and pharyngeal function. Various methods of evaluation, as well as current management and treatment options.

#### ASP 5233 (7385)—Audiologic Rehabilitation: Children

Audiometric evaluation procedures and the habilitation/ rehabilitation of infants and children with hearing loss. Emphasis is placed on the determination of appropriate remediation, language and speech therapy, auditory training, and counseling parents for home programming.

#### ASP 5243 (7386)—Audiologic Rehabilitation: Adult

Principles of audiologic rehabilitation for adults, including diagnosis, counseling, use of amplification and other assistive devices, and communication strategies. Various models of audiologic rehabilitation presented.

#### ASP 5252 (7276)—Voice Disorders

Assessment procedures and rehabilitative techniques for voice disorders in children and adults. Instrumental and behavioral approaches, as well as medical and/or surgical treatment approaches. A team approach to care will be emphasized.

#### ASP 5262 (7275)—Craniofacial Speech Disorders

Provide an understanding of speech disorders often associated with craniofacial differences. Information presented on craniofacial development, relevant anatomy and physiology, as well as procedures for evaluation (both behavioral and instrumental) and treatment of craniofacial speech disorders. A team approach to care is emphasized.

## ASP 5273 (7396)—Advanced Differential Diagnosis of Speech and Language Disorders

Advanced study in differential diagnosis of speech and language disorders of children and adults. Proficiency in the use and interpretation of standardized assessment procedures. Prerequisite: an under-graduate course in diagnostic methods or its equivalent.

#### ASP 5282 (7282)—Learning Disabilities

An introduction to the characteristics, definitions, etiologies, assessment, and therapeutic procedures in the treatment of children diagnosed with learning disabilities. Emphasis placed on the scope of practice for speechlanguage pathologists and audiologists in the due process procedures for these children.

#### ASP 5293 (7392)—Multicultural Issues

Systematic analysis of cultural similarities and differences. Examine cultural differences, verbal and nonverbal, in the clinical setting.

#### ASP 5352 (7263)—Sociolinguistics

The linguistic structure of language, nature, and forms of symbolic behavior. Human uses of symbols from various groups and socio-economic levels, particularly in communication. Prerequisite: Courses in phonetics and normal language acquisition.

#### ASP 600V (8000)-Thesis

Thesis students must register for a total of 6 semester hours; one (1) to six (6) credit hours per semester. Prerequisite: ASP 5013.

\*Students pursuing the Master of Science degree are considered to be students in the Graduate School who are taking courses offered by the faculty of the College of Health Related Professions. Accordingly, the Graduate School Catalog is considered the primary catalog for all students in this program. All provisions (including grievance procedures) in the Graduate School Catalog and the Graduate School Handbook are the authority applicable to students pursing the Master of Science degree in Communicative Disorders.

### CYTOTECHNOLOGY PROGRAM Department of Laboratory Sciences

The Cytotechnology Program is accredited by the Commission on Accreditation of Allied Health Education Programs

Donald D. Simpson, M.P.H., C.T. (A.S.C.P.); Interim Program Director and Assistant Professor

Cytotechnology Program University of Arkansas for Medical Sciences College of Health Related Professions, UAMS #517 4301 West Markham Street, Little Rock, Arkansas 72205 Telephone: (501) 686-8448 Fax: (501) 686-8519 E-mail: simpsondonald@uams.edu Web site: http://www.uams.edu/chrp/cytotechnology/

Faculty: R. Glenn, R. Schaefer, P. Shen, D. Simpson Medical Director: M. Johnson

**Patrick F. Shen, Ph.D.,** Chairman, Department of Laboratory Sciences (See page 65 for information about the Medical Technology Program)

#### THE PROFESSION

With the use of a microscope, cytotechnologists use morphologic (size and shape) criteria to decide whether a cell sample is normal, inflamed, premalignant or malignant. Cytotechnologists may assist clinicians in obtaining cellular samples from various body sites. They then process these specimens, using a variety of techniques, in preparation for microscopic examination. The cytotechnologist signs out negative specimens, while reviewing abnormal cases with a pathologist. At that time, a final diagnosis is reported to the clinician who is treating the patient. The well-trained cytotechnologist is capable of distinguishing a variety of disease processes in arriving at a final diagnosis. In learning to do this, cytotechnologists must be able to understand symptomatology and relate these manifestations to cellular responses to disease. Cytotechnologists are part of the team involved with the total care of the patient. As such, they may work as laboratory scientists, or they may become involved in administration, education or research. These kinds of opportunities may exist in hospitals, private laboratories, university centers, government facilities or in industry.

#### THE PROGRAM

The College of Health Related Professions' program in cytotechnology, jointly sponsored by the Department of Pathology of the College of Medicine, offers a Bachelor of Science degree. The professional portion of the curriculum encompasses 40 SC over 12 months of full-time study beginning in August. Contact the program director for further details.

#### **CERTIFICATION AND LICENSURE**

Graduation from the program establishes eligibility to apply to take the national registry examination in Cytotechnology given by the America Society of Clinical Pathologists Board of Registry and become registered as a cytotechnologist (CT(ASCP)). Successful completion of the program does not itself insure registration. Each student is responsible for familiarizing himself/herself with the applicable registration requirements.

#### PREPROFESSIONAL CURRICULUM

Students, to be eligible for admission, must have completed 20 SC of biological sciences (cell biology and histology are highly recommended courses), 8 SC of chemistry, 3 SC of mathematics, 29 SC of specified general education course work, and 24 SC of elective course work before the professional phase of the program begins. These credits may be completed at any regionally accredited college or university, but must fulfill all College of Health Related Professions requirements regarding acceptance of transfer credit.

Persons admitted into the professional portion of the cytotechnology program must have maintained a minimum GPA of 2.0 and completed a minimum of 84 SC, at least five (5) of which are upper level (junior/senior). These credits may be completed at any accredited college or university, but must fulfill all College requirements regarding acceptance of transfer credit. The 60 SC listed below must be included along with 24 SC of elective course work.

Minimum

| Area/Typical Course Title<br>SCIENCE   | Semester Credit |
|--|-----------------|
| Biological Science                     |                 |
| Cell Biology, Histology, Microbiology  | , Zoology,      |
| Genetics, General Biology, Bacteric    | ology,          |
| Parasitology, Anatomy and Physiol      | ogy 20          |
| Chemistry                              |                 |
| Basic, two-semester sequence of prine  | ciples of       |
| chemistry with laboratories; courses   | must be at      |
| least the equivalent of the University | v of Arkansas   |
| at Little Rock's Fundamental Chemis    | stry I          |
| (1400) and Fundamental Chemistry       | II (1401). 8    |
|  |                 |

| Mat   | hema | tice  |
|-------|------|-------|
| iviai | псша | uites |
|       |      |       |

| College Algebra or higher level mathematics    | 3  |
|--|----|
|  | 31 |
| COMMUNICATIONS                                 |    |
| Fundamentals of Speech or Speech Communication | 2  |
| LIBERAL ARTS                                   |    |
| English Composition I                          | 3  |
| English Composition II                         | 3  |
| History of Civilization or World History       | 6  |

American History or National Government

#### FINE ARTS

| Art or Music or | Theater Art | 3 |
|-----------------|-------------|---|
|                 |             |   |

3

6

15

#### **HUMANITIES**

| Philosophy, Political Science, Literature, |   |
|--|---|
| or Humanities                              | 3 |

#### SOCIAL SCIENCES

| Psychology | y, Sociology, | Anthropo | logy, Geograp | hy, |
|------------|---------------|----------|---------------|-----|
| or Econ    | omics         |          |               |     |

# ELECTIVES24TOTAL84

Students entering with a baccalaureate or higher degree from an accredited college or university must complete the following requirements for a CHRP bachelor's degree: (a) 32 SC in residence; (b) all program-specific mathematics and biological and physical science prerequisites; (c) all program-specific professional requirements; (d) if not completed as part of a previous degree program, a 3 SC college/university course in American history or national government, a 3 SC course in college algebra or higher level mathematics, and a 3 SC course in humanities.

#### **PROFESSIONAL CURRICULUM**

The following 40 SC are required in the professional program:

| Course # Title Seme |                                 | ster Credit |  |
|---------------------|---------------------------------|-------------|--|
| Fall (1)            |                                 |             |  |
| CYTO 4411           | Introduction to Cytotechnology  | 4           |  |
| CYTO 4412           | Gynecological Cytopathology I   | 4           |  |
| CYTO 4313           | Gynecological Cytopathology II  | 3           |  |
| CYTO 4614           | Non-Gynecological Cytopathology | l <u>6</u>  |  |
|                     |                                 | 17          |  |
| Spring (2)          |                                 |             |  |
| CYTO 4221           | Laboratory Operations           | 2           |  |
| CYTO 4322           | Special Techniques              | 3           |  |
| CYTO 4623           | Non-Gynecological Cytopathology | ll 6        |  |
| CYTO 4424           | Cytology Internship I           | 4           |  |
|                     |                                 | 15          |  |
| Summer (3)          |                                 |             |  |
| CYTO 4531           | Cytology Internship II          | 5           |  |
| CYTO 4331           | Comprehensive Cytotechnology    | 3           |  |
|                     |                                 | 8           |  |
| TOTAL               |                                 | 40          |  |

A grade of "F" or a mark of "U" or "NC" in a professional course is not acceptable for progression to the next semester, nor is it acceptable for graduation if it occurs in the last semester of the program. A grade of "D" in the following professional courses is not acceptable for progression to the next semester, nor is it acceptable for graduation if it occurs in the last semester of the program: Gynecological Cytopathology I (CYTO 4412) and Cytology Internship II (CYTO 4531).

#### APPLICATION PROCEDURES AND DEADLINES

Class size is limited and all applicants may not be selected for participation in the program. Applications must be received by **May 15** (see page 8) to be assured of consideration for admission. A grade point average of at least 2.50 is required in the biology courses to be considered for admission to the program. See page 7 for further information on deadlines and procedures for admission.

Early consideration will be given to those who have submitted complete applications (see required items below) by the early consideration deadline. For applicants to the Fall semester, the early consideration deadline is March 1 (see page 8); applications must be received by May 15 to be assured of consideration for admission. In the event the class is not filled from those applicants, the application deadline may be extended to as late August 1. Applicants must provide:

- 1. **Application for Admission:** The College of Health Related Professions Application for Admission is required. Please contact the program office or the CHRP Office of Student Affairs for information.
- 2. Admission Fee: A non-refundable application fee of \$10.00 is required and must accompany the application.
- 3. Official Transcripts: Arrange for each college or university you have attended to forward an official transcript of your course work. A GPA of at least 2.50 is required in the biology courses for admission.
- 4. **Interview:** Qualified applicants are contacted to arrange an interview after receipt of application and all transcripts.

Transcripts "issued to the student" will not substitute for official transcripts forwarded directly to the CHRP Office of Student Affairs by the institution issuing the transcripts.

Arkansas residency will be considered during selection for admission.

Applicants are considered without regard to race, color, creed, age, marital status, national origin, or sex. Otherwise qualified individuals with disabilities receive equal consideration.

All documents should be submitted to: University of Arkansas for Medical Sciences, College of Health Related Professions, Office of Student Affairs, UAMS, #619, 4301 West Markham, Little Rock, Arkansas 72205. Telephone: (501) 686-5730.

#### **PROFESSIONAL COURSE WORK**

#### CYTO 4221—Laboratory Operations

Principles of management, supervision, and laboratory safety. A seminar and practicum approach will be utilized with an emphasis on problem-solving and ethical practice as related to cytopathology.

#### CYTO 4313—Gynecological Cytopathology II

Histopathology and cytopathology of endometrial hyperplasia; adenocarcinoma of the endocervix and endometrium; benign and malignant lesions of the tubes, ovaries, vulva, and vagina. Radiation biology, irradiation and chemotherapy induced atypia. Prerequisite: CYTO 4412.

#### CYTO 4322—Special Techniques

Evaluation of published professional literature for its pertinence and reliability using a journal-club format. Emphasis on the use of contemporary and adjunct technologies.

#### CYTO 4411—Introduction to Cytotechnology

Introduction to cell morphology, cell cycle, and principles of cytopreparation. Emphasis on the anatomy, histology, and cytopathology of the female genital tract under normal conditions.

#### CYTO 4412—Gynecological Cytopathology I

Histopathology and cytopathology of inflammation, benign proliferative reactions, pre-malignant lesions, carcinoma in situ, microinvasive, and invasive squamous carcinoma. Prerequisite CYTO 4411.

#### CYTO 4424—Cytology Internship I

Supervised clinical internship within an accredited cytology laboratory with an emphasis on pre-screening cytopathology specimens from all body sites. Students may also participate in observing fine needle aspiration biopsies. Prerequisite: CYTO 4623.

#### CYTO 4531—Cytology Internship II

Supervised clinical internship within an accredited cytology laboratory with an emphasis on pre-screening cytopathology specimens from all body sites. Students may also participate in observing fine needle aspiration biopsies. Prerequisite: CYTO 4424.

#### CYTO 4331—Comprehensive Cytotechnology

Discussions of the cytology of all major body sites, includes computer image reviews. Emphasis on preparation for comprehensive examinations in cytotechnology.

#### CYTO 4614—Non-Gynecological Cytopathology I: Respiratory, Gastrointestinal, and Urinary Tracts

Cytopathology of respiratory, gastrointestinal, and urinary tracts. Includes methods of obtaining and processing specimens, microbiology, and the role of cytology in evaluating lung, gastrointestinal tract, and urinary tract diseases. Continuation of cytopreparation in prescreening of the female genital tract. Prerequisite: CYTO 4313.

### CYTO 4623—Non-Gynecological Cytopathology II: Body Fluids and Fine Needle Aspirates

Cytopathology of body fluids and fine needle aspirations from multiple body sites. Emphasis on anatomy, histology, and methods of specimen procurement, cytopreparation techniques, and histopathologic correlations. Prerequisite: CYTO 4614.

### DENTAL HYGIENE PROGRAM Department of Dental Hygiene

The Dental Hygiene Program is accredited by the American Dental Association, Commission on Dental Accreditation.

Susan Long, Ed.D., R.D.H., Chairman and Professor Department of Dental Hygiene University of Arkansas for Medical Sciences College of Health Related Professions UAMS, # 609; Room S8/13A Shorey Building 4301 West Markham Street, Little Rock, Arkansas 72205 Telephone: (501) 686-5734 E-mail: longsusanl@uams.edu Web site: http://www.uams.edu/chrp/dentalhygiene/default.asp

Faculty: V. Goral, J. Hoelzeman, S. Long, T. Nelms (Emeritus), C. Pace, T.G. Roberts, K. Truax (Emeritus), C. Warren, M. Zoeller Clinical Faculty: J. Antonetz, K. Atkinson, P. Baker, C. Black, F. Church, C. Dennis, N. Flaxman, P. Jensen, R. Moore, L. Mouden, R. Pleis, H. Reed, R. Shelby-Calvin, J. Spray, J. Svendsen, T. Turpin, F. Younger

#### THE PROFESSION

The dental hygienist is a valuable member of the dental health team whose major responsibilities involve preventing oral disease through patient education, removing deposits from the teeth, exposing radiographs (x-rays), applying fluoride and sealants to the teeth, administering local anesthesia, and nutritional counseling. Opportunities for employment include working in a private dental office, state or federal government agencies, public and private schools, industry, dental product sales, and dental hygiene education. The future may bring employment opportunities in hospitals, nursing homes, and other treatment sites.

#### THE PROGRAM

The Department of Dental Hygiene offers both Associate of Science and Bachelor of Science degree options. Graduation from either degree option qualifies the student to apply for state, regional, and national examinations required for licensure.

The professional portion of the curriculum consists of four (4) fall/spring semesters and one (1) summer semester beginning in the fall semester. Students completing this phase receive an Associate of Science degree. The majority of our recent graduates, however, have elected to pursue the bachelor's degree option. This requires additional general education course work plus 11 SC of upper-division (junior/senior) course work above and beyond the professional curriculum, and electives for a minimum of 124 SC.

The program receives significant support from the Department of Veterans Affairs, Central Arkansas Veterans Healthcare System (CAVHS). A portion of the clinical education occurs at the CAVHS.

Program information sessions are offered each year. Please call the Department for more information.

#### **CERTIFICATION/LICENSURE**

Satisfactory completion of the professional course work in either the associate or baccalaureate degree tracks satisfies academic and clinical eligibility requirements to apply for Arkansas licensure and national certification by the American Dental Association. Health care provider CPR certification is required for all dental hygiene students. CPR instruction is available through the American Heart Association and students must arrange to take a course at their expense.

#### FINANCIAL ASSISTANCE

In addition to the general financial aid opportunities previously described in the Financial Information section of this catalog, the Department can provide information on program-specific financial assistance. Contact the department chairman for further information regarding the sources of aid which may be available to qualified dental hygiene students.

#### PREPROFESSIONAL CURRICULUM

The Associate of Science requires 34 SC of preprofessional course work and 67 SC of professional course work.

The bachelor's degree requires 46 SC of preprofessional course work, 69 SC of professional course work and a sufficient number of additional SC to complete a minimum of 124 SC of specified general education and professional course work.

At least 45 SC of the total course work appearing on the student's degree plan must be courses taken at the upper level (junior or senior). Students are encouraged to consult with the department chairman regarding specific upper level course work requirements.

The following 34 SC of courses marked with an asterisk (\*) are required for admission to the associate's degree program. All 46 SC listed must be completed for the bachelor's degree program. All listed courses are required from a regionally accredited post-secondary academic institution, and must fulfill all College requirements regarding acceptance of transfer credit:

| Area/Typical Course Title       Semester Credit         SCIENCE       Chemistry         Basic, one-semester principles of chemistry       4         Biology       Basic, one semester principles of biology course with laboratory. (A Zoology course is also acceptable.)*       4         Microbiology       Basic one semester course with a laboratory*       3         Mathematics       3         College Algebra or higher mathematics*       3         Computer Science       3         Computer Fundamentals/Applications*       3         History       4         History       6         History       6         History       6         Basic, two-semester sequence of English Composition*       6         Basic, Art, Theater <sup>1</sup> 3         HUMANITIES       7         Philosophy, Political Science, Literature, or Humanities <sup>1</sup> 3         SOCIAL SCIENCES       9         Psychology       3         General Psychology*       3         Speech Communication       2         Fundamentals of Speech Communication*       2         Cohemistry, biology, and microbiology courses must include laboratory sections.       3         Threse 12 SC course work are required for the bachelor's degree. Proof  |   | Minimum                 |
|--|---|-------------------------|
| Chemistry       Basic, one-semester principles of chemistry course with laboratory*       4         Biology       Basic, one semester principles of biology course with laboratory. (A Zoology course is also acceptable.)*       4         Microbiology       Basic one semester course with a laboratory*       3         Microbiology       Basic one semester course with a laboratory*       3         Microbiology       Basic one semester course with a laboratory*       3         Mathematics       College Algebra or higher mathematics*       3         Computer Science       3       3         Computer Fundamentals/Applications*       3       3         History       History       3         History       History       6         History of the United States or National Government*       3         History of Civilization1       6       15         FINE ARTS       15       15         Music, Art, Theater1       3       3         SOCIAL SCIENCES       Psychology       3         Sociology       3       6         COMMUNICATIONS       Speech Communication       3         Fundamentals of Speech or Speech Communication*       2       3         Chemistry, biology, and microbiology courses must include laboratory sections. <td< th=""><th>Area/Typical Course Title</th><th>Semester Credit</th></td<>  | Area/Typical Course Title                                 | Semester Credit         |
| Basic, one-semester principles of chemistry<br>course with laboratory*       4         Biology<br>Basic, one semester principles of biology course<br>with laboratory. (A Zoology course is also<br>acceptable.)*       4         Microbiology<br>Basic one semester course with a laboratory*       3         Mathematics<br>College Algebra or higher mathematics*       3         Computer Science<br>Computer Fundamentals/Applications*       3         LIBERAL ARTS<br>History<br>History of the United States or National Government*       3         History<br>History of Civilization1       6         English Composition<br>Basic, two-semester sequence of English Composition*<br>(15       6         FINE ARTS<br>Music, Art, Theater1       3         HUMANITIES<br>Philosophy, Political Science, Literature,<br>or Humanities1       3         SOCIAL SCIENCES<br>Psychology<br>General Psychology*       3         Sociology<br>Introduction to Sociology*       3         COMMUNICATIONS<br>Speech Communication<br>Fundamentals of Speech or Speech Communication<br>Fundamentals of Speech or Speech Communication*<br>Fundamentals of Speech or Speech Communication*<br>Fundamentals of Speech or Speech Communication*<br>Fundamentals of Speech or Speech Communication<br>Fundamentals of Speech or Speech Communication*<br>Fundamentals of Speech or Speech Communication<br>Fundamentals of Speech or Speech Communication*<br>Fundam |   |                         |
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| Biology<br>Basic, one semester principles of biology course<br>with laboratory. (A Zoology course is also<br>acceptable.)*       4         Microbiology<br>Basic one semester course with a laboratory*       3         Mathematics<br>College Algebra or higher mathematics*       3         Computer Science<br>Computer Fundamentals/Applications*       3         LIBERAL ARTS<br>History<br>History of the United States or National Government*       3         History<br>History of Civilization1       6         English Composition<br>Basic, two-semester sequence of English Composition*<br>addition       6         FINE ARTS<br>Music, Art, Theater1       3         MUMANITIES<br>Philosophy, Political Science, Literature,<br>or Humanities1       3         SOCIAL SCIENCES<br>Psychology<br>General Psychology*       3         Sociology<br>Introduction to Sociology*       3         COMMUNICATIONS<br>Fundamentals of Speech or Speech Communication*<br>Liboratory sections.       2         Chemistry, biology, and microbiology courses must include<br>laboratory sections.       2         Chemistry, biology, and microbiology courses must include<br>laboratory sections.       2         Chemistry, biology, and microbiology courses must include<br>laboratory sections.       2         Introductions.       2         Speech Communication       2         Chemistry, biology, and microbiology courses must incl   | · · ·   | ,                       |
| Basic, one semester principles of biology course with laboratory. (A Zoology course is also acceptable.)*       4         Microbiology       3         Basic one semester course with a laboratory*       3         Mathematics       3         College Algebra or higher mathematics*       3         Computer Science       3         Computer Fundamentals/Applications*       3         History       3         History of the United States or National Government*       3         History of Civilization1       6         English Composition       6         Basic, Art, Theater1       3         HUMANITIES       7         Philosophy, Political Science, Literature, or Humanities1       3         SOCIAL SCIENCES       7         Psychology       3         General Psychology*       3         Sociology       3         Introduction to Sociology*       3         Chemistry, biology, and microbiology courses must include laboratory sections.       2         Chemistry, biology, and microbiology courses must include laboratory sections.       2         Music, Art, Theater required for the bachelor's degree.       3  | course with laboratory*                                   | 4                       |
| Basic, one semester principles of biology course with laboratory. (A Zoology course is also acceptable.)*       4         Microbiology       3         Basic one semester course with a laboratory*       3         Mathematics       3         College Algebra or higher mathematics*       3         Computer Science       3         Computer Fundamentals/Applications*       3         History       3         History of the United States or National Government*       3         History of Civilization1       6         English Composition       6         Basic, Art, Theater1       3         HUMANITIES       7         Philosophy, Political Science, Literature, or Humanities1       3         SOCIAL SCIENCES       7         Psychology       3         General Psychology*       3         Sociology       3         Introduction to Sociology*       3         Chemistry, biology, and microbiology courses must include laboratory sections.       2         Chemistry, biology, and microbiology courses must include laboratory sections.       2         Music, Art, Theater required for the bachelor's degree.       3  | Piology   |                         |
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| acceptable.)*       4         Microbiology       3         Basic one semester course with a laboratory*       3         Mathematics       3         College Algebra or higher mathematics*       3         Computer Science       3         Computer Fundamentals/Applications*       3         History       17         LIBERAL ARTS       3         History       3         History of the United States or National Government*       3         History of Civilization1       6         English Composition       3         Basic, two-semester sequence of English Composition*       6         The ARTS       3         Music, Art, Theater1       3         HUMANITIES       Philosophy, Political Science, Literature, or Humanities1       3         SOCIAL SCIENCES       Psychology       3         General Psychology*       3       6         COMMUNICATIONS       3       6         Speech Communication       4       6         Fundamentals of Speech or Speech Communication*       2         General Psychology, and microbiology courses must include laboratory sections.       4         Chemistry, biology, and microbiology courses must include laboratory sections.       4   |   | e.                      |
| Microbiology       3         Mathematics       3         College Algebra or higher mathematics*       3         Computer Science       3         Computer Fundamentals/Applications*       3         History       3         History       3         History of the United States or National Government*       3         History of Civilization1       6         English Composition       6         Basic, two-semester sequence of English Composition*       6         FINE ARTS       3         Music, Art, Theater1       3         SOCIAL SCIENCES       9         Psychology       3         General Psychology*       3         Sociology       3         Introduction to Sociology*       3         Introduction to Sociology*       3         Chemistry, biology, and microbiology courses must include laboratory sections.       2         Chemistry, biology, and microbiology courses must include laboratory sections.       2         Introductions       2         General Psychology       46         Chemistry, biology, and microbiology courses must include laboratory sections.       2         Introductions       46  | ,                   |                         |
| Basic one semester course with a laboratory*       3         Mathematics       3         College Algebra or higher mathematics*       3         Computer Science       3         Computer Fundamentals/Applications*       3         History       17         LIBERAL ARTS       3         History       3         History       3         History of the United States or National Government*       3         History of Civilization1       6         English Composition       6         Basic, two-semester sequence of English Composition*       6         TINE ARTS       3         Music, Art, Theater1       3         Music, Art, Theater1       3         SOCIAL SCIENCES       Psychology         General Psychology*       3         General Psychology*       3         Sociology       3         Introduction to Sociology*       3         Fundamentals of Speech Communication*       2         Fundamentals of Speech or Speech Communication*       2         Chemistry, biology, and microbiology courses must include laboratory sections.       2         Introductions.       1         These 12 SC course work are required for the bachelor's degree.  | acceptable.)  | 4                       |
| Basic one semester course with a laboratory*       3         Mathematics       3         College Algebra or higher mathematics*       3         Computer Science       3         Computer Fundamentals/Applications*       3         History       17         LIBERAL ARTS       3         History       3         History       3         History of the United States or National Government*       3         History of Civilization1       6         English Composition       6         Basic, two-semester sequence of English Composition*       6         TINE ARTS       3         Music, Art, Theater1       3         Music, Art, Theater1       3         SOCIAL SCIENCES       Psychology         General Psychology*       3         General Psychology*       3         Sociology       3         Introduction to Sociology*       3         Fundamentals of Speech Communication*       2         Fundamentals of Speech or Speech Communication*       2         Chemistry, biology, and microbiology courses must include laboratory sections.       2         Introductions.       1         These 12 SC course work are required for the bachelor's degree.  | Microbiology  |                         |
| Mathematics<br>College Algebra or higher mathematics*       3         Computer Science<br>Computer Fundamentals/Applications*       3<br>17         LIBERAL ARTS<br>History<br>History of the United States or National Government*       3<br>6         English Composition<br>Basic, two-semester sequence of English Composition*       6<br>15         FINE ARTS<br>Music, Art, Theater <sup>1</sup> 3         MUMANITIES<br>Philosophy, Political Science, Literature,<br>or Humanities <sup>1</sup> 3         SOCIAL SCIENCES<br>Psychology<br>General Psychology*       3<br>6         Sociology<br>Introduction to Sociology*       3<br>6         COMMUNICATIONS<br>Speech Communication<br>Fundamentals of Speech or Speech Communication*       2<br>46         Chemistry, biology, and microbiology courses must include<br>laboratory sections.       2<br>1         These 12 SC course work are required for the bachelor's degree.       3  | •,  | oratory* 3              |
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| Computer Science       3         Computer Fundamentals/Applications*       3         17       11         LIBERAL ARTS       17         History       15         History of the United States or National Government*       3         History of Civilization1       6         English Composition       6         Basic, two-semester sequence of English Composition*       6         THUMANITIES       15         Philosophy, Political Science, Literature, or Humanities1       3         SOCIAL SCIENCES       Psychology         General Psychology*       3         Sociology       3         Introduction to Sociology*       3         Fundamentals of Speech Communication       2         Fundamentals of Speech or Speech Communication*       2         Chemistry, biology, and microbiology courses must include laboratory sections.       46         Iboratory sections.       1         Threse 12 SC course work are required for the bachelor's degree.  |   |                         |
| Computer Fundamentals/Applications*3<br>17LIBERAL ARTS<br>History<br>History of the United States or National Government*3<br>distory of Civilization1History of Civilization16English Composition<br>Basic, two-semester sequence of English Composition*<br>Basic, Art, Theater16FINE ARTS<br>Music, Art, Theater13HUMANITIES<br>Philosophy, Political Science, Literature,<br>or Humanities13SOCIAL SCIENCES<br>Psychology<br>General Psychology*3Sociology<br>Introduction to Sociology*3COMMUNICATIONS<br>Speech Communication3Communication<br>Fundamentals of Speech or Speech Communication*2<br>46Chemistry, biology, and microbiology courses must include<br>laboratory sections.2<br>461 These 12 SC course work are required for the bachelor's degree.3  | College Algebra or higher mathematic                      | cs* 3                   |
| Computer Fundamentals/Applications*3<br>17LIBERAL ARTS<br>History<br>History of the United States or National Government*3<br>distory of Civilization1History of Civilization16English Composition<br>Basic, two-semester sequence of English Composition*<br>Basic, Art, Theater16FINE ARTS<br>Music, Art, Theater13HUMANITIES<br>Philosophy, Political Science, Literature,<br>or Humanities13SOCIAL SCIENCES<br>Psychology<br>General Psychology*3Sociology<br>Introduction to Sociology*3COMMUNICATIONS<br>Speech Communication3Communication<br>Fundamentals of Speech or Speech Communication*2<br>46Chemistry, biology, and microbiology courses must include<br>laboratory sections.2<br>461 These 12 SC course work are required for the bachelor's degree.3  | Computer Science  |                         |
| IBERAL ARTS       17         History       History of the United States or National Government*       3         History of Civilization <sup>1</sup> 6         English Composition       6         Basic, two-semester sequence of English Composition*       6         IT       15         FINE ARTS       15         Music, Art, Theater <sup>1</sup> 3         HUMANITIES       7         Philosophy, Political Science, Literature, or Humanities <sup>1</sup> 3         SOCIAL SCIENCES       Psychology         General Psychology*       3         Sociology       3         Introduction to Sociology*       3         Communication       2         Fundamentals of Speech or Speech Communication*       2         Chemistry, biology, and microbiology courses must include laboratory sections.       1 <sup>1</sup> These 12 SC course work are required for the bachelor's degree.       1   |   | * 3                     |
| LIBERAL ARTS<br>History<br>History of the United States or National Government* 3<br>History of Civilization <sup>1</sup> 6<br>English Composition<br>Basic, two-semester sequence of English Composition* 6<br>15<br>FINE ARTS<br>Music, Art, Theater <sup>1</sup> 3<br>HUMANITIES<br>Philosophy, Political Science, Literature,<br>or Humanities <sup>1</sup> 3<br>SOCIAL SCIENCES<br>Psychology<br>General Psychology*3<br>Sociology<br>Introduction to Sociology*3<br>COMMUNICATIONS<br>Speech Communication<br>Fundamentals of Speech or Speech Communication* 2<br>Chemistry, biology, and microbiology courses must include<br>laboratory sections.<br><sup>1</sup> These 12 SC course work are required for the bachelor's degree.   | computer rundamentals/Appreations                         | $\frac{3}{17}$          |
| History       3         History of the United States or National Government*       3         History of Civilization1       6         English Composition       6         Basic, two-semester sequence of English Composition*       6         TINE ARTS       15         Music, Art, Theater1       3         HUMANITIES       Philosophy, Political Science, Literature, or Humanities1       3         SOCIAL SCIENCES       Psychology       3         General Psychology*       3       3         Sociology       3       3         Introduction to Sociology*       3       3         COMMUNICATIONS       3       3         Speech Communication       2       46         Chemistry, biology, and microbiology courses must include laboratory sections.       4         1 These 12 SC course work are required for the bachelor's degree.       3  | LIBERAL ARTS  | 17                      |
| History of the United States or National Government* 3<br>History of Civilization <sup>1</sup> 6<br>English Composition<br>Basic, two-semester sequence of English Composition* 6<br>15<br>FINE ARTS<br>Music, Art, Theater <sup>1</sup> 3<br>HUMANITIES<br>Philosophy, Political Science, Literature,<br>or Humanities <sup>1</sup> 3<br>SOCIAL SCIENCES<br>Psychology<br>General Psychology*3<br>Sociology<br>Introduction to Sociology*3<br>Sociology<br>Introduction to Sociology*3<br>COMMUNICATIONS<br>Speech Communication<br>Fundamentals of Speech or Speech Communication*2<br>Chemistry, biology, and microbiology courses must include<br>laboratory sections.<br><sup>1</sup> These 12 SC course work are required for the bachelor's degree.   |   |                         |
| History of Civilization <sup>1</sup> 6         English Composition       6         Basic, two-semester sequence of English Composition*       6         FINE ARTS       15         Music, Art, Theater <sup>1</sup> 3         HUMANITIES       Philosophy, Political Science, Literature, or Humanities <sup>1</sup> 3         SOCIAL SCIENCES       Psychology         General Psychology*       3         Sociology       3         Introduction to Sociology*       3         Fundamentals of Speech Communication*       2         Fundamentals of Speech or Speech Communication*       2         Chemistry, biology, and microbiology courses must include laboratory sections.       2 <sup>1</sup> These 12 SC course work are required for the bachelor's degree.       3   |   | Government* 3           |
| English Composition         Basic, two-semester sequence of English Composition*         Basic, two-semester sequence of English Composition*         15         FINE ARTS         Music, Art, Theater1         Music, Art, Theater1         3         HUMANITIES         Philosophy, Political Science, Literature,<br>or Humanities1         3         SOCIAL SCIENCES         Psychology         General Psychology*         3         Sociology         Introduction to Sociology*         3         Speech Communication         Fundamentals of Speech or Speech Communication*         Fundamentals of Speech or Speech Communication*         Chemistry, biology, and microbiology courses must include laboratory sections.         1         These 12 SC course work are required for the bachelor's degree.   | •   |                         |
| Basic, two-semester sequence of English Composition* 6<br>15<br>FINE ARTS<br>Music, Art, Theater <sup>1</sup> 3<br>HUMANITIES<br>Philosophy, Political Science, Literature,<br>or Humanities <sup>1</sup> 3<br>SOCIAL SCIENCES<br>Psychology<br>General Psychology*3<br>Sociology<br>Introduction to Sociology*3<br>Sociology<br>Introduction to Sociology*3<br>COMMUNICATIONS<br>Speech Communication<br>Fundamentals of Speech or Speech Communication*2<br>total<br>Chemistry, biology, and microbiology courses must include<br>laboratory sections.<br><sup>1</sup> These 12 SC course work are required for the bachelor's degree.   | Thistory of chanzadon                                     | 0                       |
| 15         FINE ARTS         Music, Art, Theater1         3         HUMANITIES         Philosophy, Political Science, Literature,<br>or Humanities1         3         SOCIAL SCIENCES         Psychology         General Psychology*         3         Sociology         Introduction to Sociology*         3         COMMUNICATIONS         Speech Communication         Fundamentals of Speech or Speech Communication*         Chemistry, biology, and microbiology courses must include<br>laboratory sections. <sup>1</sup> These 12 SC course work are required for the bachelor's degree.   | English Composition                                       |                         |
| FINE ARTS       Music, Art, Theater <sup>1</sup> 3         Music, Art, Theater <sup>1</sup> 3         HUMANITIES       Philosophy, Political Science, Literature, or Humanities <sup>1</sup> 3         SOCIAL SCIENCES       Psychology         General Psychology*       3         Sociology       3         Introduction to Sociology*       3         COMMUNICATIONS       3         Speech Communication       2         Fundamentals of Speech or Speech Communication*       2         Chemistry, biology, and microbiology courses must include laboratory sections.       1 <sup>1</sup> These 12 SC course work are required for the bachelor's degree.       1   | Basic, two-semester sequence of Englis                    | h Composition* <u>6</u> |
| Music, Art, Theater <sup>1</sup> 3         HUMANITIES       Philosophy, Political Science, Literature, or Humanities <sup>1</sup> 3         SOCIAL SCIENCES       Psychology         General Psychology*       3         Sociology       3         Introduction to Sociology*       3         COMMUNICATIONS       3         Speech Communication       2         Fundamentals of Speech or Speech Communication*       2         Chemistry, biology, and microbiology courses must include laboratory sections.       1 <sup>1</sup> These 12 SC course work are required for the bachelor's degree.       3  |   | 15                      |
| HUMANITIES       Philosophy, Political Science, Literature, or Humanities <sup>1</sup> 3         SOCIAL SCIENCES       Psychology         General Psychology*       3         Sociology       3         Introduction to Sociology*       3         COMMUNICATIONS       3         Speech Communication       2         Fundamentals of Speech or Speech Communication*       2         Chemistry, biology, and microbiology courses must include laboratory sections.       1         These 12 SC course work are required for the bachelor's degree.       1  |   |                         |
| Philosophy, Political Science, Literature,<br>or Humanities <sup>1</sup> 3         SOCIAL SCIENCES<br>Psychology<br>General Psychology*       3         Sociology<br>Introduction to Sociology*       3         Sociology<br>Introduction to Sociology*       3         COMMUNICATIONS<br>Speech Communication<br>Fundamentals of Speech or Speech Communication*       2         Chemistry, biology, and microbiology courses must include<br>laboratory sections.       2         These 12 SC course work are required for the bachelor's degree.  | Music, Art, Theater <sup>1</sup>                          | 3                       |
| Philosophy, Political Science, Literature,<br>or Humanities <sup>1</sup> 3         SOCIAL SCIENCES<br>Psychology<br>General Psychology*       3         Sociology<br>Introduction to Sociology*       3         Sociology<br>Introduction to Sociology*       3         COMMUNICATIONS<br>Speech Communication<br>Fundamentals of Speech or Speech Communication*       2         Chemistry, biology, and microbiology courses must include<br>laboratory sections.       2         These 12 SC course work are required for the bachelor's degree.  |   |                         |
| or Humanities13SOCIAL SCIENCES<br>Psychology<br>General Psychology*3Sociology<br>Introduction to Sociology*3Sociology<br>Introduction to Sociology*3COMMUNICATIONS<br>Speech Communication<br>Fundamentals of Speech or Speech Communication<br>Fundamentals of Speech or Speech Communication<br>Chemistry, biology, and microbiology courses must include<br>laboratory sections.Chemistry, biology, and microbiology courses must include<br>laboratory sections.21These 12 SC course work are required for the bachelor's degree.  |   |                         |
| SOCIAL SCIENCES<br>Psychology<br>General Psychology* 3<br>Sociology<br>Introduction to Sociology* <u>3</u><br>6<br>COMMUNICATIONS<br>Speech Communication<br>Fundamentals of Speech or Speech Communication* <u>2</u><br>TOTAL <u>46</u><br>Chemistry, biology, and microbiology courses must include<br>laboratory sections. <sup>1</sup> These 12 SC course work are required for the bachelor's degree.   |   |                         |
| Psychology       3         General Psychology*       3         Sociology       3         Introduction to Sociology*       3         COMMUNICATIONS       3         Speech Communication       2         Fundamentals of Speech or Speech Communication*       2         Chemistry, biology, and microbiology courses must include laboratory sections.       1         These 12 SC course work are required for the bachelor's degree.       1   | or Humanities'  | 3                       |
| Psychology       3         General Psychology*       3         Sociology       3         Introduction to Sociology*       3         COMMUNICATIONS       3         Speech Communication       2         Fundamentals of Speech or Speech Communication*       2         Chemistry, biology, and microbiology courses must include laboratory sections.       1         These 12 SC course work are required for the bachelor's degree.       1   | SOCIAL SCIENCES   |                         |
| General Psychology*       3         Sociology  |   |                         |
| Sociology  | , .,  | 3                       |
| Introduction to Sociology* 3<br>6<br>COMMUNICATIONS<br>Speech Communication<br>Fundamentals of Speech or Speech Communication* 2<br>TOTAL 46<br>Chemistry, biology, and microbiology courses must include<br>laboratory sections.<br><sup>1</sup> These 12 SC course work are required for the bachelor's degree.  | ,   |                         |
| 6         COMMUNICATIONS         Speech Communication         Fundamentals of Speech or Speech Communication*         TOTAL         Chemistry, biology, and microbiology courses must include laboratory sections. <sup>1</sup> These 12 SC course work are required for the bachelor's degree.  | Sociology   |                         |
| Speech Communication       2         Fundamentals of Speech or Speech Communication*       2         TOTAL       46         Chemistry, biology, and microbiology courses must include laboratory sections.       1 <sup>1</sup> These 12 SC course work are required for the bachelor's degree.  | Introduction to Sociology*                                | 3                       |
| Speech Communication       2         Fundamentals of Speech or Speech Communication*       2         TOTAL       46         Chemistry, biology, and microbiology courses must include laboratory sections.       1 <sup>1</sup> These 12 SC course work are required for the bachelor's degree.  |   | 6                       |
| Fundamentals of Speech or Speech Communication*       2         TOTAL       46         Chemistry, biology, and microbiology courses must include laboratory sections.       1 <sup>1</sup> These 12 SC course work are required for the bachelor's degree.   | COMMUNICATIONS  |                         |
| TOTAL     46       Chemistry, biology, and microbiology courses must include laboratory sections.     1 <sup>1</sup> These 12 SC course work are required for the bachelor's degree.   | Speech Communication                                      |                         |
| Chemistry, biology, and microbiology courses must include<br>laboratory sections.<br><sup>1</sup> These 12 SC course work are required for the bachelor's degree.  |   | munication* $2$         |
| laboratory sections.<br><sup>1</sup> These 12 SC course work are required for the bachelor's degree.   | TOTAL   | 46                      |
| laboratory sections.<br><sup>1</sup> These 12 SC course work are required for the bachelor's degree.   | Chemistry, biology, and microbiology cou                  | rses must include       |
|  |   |                         |
|  | <sup>1</sup> These 12 SC course work are required for the | bachelor's degree.      |
|  |   |                         |

semester immediately preceding entry into the professional curriculum must be presented before registration. Students entering with a baccalaureate or higher degree from

an accredited college or university must complete the following requirements for a CHRP bachelor's degree: (a) 32 SC in residence; (b) all program-specific mathematics and biological and physical science prerequisites; (c) all program-specific professional requirements; (d) if not completed as part of a previous degree program, a 3 SC college/university course in American history or national government, a 3 SC course in college algebra or higher level mathematics, and a 3 SC course in humanities.

## **PROFESSIONAL CURRICULUM**

The following 67 SC for the Associate of Science degree (69 SC for the Bachelor of Science degree) are required in the professional program:

| Course #<br><i>Fall (1)</i> | Title Semester C                            | redit   |
|-----------------------------|---|---|
| DHY 2311                    | Chemistry for Biological Sciences           | 3   |
| DHY 2312                    | Dental Hygiene Theory I                     | 3   |
| DHY 2413                    | Dental Hygiene Instrumentation              | 4   |
| DHY 2314                    | Human Anatomy and Physiology I              | 3   |
| DHY 2215                    | Oral Anatomy                                | 2   |
| DHY 2116                    | Oral Embryology and Histology               | 1   |
| DHY 2217                    | Dental Radiography I                        | $\frac{2}{18}$  |
| Spring (2)                  |   | 10  |
| DHY 2221                    | Dental Hygiene Clinic I                     | 2   |
| DHY 2322                    | Oral Medicine                               | 3   |
| DHY 2223                    | Dental Radiography II                       | 2   |
| DHY 2425                    | Human Anatomy and Physiology II             | 4   |
| DHY 2326                    | Dental Hygiene Theory II                    | 3   |
| DHY 2327                    | Dental Materials                            | $\frac{3}{17}$  |
| Summer (3)                  |   | 17  |
| DHY 3145                    | Dental Hygiene Clinic—Summer                | 1   |
| DHY 3246                    | Local Anesthesia                            | $\frac{2}{3}$   |
| Fall (4)                    |   | 3   |
| DHY 3531                    | Dental Hygiene Clinic II                    | 5   |
| DHY 3332                    | Pharmacology                                | 3   |
| DHY 3344                    | Dental Health Education and                 |   |
|                             | Community Dentistry                         | 3   |
| DHY 3334                    | Pathology                                   | 3   |
| DHY 3335                    | Periodontology                              | $\frac{3}{17}$  |
| Spring (5)                  |   | 17  |
| DHY 3541                    | Dental Hygiene Clinic III                   | 5   |
| DHY 3342                    | Management of Patients with Special Needs   |   |
| DHY 3243                    | Practice Management                         | 2   |
| DHY 3233                    | Nutrition                                   | 2   |
| DHY 42023                   | * Administrative Aspects of Dental Practice | $\begin{array}{r} 2\\ 2\\ \underline{2}\\ \underline{14} \end{array}$ |
|                             | -   | 14  |
| TOTAL                       |   | 69  |

#### TOTAL

#### \*DHY 4202 will be required for baccalaureate graduates only.

A grade of "F" or a mark of "U" or "NC" is not acceptable for progression to the next semester, nor is it acceptable for graduation if it occurs in the last semester of the program. A grade of "D" in the following professional courses is not acceptable for progression to the next semester, nor is it acceptable for graduation if it occurs in the last semester of the program: Dental Hygiene Theory I (DHY 2312), Dental Hygiene Instrumentation (DHY 2413), Dental Radiography I (DHY 2217), Dental Hygiene Clinic I (DHY 2221), Dental Radiography II (DHY 2223), Dental Hygiene Theory II (DHY 2326), Local Anesthesia (DHY 3246), Dental Hygiene Clinic II (DHY 3531), Dental Hygiene Clinic III (DHY 3541), Dental Hygiene Clinic-Summer (DHY 3145).

## APPLICATION PROCEDURES AND DEADLINES

Class size is limited and all applicants may not be selected for participation in the program. A selective admissions process will be utilized to facilitate representation from each of the five geographic regions of the state (NE, NW, SE, SW, and Central). Information will be provided with the application packet. All application materials must be received by **March 1** (see page 8) to be assured of consideration for admission. No applications will be reviewed after this date. Applicants must provide:

- 1. **Application for Admission:** The College of Health Related Professions Application for Admission is required. Please contact the department office or the CHRP Office of Student Affairs for information.
- 2. **Application Fee:** A non-refundable application fee of \$10.00 is required and must accompany the application.
- 3. Official Transcripts: Arrange for each college or university you have attended to forward an official transcript of your course work. A minimum cumulative and prerequisite GPA of 2.75 is required for admission. Additionally, applicants must have completed a minimum of 12 SC of the prerequisite course work prior to the application deadline.
- 4. ACT Scores: Scores must be documented on an official high school transcript or sent directly from ACT. A minimum ACT composite score of 20 is required for admission.
- 5. **Professional Observation Form:** One (1) completed professional observation form from a dentist or a dental hygienist is required. That professional observation must reflect evidence of previous exposure to the profession of dentistry, such as observation of at least 20 hours in a dental office or actual dental assisting experience. The professional observation form will be provided with the application packet.
- 6. **Interview:** The most qualified applicants will be contacted by the department to arrange an interview after the application packet is complete.

Transcripts "issued to the student" will not substitute for official transcripts forwarded directly to the College of Health Related Professions by the institution issuing the transcripts.

Arkansas residency will be considered during selection for admission.  $% \label{eq:considered}$ 

Applicants are considered without regard to race, color, creed, age, marital status, national origin, or sex. Otherwise qualified individuals with disabilities receive equal consideration.

All documents should be submitted to: University of Arkansas for Medical Sciences, College of Health Related Professions, Office of Student Affairs, UAMS, #619, 4301 West Markham Street, Little Rock, Arkansas 72205. Telephone (501) 686-5730.

## **PROFESSIONAL COURSE WORK**

## DHY 2116—Oral Embryology and Histology

Development and composition of tissues of the oral cavity and related structures.

## DHY 2215—Oral Anatomy

Anatomy of dental structures.

## DHY 2217—Dental Radiography I

Introduction to radiographic essentials. Emphasis on safety precautions, paralleling technique, and processing of exposed film.

## DHY 2221—Dental Hygiene Clinic I

Clinical application of dental hygiene techniques. Emphasis on patient medical history, aseptic techniques, patient assessment procedures, instrumentation, patient management, professional behavior, and instrument sharpening. Prerequisite: DHY 2312, 2313, 2217.

## DHY 2223—Dental Radiography II

History and development of radiography, biological effects of exposure, extraoral techniques, and interpretation of processed film. Prerequisite: DHY 2217.

## DHY 2311—Chemistry for Biological Sciences

Introduction to organic and biochemistry. Provides a foundation for anatomy, physiology, nutrition, pathology, microbiology, and pharmacology.

## DHY 2312-Dental Hygiene Theory I

Orientation to preclinical procedures. Emphasis on prevention of disease transmission, examination techniques, medical histories, etiology of plaque, calculus, and periodontal disease.

## DHY 2314—Human Anatomy and Physiology I

Functions of the major organ systems. Emphasis on physiology, microanatomy, and macroanatomy.

## DHY 2322—Oral Medicine

Patient interviews, medical/dental history, clinical oral examination. Includes recognition and description of disease processes and oral pathology. Emphasis on microbiology and the role of microorganisms in the disease process.

## DHY 2326—Dental Hygiene Theory II

Continuation of Dental Hygiene Theory I. Includes oral disease control, fundamentals of preventive principles and techniques, chairside plaque control instructions, fluorides, occlusion and dental exams, and instrument sharpening.

## DHY 2327—Dental Materials

Restorative and impression materials and abrasive agents. Includes physical properties and manipulation variables.

## DHY 2413—Dental Hygiene Instrumentation

Orientation and clinical application of instruments and practical experience in performing the oral prophylaxis.

## DHY 2425—Human Anatomy and Physiology II

Continuation of Human Anatomy and Physiology I. Includes anatomy of the head and neck with emphasis on osteology, neurology, and the circulatory system.

## DHY 3145—Dental Hygiene Clinic—Summer

Provides for continuous clinical experience to enhance skills and promote clinical competence. Offered in summer term only.

## DHY 3233—Nutrition

Introduction to the science of nutrition and its oral relevance. Emphasis on preventive dentistry and counseling for dental disease prevention.

#### DHY 3243—Practice Management

Dental hygiene and its relationship to the practice of dentistry. Emphasis on procedures for patient management, recall, and record keeping. Includes ethical issues and the American Dental Hygienists Association Code of Ethics as well as jurisprudence topics.

#### DHY 3246-Local Anesthesia

Introduces principles related to local anesthetic injections and provides for the clinical application of techniques. Reviews related anatomical, neuro-physiological, and pharmacological considerations. Prevention and treatment of local and systemic complications of local anesthesia are stressed.

#### DHY 3332—Pharmacology

Physiologic effects of medications. Emphasis on drugs used by the dental profession.

## DHY 3334—Pathology

Basic concepts of pathology. Includes inflammation, immunology, changes due to microorganisms, neoplasms, nutrition, and hormonal influence.

## DHY 3335—Periodontology

Periodontal diseases and the role of the dental hygienist in their diagnosis, prevention, and treatment.

#### DHY 3342-Management of Patients with Special Needs

Management techniques for geriatric, chronically ill and handicapped individuals. Includes topics and demonstrations related to head and neck cancer.

# DHY 3344—Dental Health Education and Community Dentistry

Dental health education and public health. Emphasis on the role of the hygienist in promoting dental health in the private office and community, education methods, biostatistics, and epidemiology.

## DHY 3531—Dental Hygiene Clinic II

Continuation of Summer Clinic. Includes increased competency in instrumentation and patient management skills on periodontally involved patients. Prerequisite: DHY 2221, DHY 2326, DHY 2223, and DHY 3145.

## DHY 3541—Dental Hygiene Clinic III

Continuation of Dental Hygiene Clinic II. Includes increased competency in the use of curets on periodontally involved patients, root planing, subgingival curettage, use of the ultrasonic scaler, and time management. Prerequisite: DHY 2223, DHY 3531.

#### DHY 4202—Administrative Aspects of Dental Practice

An examination of dental practice management and administrative concepts, policies, and procedures. A seminar and practicum approach will be utilized and each student will develop a policy and procedure manual for a selected dental office. Enrollment is limited to dental hygiene students who are pursuing baccalaureate study.

## DIAGNOSTIC MEDICAL SONOGRAPHY PROGRAM Department of Imaging and Radiation Sciences

The Diagnostic Medical Sonography Program is accredited by Commission on Accreditation of Allied Health Education Programs in cooperation with the Joint Review Committee on Education in Diagnostic Medical Sonography.

Terry J. DuBose, M.S., R.D.M.S., F.A.I.U.M., F.S.D.M.S.; Division Director and Associate Professor

Division of Diagnostic Medical Sonography Department of Imaging and Radiation Sciences University of Arkansas for Medical Sciences College of Health Related Professions, UAMS #563 4301 West Markham Street, Little Rock, Arkansas 72205 Telephone: (501) 686-6510 FAX: (501) 686-6513 E-mail: duboseterryj@uams.edu Web site: http://www.uams.edu/chrp/Sonography

Faculty: T. Angtuaco, A. Baker, S. Barringer, K. Bridgeman, B. Butler, W. Diacon, T. DuBose, J. Eidt, L. Kimbrow, R. Nation, W. Pedigo, D. Rands, A. Sinha, R. Troillett, Q. Young

Rebecca L. Ludwig, Ph.D., R.T.(R)(QM)(ARRT); Interim Chairman, Department of Imaging and Radiation Sciences

The mission of the Diagnostic Medical Sonography Program is to provide a progressive academic and clinic educational environment for qualified students and prepare them as competent and compassionate heath care workers.

## THE PROFESSION

Diagnostic Medical Sonography (DMS) is a specialized area of diagnostic imaging and the diagnostic medical sonographer is an integral part of the health care team. DMS is a specialized, noninvasive, technique that utilizes high frequency ultrasound waves with appropriate detectors and display apparatus to produce diagnostic images of internal organs and structures. The diagnostic medical sonographer provides patient services using sonographic equipment in consultation with a physician. The sonographer assists the physician in gathering pertinent anatomical, physiological, and/or pathological sonographic data and images necessary to diagnose a variety of conditions and diseases.

Sonographers must demonstrate a high degree of motivation and good judgment and be able to work independently. The sonographer must work well with other health care professionals in providing quality service to the patient and must demonstrate empathy and ethical behavior in the practice of the profession.

Employment opportunities may be available throughout the state and nation in hospitals, clinics, physician offices, and industry. Suitably qualified educators, researchers, and administrators are also needed. The national demand for sonographers continues to exceed the supply of graduates.

## THE DMS PROGRAM

**Diagnostic Medical Sonography/Little Rock:** The College of Health Related Professions offers an Advanced Certificate and Bachelor of Science degree programs in Diagnostic Medical Sonography. Admission to the Advanced Certificate (basic) program requires applicants to have completed a twoyear allied health educational program that is patient-care related. Allied health occupations include, but are not limited to, radiologic technologist, respiratory therapist, occupational therapist, physical therapist, and registered nurse. In addition, successful completion of 13 semester credits (SC) of specified prerequisite courses (see page 39) are required. The curriculum consists of 54 SC of specified course work offered over three (3) semesters and one (1) summer of full-time study. Admission to the Bachelor of 52 SC of specified prerequisite courses (see page 40). Prior allied health educational program completion and/or certification is not required for admission to the Bachelor of Science degree program. The professional curriculum for the program requires 72 SC of specified course work offered over four (4) semesters and two (2) summers of full-time study.

**Diagnostic Medical Sonography/Fayetteville:** The Advanced Certificate and Bachelor of Science degree programs in Diagnostic Medical Sonography are offered in northwest Arkansas in conjunction with the Area Health Education Center (AHEC) Northwest. The prerequisite and professional components of this program are the same as those of the Little Rock program as described above and on the following pages. For information contact: Lori Kimbrow, B.S.R.T., R.D.M.S., R.D.C.S., R.V.T., R.T.(ARRT), or Stanley Olejniczak, R.T.(R) (ARRT); AHEC Northwest, 2907 E. Joyce, Fayetteville, Arkansas 72703. Telephone: (479)521-8269.

**Diagnostic Medical Sonography/Texarkana:** The Advanced Certificate and Bachelor of Science degree programs in Diagnostic Medical Sonography are offered in Southwest Arkansas in conjunction with the Area Health Education Center (AHEC) Southwest. The prerequisite and professional components of this program are the same as those of the Little Rock program as described above and on the following pages. For information contact: David Rands, B.A., R.D.C.S., R.V.T., R.D.M.S. or William Pedigo, R.D.M.S., R.T., (R)(ARRT); AHEC Southwest; 300 East 6th Street; Texarkana, Arkansas 75504. Telephone: (870) 779-6054.

On-Line Bachelor of Science in Diagnostic Medical Sonography Career Ladder: In addition, the College of Health Related Professions offers an online distance education Bachelor of Science in Diagnostic Medical Sonography degree completion program for individuals who already hold a certification from the American Registry of Diagnostic Medical Sonography (R.D.M.S., R.V.T., or R.D.C.S.). The online degree completion program requires 92 prerequisite SC plus 32 SC from the CHRP-DMS program for a total of 124 SC that are required for the Bachelor of Science degree in Diagnostic Medical Sonography. The ARDMS certification is a mandatory prerequisite since this degree program does not require additional clinical education. This may allow the sonographer to continue to work in her/his current job. The degree completion program does not assure that the graduate will be eligible to sit for any ARDMS examinations. The individual is responsible for completing the required clinical prerequisites for specific ARDMS examinations. See: www.ARDMS.org.

## **CERTIFICATIONS AND LICENSURES**

Upon successful completion of the **Diagnostic Medical Sonography Program**, graduates are eligible to apply to take the national certifying examinations administered by the American Registry of Diagnostic Medical Sonographers. See the on-line career ladder section above for exceptions.

To earn these credentials, candidates must pass the following American Registry of Diagnostic Medical Sonographers (ARDMS) examinations:

**Registered Diagnostic Medical Sonography (RDMS):** Ultrasound Physics and Instrumentation **AND** Abdomen, **OR** OB/GYN, **OR** Neurosonology, **OR** Ophthalmology **OR** Breast Sonography.

**Registered Vascular Technologist (RVT):** Vascular Physical Principles and Instrumentation **AND** Vascular Technology.

**Registered Diagnostic Cardiac Sonographer (RDCS):** Cardiovascular Principles, Instrumentation, and Physics **AND** Adult Echocardiography, Pediatric or Fetal Echocardiography.

Successful completion of the program does not itself insure registration. Each student is responsible for familiarizing himself/herself with the applicable registration requirements. See: www.ARDMS.org.

## TRACKS

There are three entry points for applicants to the DMS program. Those who completed a two-year allied health educational program that is patient-care related and have successfully completed the 13 SC of specified prerequisite course work may be accepted to enter the Advanced Certificate track. Allied health occupations include, but are not limited to, radiologic technologist, respiratory therapist, occupational therapist, physical therapist, and registered nurse. Upon completion of this approximately 18-month basic program, graduates will receive an Advanced Certificate

in DMS. If they choose to continue for the B.S. in DMS, they must first successfully complete, or have completed, all 52 SC of specified prerequisite course work (of which the previous 13 SC is a part).

Applicants who have not completed a two-year allied health eductional program that is patient-care related may be accepted into the B.S. program if they have completed all 52 SC of the specified prerequisite course work. They will normally complete the basic program as part of the B.S. program. Although they will not receive an Advanced Certificate at that point, they will be eligible to sit for the national ARDMS certification examinations if they are continuing students in the B.S. program. When they successfully complete the final spring semester of the B.S. program they will be eligible to receive the B.S. degree in Diagnostic Medical Sonography.

Applicants who are certified by the American Registry of Diagnostic Medical Sonography (ARDMS) may be accepted into the online B.S. Career Ladder track if they have completed all 92 SC of the specified prerequisite course work. They will normally complete the following:

- 1. ARDMS certification
- 2. 92 prerequisite semester credits transferred from any regionally accredited college or university, including:
  - a. A minimum of 52 semester credits of specific liberal arts and science courses (see the CHRP catalog, page 40).
  - b. 40 semester credits of electives; 13 semester credits of which must be upper level (3000 or 4000) electives. The upper level electives may be completed concurrently at UAMS or transferred from any 4-year regionally accredited college or university.
- 3. These prerequisite hours, from a regionally accredited institution of higher education, plus 32 or more semester credit hours of UAMS Diagnostic Medical Sonography online studies, must equal or exceed the 124 semester credits required for a Bachelor of Science degree in Diagnostic Medical Sonography. Of the 124 credits, a minimum of 45 must be upper level (3000 and 4000) courses.
- 4. The ARDMS certification is a mandatory prerequisite, since this degree completion program does not require additional clinical education. This may allow sonographers to continue to work in their current jobs while completing their degrees.

## ADVANCED CERTIFICATE (BASIC PROGRAM) PREPROFESSIONAL CURRICULUM

In addition to completing a two-year health education program that is patient-care related, the following 13 SC are required from an accredited college or university and must fulfill all College requirements regarding acceptance of transfer credit:

|  | Minimum         |
|--|-----------------|
| Area/Typical Course Title                  | Semester Credit |
| College Algebra (or higher level Mathemati | cs)* 3          |
| Human Anatomy and Physiology*, **          | 4               |
| Introductory College Physics***            | 3               |
| Computer Fundamentals/Applications*        | _ 3             |
| TOTAL                                      | 13              |

To be considered for acceptance into the program, the applicant must have earned a CGPA of 2.5 or higher at the time of application. In addition, only grades of "C" or higher are accepted in prerequisite course work.

\*Human anatomy and physiology, computer fundamentals, and college algebra must be completed within seven years prior to admission into the program.

\*\*Anatomy and physiology courses must cover all body systems and include accompanying laboratory sections.

\*\*\*Introductory College Physics must cover wave motion, heat, electricity, force, and energy.

Actual course titles may vary among institutions. Consult the Division Director for preprofessional counseling.

Fulfillment of the diagnostic medical sonography preprofessional curriculum does not assure admittance into the professional program (please see Application Procedures and Deadlines). Not more than one course in the following group will be accepted in transfer to meet degree requirements: band, studio, physical education, military science, English as a second language (ESL), manual skills.

Students entering with a baccalaureate or higher degree from an accredited college or university must complete the following requirements for a CHRP bachelor's degree: (a) 32 SC in residence; (b) all program-specific mathematics and biological and physical science prerequisites; (c) all program-specific professional requirements; (d) if not completed as part of a previous degree program, a 3 SC college/university course in American history or national government, a 3 SC course in college algebra or higher level mathematics, and a 3 SC course in humanities.

## ADVANCED CERTIFICATE (BASIC PROGRAM) PROFESSIONAL CURRICULUM

Advanced Certificate: The following 54 SC are offered in the Advanced Certificate Diagnostic Medical Sonography professional program. All courses as listed below must be successfully completed to obtain the Advanced Certificate.

| Course # | Title                  | Semester Credit |
|----------|------------------------|-----------------|
| Fall (1) |                        |                 |
| DMS 3211 | Sectional Anatomy      | 2               |
| DMS 3312 | Introductory Physics   | 3               |
| DMS 3313 | Abdominal Sonography   | 3               |
| DMS 3221 | Gynecologic Sonography | 2               |
| DMS 3514 | Clinical Practicum I   | _5              |
|          |                        | 15              |

## Spring (2)

| Spring (2)  |               |
|---|---------------|
| DMS 4242 Sonographic Conference                       | 2             |
| DMS 3222 Advanced Physics                             | 2             |
| DMS 3321 Sonographic Applications: Obstetrics         | 3             |
| DMS 3824 Clinical Practicum II                        | _8            |
|   | 15            |
| Summer (3)  |               |
| DMS 3541 Clinical Practicum III                       | 5             |
| DMS 4342 Introductory Cardiac & Vascular Sonography   | 3             |
|   | $\frac{3}{8}$ |
| Fall (4)  |               |
| DMS 4241 Advanced Obstetrics, Genetics, and Pathology | / 2           |
| DMS 3323 Sonographic Survey                           | 3             |
| DMS 4352 Doppler Sonography & Advanced Hemodynamics   | 3             |
| DMS 4843 Clinical Practicum IV                        | 8             |
|   | 16            |

## TOTAL

All professional courses must be completed with a grade of "C" or higher for progression to the next semester and for graduation.

54

Advanced Certificate in Diagnostic Medical Sonography: Qualified students who successfully complete all 13 SC preprofessional courses and 54 SC Advanced Certificate professional for a total of 67 SC are eligible upon graduation to receive the Advanced Certificate in Diagnostic Medical Sonography.

## ADVANCED CERTIFICATE (BASIC PROGRAM) APPLICATION PROCEDURES AND DEADLINES

Class size is limited and all applicants may not be selected for participation in the diagnostic medical sonography program. Applications must be received by **March 1** (see page 8) to be assured of consideration for admission. See page 7 for further information on deadlines and procedures for admission. Applicants must provide:

- 1. **Application for Admission:** The College of Health Related Professions Application for Admission is required. Please contact the department office or the CHRP Office of Student Affairs for information.
- 2. **Application Fee:** A non-refundable application fee of \$10.00 is required and must accompany the application.
- 3. **Official Transcripts:** Arrange for each college or university you have attended to forward an official transcript of your course work. A minimum CGPA of 2.5 or higher for all undergraduate courses is required.
- 4. **Certification/Registration:** Provide official transcripts verifying completion of a two-year allied health education program that is patient care related.
- 5. **Counseling:** Qualified applicants must present themselves in person for academic counseling in the department. This counseling session will be scheduled by the program.

Transcripts "issued to the student" will not substitute for official transcripts forwarded directly to the College of Health Related Professions by the institution issuing the transcripts.

Arkansas residency will be considered during selection for admission.

Applicants are considered without regard to race, color, creed, age, marital status, national origin, or sex. Otherwise qualified individuals with disabilities receive equal consideration.

All documents should be submitted to: University of Arkansas for Medical Sciences, College of Health Related Professions, Office of Student Affairs, UAMS, #619, 4301 West Markham Street, Little Rock, Arkansas 72205. Telephone: (501) 686-5730.

## BACHELOR OF SCIENCE DEGREE PREPROFESSIONAL CURRICULUM

The following 52 SC are required from an accredited college or university and must fulfill all College requirements regarding acceptance of transfer credit:

|   | Minimum         |
|---|-----------------|
| Area/Typical Course Title S<br>SCIENCE            | emester Credit  |
| College Algebra (or higher level Mathema          | tics)* 3        |
| Human Anatomy and Physiology*, **                 | 4               |
| Introductory College Physics***                   |                 |
|   | $\frac{3}{10}$  |
| LIBERAL ARTS                                      |                 |
| English Composition I                             | 3               |
| English Composition II                            | 3               |
| American History or National Governmen            |                 |
| History of Civilization or World History I        | 3               |
| History of Civilization or World History II       | $\frac{3}{15}$  |
|   | 15              |
| SOCIAL SCIENCES                                   | 2               |
| Psychology  | 3               |
| Sociology   | $\frac{3}{6}$   |
| COMMUNICATIONS                                    | 0               |
| Speech or Oral Communication                      | 2               |
| opecen of oral commanication                      | -               |
| COMPUTER SCIENCE                                  |                 |
| Computer Fundamentals/Applications                | 3               |
| FINE ARTS   |                 |
| Art, Music, or Theater Art                        | 3               |
| Ait, Music, of meater Ait                         | 5               |
| HUMANITIES  |                 |
| Philosophy, Political Science, Literature,        |                 |
| or Humanities                                     | 3               |
| ELECTIVES   | $\frac{10}{10}$ |
| TOTAL   | 52              |
| To be considered for acceptance into the program. | the applicant   |

To be considered for acceptance into the program, the applicant must have earned a CGPA of 2.5 or higher at the time of application. In addition, only grades of "C" or higher are accepted in prerequisite course work.

\*Human anatomy and physiology and college algebra must be completed within seven years prior to admission into the program.

\*\*Anatomy and physiology courses must cover all body systems and include accompanying laboratory sections.

\*\*\*Introductory College Physics must cover wave motion, heat, electricity, force, and energy.

Actual course titles may vary among institutions. Consult the Division Director for preprofessional counseling.

Fulfillment of the diagnostic medical sonography preprofessional curriculum does not assure admittance into the professional program (please see Application Procedures and Deadlines). Not more than one course in the following group will be accepted in transfer to meet degree requirements: band, studio, physical education, military science, English as a second language (ESL), manual skills.

Students entering with a baccalaureate or higher degree from an accredited college or university must complete the following requirements for a CHRP bachelor's degree: (a) 32 SC in residence; (b) all program-specific mathematics, biological and physical science prerequisites; (c) all program-specific professional requirements; (d) if not completed as part of a previous degree program, a 3 SC college/university course in American history or national government, a 3 SC course in college algebra or higher level mathematics, and a 3 SC course in humanities.

## BACHELOR OF SCIENCE DEGREE PROFESSIONAL CURRICULUM

**Bachelor of Science Degree:** In addition to the 52 SC of preprofessional courses, the following 72 SC are offered in the Bachelor of Science in Diagnostic Medical Sonography professional program. All courses as listed below must be successfully completed to receive the Bachelor of Science degree.

| Course #<br>Fall (1)   | Title   | Semester Credit                                 |
|--|---|---|
| DMS 2321<br>DMS 3211<br>DMS 3312<br>DMS 3313<br>DMS 3221<br>DMS 3514 | Basic Patient Care<br>Sectional Anatomy<br>Introductory Physics<br>Abdominal Sonography<br>Gynecologic Sonography<br>Clinical Practicum I               | 3<br>2<br>3<br>3<br>2<br><u>5</u><br>18         |
| DMS 3222<br>DMS 3321   | 2 Sonographic Conference<br>2 Advanced Physics<br>1 Sonographic Applications: C<br>4 Clinical Practicum II<br>8)  | Dbstetrics 2<br>$\frac{2}{3}$<br>$\frac{8}{15}$ |
| DMS 3541<br>DMS 4342   | 1 Clinical Practicum III<br>2 Introductory Cardiac & Vascul   | 5<br>Iar Sonography <u>3</u><br>8               |
| DMS 4353<br>DMS 43<br>DMS 4352                                       | Advanced Obstetrics, Genetic<br>Intermediate Vascular Sonog<br>54 Intermediate Cardiac Sono<br>Doppler Sonography & Advanced<br>Clinical Practicum IV   | raphy, OR<br>graphy 3                           |
| DMS 4261<br>DMS 4363<br>DMS 43                                       | I Cardiovascular Pathophysiolo<br>I Current Issues in Health Care<br>3 Advanced Vascular Sonogra<br>64 Advanced Cardiac Sonog<br>4 Clinical Practicum V | gy 2<br>e 2<br>phy OR                           |
| TOTAL  |   | <u>15</u><br>72                                 |

All professional courses must be completed with a grade of "C" or higher for progression to the next semester and for graduation.

**Bachelor of Science in Diagnostic Medical Sonography:** Students who successfully complete all 52 SC of preprofessional and 72 SC Bachelor of Science professional courses, for a total of 124 SC, are eligible upon graduation to receive the Bachelor of Science degree in Diagnostic Medical Sonography. Students may select one of two areas of concentration in either vascular sonography or echocardiography.

Advanced Placement: The Department offers an advanced placement opportunity for ARDMS-prepared applicants who want to pursue specialized instruction in vascular sonography or echocardiography. Contact the deapartment chairman for more information.

## BACHELOR OF SCIENCE DEGREE APPLICATION PROCEDURES AND DEADLINES

Class size is limited and all applicants may not be selected for participation in the diagnostic medical sonography program. Applications must be received by **March 1** to be assured of consideration for admission. See page 8 for further information on deadlines and procedures for admission. Applicants must provide:

- 1. **Application for Admission:** The College of Health Related Professions Application for Admission is required. Please contact the department office of the CHRP Office of Student Affairs for information.
- 2. **Application Fee:** A non-refundable application fee of \$10.00 is required and must accompany the application.
- 3. Official Transcripts: Arrange for each college or university you have attended to forward an official transcript of your course work. A minimum CGPA of 2.5 or higher for all undergraduate courses is required.
- 4. **Professional Observation:** Applicants are required to gain an understanding of the responsibilities and duties of the diagnostic sonographer through direct observation in a hospital department where sonography is practiced and through discussion with current sonographers in the field. Details of the observation and a verification form will be sent to the applicant upon receipt of the completed application and application fee. The professional observation is to be completed by **March 1**.
- 5. **Counseling:** Qualified applicants must present themselves in person for academic counseling in the division. This counseling session will be scheduled by the program.

Transcripts "issued to the student" will not substitute for official transcripts forwarded directly to the College of Health Related Professions by the institution issuing the transcripts.

Arkansas residency will be considered during selection for admission.

Applicants are considered without regard to race, color, creed, age, marital status, national origin, or sex. Otherwise qualified individuals with disabilities receive equal consideration.

All documents should be submitted to: University of Arkansas for Medical Sciences, College of Health Related Professions, Office of Student Affairs, UAMS, #619, 4301 West Markham Street, Little Rock, Arkansas 72205. Telephone: (501) 686-5730.

## PROFESSIONAL COURSE WORK IN DIAGNOSTIC MEDICAL SONOGRAPHY

## DMS 2321—Basic Patient Care

Discussion of common patient care theories, procedures, and techniques emphasizing the physical and psychological wellness of the patient during diagnostic imaging procedures. Ethical and legal principles are included.

## DMS 3211-Sectional Anatomy

A study of sectional anatomy of the transverse, longitudinal, and coronal planes are included with an emphasis on the organs of sonographic interest. Correlation with other imaging procedures will be emphasized.

## DMS 3221—Gynecologic Sonography

Gynecological anatomy and physiology are the foci of this course. Laboratory tests, signs and symptoms of gynecologic disease will be discussed. Scanning techniques and protocols will be included.

## DMS 3222—Advanced Physics

Lectures and related demonstrations covering advanced areas of ultrasonic propagation principles, transducer parameters, interactive properties of ultrasound with human tissues, possible biologic effects, advanced equipment types, instrumentation, and quality control procedures. An introduction to Doppler physics is included.

## DMS 3312—Introductory Physics

Lectures and related laboratory exercises covering the areas of ultrasonic propagation principles, transducer parameters, interactive properties of ultrasound with human tissues, possible biologic effects, basic equipment types, instrumentation, and quality control procedures.

## DMS 3313—Abdominal Sonography

Clinical applications in the abdomen include a review of gross abdominal anatomy, physiology, and pathology of every organ imaged in the abdomen. Pertinent laboratory tests as well as signs and symptoms related to disease processes of each organ will be discussed. Basic scanning techniques and protocols will be included.

## DMS 3321–Sonographic Applications: Obstetrics

Normal maternal changes and fetal development throughout gestation are reviewed. Embryonic and fetal measurements, anatomy, and anomalies of the first, second and third trimesters are studied. Scanning techniques and protocols are included. Is offered on a satisfactory/unsatisfactory grading basis.

## DMS 3323—Sonography Survey

A discussion of Doppler, small parts scanning, pediatrics, geriatrics, breast, and vascular imaging are included.

## DMS 3514—Clinical Practicum I

Supervised clinical experience emphasizing sonographic procedures of the abdomen.

## DMS 3541—Clinical Practicum III

Continuation of clinical course work at the intermediate skill level. Prerequisite: DMS 3824.

## DMS 3824—Clinical Practicum II

Supervised clinical experience at an intermediate level emphasizing sonographic procedures of the gynecologic system. Prerequisite: DMS 3514.

## DMS 4241-Advanced Obstetrics, Genetics, and Pathology

Advanced topics in obstetrical sonography and fetal disease, including an introduction to genetics and the range of pathologies related to genetics and teratogenesis.

## DMS 4242—Sonographic Conference

Specialists in the field will present special lectures focusing on specific organs or disease entities. Historical and new developments in techniques or applications of ultrasound and safety are discussed.

## DMS 4251—Cardiovascular Pathophysiology

An advanced study of the structure, function, and pathologies of vascular and cardiac anatomy of sonographic interest.

## **DMS 4252—Doppler Physics**

A discussion of basic Doppler physics including continuous, pulsed, and duplex scanning with an emphasis on color flow imaging and Doppler spectral analysis.

## DMS 4261-Current Issues in Health Care

A discussion of the moral, ethical, economical, and legal issues that confront sonographers as they practice in the dynamic health care environment.

## DMS 4300—Introduction to Health Care Management

This course is an introduction to the functions of management in health care organizations. The concepts of management, supervision, and leadership are included.

## DMS 4301—Health Care Systems in America

This course is an introduction to the health care services provided within the United States of America. The evolution, structure, financing, and regulation of the nation's health care institutions will be covered. In addition, ethics and legal issues in medicine will be discussed.

## DMS 4302—Interdisciplinary Diagnostic Cardiac Imaging

This course provides the student with an understanding of the major modalities for the diagnostic imaging of the human heart. Included are overviews of the methods, effectiveness, advantages and disadvantages of echocardiography, nuclear medicine, magnetic resonance, computerized tomography, and cardiac catheterization for the diagnosis of heart disease.

## DMS 4342—Introductory Cardiac and Vascular Sonography

This course is an introductory study of the vascular and cardiac anatomy of sonographic interest and includes terminology and ECG interpretation.

## DMS 4352—Doppler Sonography & Advanced Hemodynamics

A discussion of Doppler sonography that includes basic ultrasound physics and instrumentation, continuous-wave Doppler, pulsed Doppler, and duplex-triplex scanning with emphasis on the analysis of Doppler spectral waveforms and interpreting color Doppler images. An in-depth analysis of normal cardiac and vascular hemodynamics and the effects of pathology on the flow of blood within the heart and throughout the vascular circulation are presented.

## DMS 4353—Intermediate Vascular Sonography

This intermediate-level vascular course includes arterial and venous anatomy, vascular imaging protocols, basic scanning techniques, and transducer manipulation. B-Mode imaging, color flow image interpretation, and spectral Doppler waveform analysis will be discussed. Vascular disease and its effect on blood flow will be covered.

## DMS 4354--Intermediate Cardiac Sonography

Cardiac anatomy, physiology, and hemodynamics will be the focus of this course. Laboratory tests, and signs and symptoms of cardiac disease will be discussed. Scanning techniques and protocols for pediatric and adult procedures will be included.

## DMS 4363—Advanced Vascular Sonography

Advanced study of vascular anatomy and physiology are the foci of this course. Symptoms of venous and arterial diseases are discussed. Scanning techniques and protocols used to diagnose vascular pathology are also included.

## DMS 4364—Advanced Cardiac Sonography

Hemodynamics, cardiovascular principles, cardiac doppler and the related physics, physiology and pathophysiology will be the focus of this course.

## DMS 4843—Clinical Practicum IV

Supervised clinical experience at the advanced level emphasizing sonographic procedures of fetal and maternal anatomy. Prerequisite: DMS 3541.

## DMS 4854—Clinical Practicum V

Advanced practice supervised clinical experience emphasizing vascular or cardiac sonographic procedures. Prerequisite: DMS 4843.

## Elective

# DMS 3132–Applied Sonographic Procedures: Abdomen, Obstetrics & Gynecology, Physics and Instrumentation

This is an elementary applications course emphasizing sonographic procedures in abdominal, obstetric and gynecologic imaging, including physics and instrumentation. A study of general sectional anatomy of the transverse, longitudinal, and coronal planes with an emphasis on the organs of sonographic interest. Selected pathology of these organs will be discussed. The control, operation and use of sonographic equipment to acquire images in these examinations will be explained.

## DIETETICS AND NUTRITION PROGRAMS\* Department of Dietetics and Nutrition

The Dietetic Internship Program is accredited by the Commission on Accreditation for Dietetics Education of The American Dietetic Association

Reza Hakkak, Ph.D.; Chairman

Department of Dietetics and Nutrition University of Arkansas for Medical Sciences College of Health Related Professions, UAMS #627 4301 West Markham Street, Little Rock, Arkansas 72205 Telephone: (501) 686-6166 E-mail: hakkakreza@uams.edu Web site: http://www.uams.edu/chrp/dietnutrition

Dietetic Internship Director: Polly Carroll, M.A., R.D., L.D.

**Faculty:** V. Baker, M. Bogle, P. Carroll, L. Christie, W. Evans, R. Guyton, R. Hakkak, M. Harris, R. N. Hays, M. Hinton (Emeritus), J. Jensen, D. Mock, R. Rodibaugh

Internship Faculty: A. Bercher, P. Bryant, M. Cagle, N. Campalans, P. Carroll, K. Denison, C. Garner, S. Handford, M. Hicks, A. Hobbs, P. Johnson, T. Johnson, R. Johnston, D. McClendon, A. Murray, R. Pasley, T. Pipkin, F. Price, M. Pyland, S. Rephan, D. Rhoads, C. Sellers, J. Shelton, P. Snow, N. Stagger, J. Wall, C. Woods

## THE PROFESSION

The dietitian is the translator of nutrition science into the skill of furnishing optimal nourishment to people. Traditionally, dietitians function as members of the health care team in providing nutritional care through assessment of nutritional needs, planning and implementation of nutritional care and provision of dietary counseling. In administrative dietetics, dietitians are traditionally concerned with all aspects of management of nutritional services through planning, budgeting, supervision, and computerized evaluation of food service systems. Increasingly, dietitians are involved in private, independent nutrition consultation and practice as well as assuming more corporate management roles in food industry, health, and promotion businesses.

As the overall recognition of the importance of nutrition increases in both disease treatment and prevention, highly specialized and advanced level roles are emerging for dietitians. These advanced level roles require practice as an entry-level dietitian with professional development of additional knowledge and skills. Graduate programs are being designed to develop both advanced level knowledge and skills in various specialty areas such as pediatrics, geriatrics, clinical management, wellness counseling, nutrition support, and many others.

Graduates of the Dietetic Internship Program have been able to find employment in a variety of work environments throughout the United States. Graduates of the Master's Program are employable in academic, research, clinical, and community nutrition facilities.

## THE PROGRAMS

**Dietetic Internship:** The dietetic internship program is jointly sponsored by the University of Arkansas for Medical Sciences and the Central Arkansas Veterans Healthcare System. Affiliations with a number of hospitals, school food service, and clinics in the central Arkansas area provide experiences which supplement and complement those received at the primary training sites. Admission requirements include a baccalaureate degree, verification from a didactic program in dietetics approved by The American Dietetic Association, and participation in a national computer matching program for dietetic interns (see internship admission requirements).

This program is accredited with the Commission on Accreditation for Dietetics Education (CADE) of The American Dietetic Association, 120 South Riverside Plaza, Suite 2000, Chicago, IL 60606. Telephone: (800) 877-1600, ext. 4872.

Master of Science in Clinical Nutrition: The Master of Science degree program in Clinical Nutrition is designed to prepare dietitians to practice at an advanced or specialized level. Currently, four areas of emphasis are offered: community nutrition; geriatric nutrition; pediatric nutrition; and nutrition, health promotion and wellness. A thesis or nonthesis option may be selected. Classes are offered primarily in the late afternoon and evening to allow practicing dietitians to enroll in the program. Students may enroll as degree candidates or as special non-degree students on a limited basis. Degree candidates apply through the UAMS Graduate Office. Practitioners or other graduate students may apply as special non-degree students directly to the Department of Dietetics and Nutrition. Special continuing education courses will be offered on occasion and information will be available through the Department.

## **CERTIFICATION AND LICENSURE**

Upon graduation from the University of Arkansas for Medical Sciences/Central Arkansas Veterans Healthcare System Dietetic Internship Program, the Post-Baccalaureate Certificate in Dietetics is awarded. The Certificate establishes academic eligibility to apply for the national registration examination through The Commission on Dietetic Registration. Upon successful completion of the examination, the graduates become Registered Dietitians (RD) and eligible for state licensure in Arkansas. Successful completion of the program does not itself insure registration or licensure. Each student is responsible for familiarizing himself/herself with the applicable registration and licensure requirements.

## FINANCIAL ASSISTANCE

In addition to the general financial aid opportunities previously described in the Financial Information section of this catalog, the department can provide information on program-specific financial assistance. Contact the department chairman for further information regarding the following sources of aid which may be available to qualified students:

**Department of Veterans Affairs Medical Center Traineeship:** Assistantships are available for one full-time student (\$15,000) and one part-time student (\$5,000) each year for graduate students.

Arkansas Dietetic Association Scholarship: This scholarship provides \$500.00 to an Arkansas dietetic intern. For more information, go to: http://www.arkansaseatright.org

The American Dietetic Association Scholarships: The American Dietetic Association offers several scholarships of \$500-\$5000 to dietetic interns and dietetic graduate students each year. Applications for these scholarships must be made the year <u>before</u> the scholarship is needed (e.g., applications for the 2006-2007 academic year must be made in 2006). Application forms may be requested from The Scholarship Committee, The American Dietetic Association, 120 South Riverside Plaza, Suite 2000, Chicago, IL 60606 or at: http://www.eatright.org/Public/Careers/94\_8628.cfm.

## PROFESSIONAL CURRICULA

**Post-Baccalaureate Certificate in Dietetics:** Students accepted into the internship program enter in August. During the internship, development of competencies in general dietetics is emphasized including clinical dietetics, food service administration, and community nutrition. Supervised practice through establishment of a working relationship with registered dietitians is emphasized. Seminars, lectures, and classes complement the student's practical experiences. The accredited program has a general emphasis and consists of a 40-week, full-time, experience with a minimum of 40 hours scheduled per week. Interns are required to enroll in a 12 hours of graduate course work as well as clinical education experiences.

**Master of Science in Clinical Nutrition:** Degree requirements include 19 SC of core courses, eight (8) SC of supportive and elective courses, a three (3) SC clinical practicum, and six (6) semester hours of thesis credit for a

total of 36 semester hours. In the nonthesis option, the requirements are for an additional three (3) SC course plus a three (3) SC research course instead of the six (6) hours of thesis. A list of required and potential elective courses appears below. A combined maximum of twelve (12) SC of course work will be accepted as transfer from special student status and from other accredited colleges and universities. A specific degree plan will be prepared for each student.

## **APPLICATION PROCEDURES AND DEADLINES**

**Dietetic Internship:** A bachelor's degree from an accredited university, a Verification Statement from an approved Didactic Program in Dietetics, and a GPA of 2.7 and science GPA of 2.0 or above are required for consideration. Selection factors include: Total GPA (includes all collegiate course work), Science GPA, Dietetics GPA, application letter, resume, reference letters, extracurricular activities, work experience and GRE scores.

Class size is limited and all applicants may not be selected for participation in the program. All items below must be postmarked by **February 15, 2007** to be considered for admission:

- 1. **Application for Admission:** Standard American Dietetic Association (ADA) Application Form which can be downloaded from the department Web site.
- National Computer Matching Program: The Internship program participates in the national computer matching of dietetic interns. Applicants must submit the official computer matching card which may be obtained from the undergraduate dietetic advisor or directly from D & D Digital Company, 304 Main Street, Suite 301, Ames, IA 50010-6140. Telephone: (515) 292-0490, Fax: (515) 663-9427, or e-mail: dnd@netins.net, http://www.dnddigital.com/.
- 3. Official Transcripts and GRE Scores: Current and complete official transcript(s) of all college work and official GRE scores are required. The transcripts must be original and be mailed by the college to be official. GRE scores must be mailed to the CHRP Office of Student Affairs. Use institutional code number 6146 to have scores sent directly to the College of Health Related Professions.
- 4. **Official Verification Statement:** An official verification or intent to complete statement (the original must be signed by the didactic program director in <u>non</u>-black ink and dated).
- 5. **References:** Use the standardized reference forms provided by The American Dietetics Association. Send three (3) references, one (1) each, from: advisor, major professor in dietetics, and employer. Only three (3) references will be used in the selection process.

- 6. **One-Page Resume:** Include paid and volunteer work experience. Experience in hospital dietetics is desirable but not required. Include extracurricular activities, honors, and awards indicative of a well-rounded life-style.
- 7. **Application Letter:** An application letter addressed to the Selection Committee. The letter should be computer-printed (in 12-point font and limited to two [2] pages). The letter should be in business format, addressed to the Selection Committee, and should include the following:
  - a. Why you want to enter the dietetic profession
  - b. The areas in your previous experiences that have helped prepare you for a career in dietetics
  - c. Your short and long-term career goals
  - d. Why you are applying to the UAMS/CAVHS Dietetic Internship
  - e. Other information you consider relevant to the selection committee's decision making.
- 7. **Application Fee:** A non-refundable application fee of \$10.00 is required and must accompany the application.
- 8. **TOEFL Scores:** If applicable.

# Transcripts "issued to the student" will not substitute for official transcripts forwarded directly to the Department Office by the institution issuing the transcripts.

Applicants are considered without regard to race, color, creed, national origin, or sex. Otherwise qualified individuals with disabilities receive equal consideration.

All documents should be submitted to: CHRP Admission Officer, University of Arkansas for Medical Sciences, UAMS, #619, 4301 West Markham Street, Little Rock, Arkansas 72205. Telephone: (501) 686-5730.

**Master of Science in Clinical Nutrition:** Admission to the degree program includes the completion of a baccalaureate degree and other requirements of the UAMS Graduate School. The degree applicant first applies for admission to the UAMS Graduate School by completing the application forms and requesting official transcripts from all colleges attended. The UAMS Graduate School forwards all eligible applications to the Department of Dietetics and Nutrition for an admission decision. Program requirements include: a cumulative grade point average of at least 2.85 on a 4.0 scale, a satisfactory score on the Graduate Record Examination (GRE), and three (3) reference letters from an undergraduate professor in your major, a director of internship or other practice program, or an employer.

Application for graduate study is made through the Graduate School Office, University of Arkansas for Medical Sciences, 4301 West Markham, #601, Little Rock, AR 72205. Telephone: (501) 686-5454.

## PROFESSIONAL COURSE WORK

## NUTR 5032—Assessment of Nutritional Status

A study of nutritional assessment systems and methodology including the latest technology in dietary, biochemical, anthropometric, and clinical evaluation. Emphasis placed on the design of systems, the interpretation of indices for all age groups in health and disease, and the application of data in nutrition counseling and consultation. Prerequisites: undergraduate courses in biochemistry, anatomy, physiology, nutrition, food science or equivalents.

## NUTR 5033—Advanced Clinical Nutrition

Integration of principles of biochemistry, physiology, pathology, anatomy, psychology, anthropology, epidemiology, nutrition and food science into therapeutic use of foods and nutrients in disease prevention and treatment through a case-oriented approach. Prerequisites: Biochemistry, Diet in Disease, Nutrition, Anatomy and Physiology, or consent.

## NUTR 5043—Diet and/or Cancer Prevention

Focused on clinical and preclinical studies that address how dietary related factors, such as nutrients, bioactive food components and obesity, influence cancer development and cover major mechanisms by which dietary factors modify cancer risk. Prerequisites: A previous course in nutrition, biology, biochemistry, or physiology, and consent.

## NUTR 5063—Medical Nutrition Therapy

Online course introducing nutrition as a medical specialty from the perspective of disease prevention and treatment including assessment, patient interviewing strategies, medical terminology, nutrition care plan techniques, and prevention strategies. Prerequisites: a course in nutrition and in organic biochemistry or equivalent, and consent.

## **NUTR 5073—Practicum in Clinical Dietetics**

Supervised learning experience in clinical dietetics designed to meet specific objectives and achieve identified clinical nutrition competencies. Experiences scheduled in a variety of health care and community settings. Elective in MSCN program and core course in internship.

## NUTR 5083—Practicum in Administrative Dietetics

Supervised learning experiences in administrative dietetics to meet specific objectives and achieve identified management competencies. Experiences scheduled in a variety of units within health care facilities. Elective in MSCN program and core course in internship.

**NUTR 509V—Independent Study in Clinical Nutrition (1-6)** Under supervision of a faculty member, the student will design and conduct a research project in clinical nutrition and prepare a written paper including a review of literature, identification of the problem, methodology, results and discussion, summary and citing of references following designated guidelines.

## NUTR 5102—Management Principles in Dietetics

Application of current higher level management skills in clinical nutrition and dietetics. Emphasis on incorporation of latest technological developments, management theories, and future trends in legal aspects, cost analysis, personnel and resource management, quality control, and reimbursements.

## NUTR 5103-Nutrition and Metabolism: Macronutrients

Reviews cell function, including acid-base balance, utilization of macronutrients in metabolic processes, and roles of specific nutrients in human metabolism. Relationship of physiology and organ systems functions to nutrition is addressed. Alterations in metabolic processes caused by specific diseases will be discussed.

#### NUTR 5112—Nutrition Counseling

Provides an understanding of the methods, strategies, and evaluation of nutrition and diet counseling to modify eating habits for health promotion and increase compliance with therapeutic regimens. Consideration of learning styles, nutritional anthropology, and instructional technology effectively applied in the health care setting. Prerequisite: NUTR 5033: Advanced Clinical Nutrition or equivalent; and consent of faculty.

## NUTR 5122—Principles of Advanced Nutrition Support

Advanced study in the art and science of nutrition support explored through a comprehensive review of the literature; discussion of the biochemical, psychological, and medical aspects of nutrition support; and application of principles in clinical practice through case study presentation. Students participate in the literature analysis and case discussions. Prerequisite: NUTR 5033: Advanced Clinical Nutrition or equivalent; NUTR 5103 Nutrition and Metabolism or equivalent; NUTR 5032 Assessment of Nutritional Status or equivalent; and consent of faculty.

## NUTR 5143-Nutrition Research and Statistical Methods

A study of research designs, statistics, and data collection methods used in nutrition research. Emphasis on planning metabolic, epidemiological, education, and clinical studies including food composition and nutritional assessment surveys with basic and advanced statistical applications. Prerequisite: Graduate level course in Statistics and consent of faculty.

NUTR 5153—Nutrition and Metabolism Micronutrients (II) Reviews the roles of vitamins, minerals, and trace elements in metabolic processes and their roles in human metabolism. Alterations in metabolic processes caused by specific vitamin deficiency diseases will be discussed. Metabolism of common drugs and drug-nutrient interactions will be reviewed. Prerequisite: NUTR 5103 or equivalent.

## NUTR 5161—Advanced Nutrition Seminar

Graduate seminar of important current research in clinical nutrition to reflect content, application to clinical practice, and study parameters and design. Students will read original papers, write critiques, and make presentations for discussion.

## NUTR 5203—Geriatric Nutrition

Examines the relationships between nutrition and physiologic aging. The impact of aging on nutritional requirements, effects of chronic and acute disease, effects of nutrition on the aging process, and nutrition programs for older adults are explored. Students will actively analyze and discuss research literature. Prerequisite: graduate courses in metabolism, nutrition assessment, and advanced clinical nutrition and consent of faculty.

#### NUTR 5213—Pediatric Nutrition

Describes the relationship of growth and development to nutrient requirements from infancy to adolescence. The assessment of feeding practices, food habits, and nutritional status in growth problems, health and disease will be discussed. Nutritional interventions and therapies for specific conditions will be planned. Prerequisites: NUTR 5103, 5153, 5033 and consent of faculty.

# NUTR 5223—Nutrition in Health Promotion, Wellness, and Athletics

Describes the application of advanced principles of normal and preventive nutrition in health and fitness, physical performance, disease prevention, and health promotion in dietetic practice. It relates clinical research in exercise physiology to decision-making in wellness and sports nutrition counseling. Prerequisites: NUTR 5103, 5153, 5033 and consent of faculty.

#### NUTR 5243—Community Nutrition

This course will provide students with a framework to approach, analyze and work with community nutrition problems. Needs of different populations and various resources within the community will be discussed. The course will cover areas such as community needs assessment, nutrition education, public policy, grant writing and communication skills needed for various audiences. Pre-requisites include either NUTR 5103 or NURT 5153 or NUTR 5333 or consent of the faculty. Off-site activities will be necessary to fulfill the requirements for this course.

#### NUTR 5333—Advanced Clinical Dietetics

Integration of scientific principles of nutrition and food science into the use of foods and nutrients in disease prevention and treatment in accordance with clinical competencies for the entrylevel dietitian. Corequisite: admission to Dietetic Internship and consent of faculty.

## NUTR 523V—Advanced Clinical Practicum (I-III)

Based on individual needs and prior clinical experiences, the student may elect an area of advanced clinical nutrition practice for in-depth experiences after determining the goals, objectives, and major experiences desired. A total of three (3) hours is required. Prerequisites: NUTR 5033, 5032, 5112, and 5203 or equivalent, and consent of faculty.

## NUTR 551V—Special Topics in Clinical Nutrition

Advanced work in selected topics of current interest and investigation in clinical nutrition. Topics may include new research and guidelines in the use of nutrition or selected nutrients to prevent or treat a specific disease state, such as diabetes, digestive diseases, osteoporosis, obesity, or cardiovascular diseases.

#### NUTR 600V—Master's Thesis in Clinical Nutrition

Under supervision of graduate faculty, an original research study will be designed and conducted with written thesis following graduate college guidelines. Prerequisite: consent of faculty.

#### NUTR 601V—Clinical Nutrition Special Project

A capstone research project under direction of faculty advisor and project committee. Prerequisite: completion of, or concurrent enrollment in, all core courses in Clinical Nutrition. Corequisite: approval of project advisor. A grade of "R" is given until requirements of all three hours are met. Prerequisite: completion of or concurrent enrollment in all core courses in Clinical Nutrition. Corequisite: approval of project advisor.

#### NUTR 608V—Research in Nutrition (1-10)(I, II, S)

Students will participate in a research project under the supervision of a faculty member.

\*Students pursuing the Master of Science degree in Clinical Nutrition are considered to be students in the Graduate School who are taking courses offered by the faculty of the College of Health Related Professions. Accordingly, the Graduate School Catalog is considered the primary catalog for all students in this program. All provisions (including grievance procedures) in the Graduate School Catalog and the Graduate School Handbook are the authority applicable to students pursing the Master of Science degree in Clinical Nutrition.

\*Students pursuing the Post-Baccalaureate Certificate in Dietetics and Nutrition are considered to be students in the College of Health Related Professions (CHRP). The CHRP Catalog is considered the primary catalog for all students in this program. All provisions (including grievance procedures) in the CHRP Catalog and the CHRP Student Handbook are the authority applicable to students pursing the Post Baccalaureate Certificate in Dietetics and Nutrition.

## EMERGENCY MEDICAL SCIENCES PROGRAMS Emergency Medical Sciences Department

The Emergency Medical Sciences Paramedic Program is Accredited by the Commission on Acceditation of Allied Health Educational Programs (CAAHEP).

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Faculty: D. Bercher, D. Mitchell, T. Rinehart Medical Director: G. Hall Associate Medical Director: D. Cheng

## THE PROFESSION

The paramedic is the highest level emergency medical services health care professional in the prehospital setting. The paramedic must be able to work independently and as a team leader helping people under stressful conditions. The paramedic must demonstrate knowledge and skills in areas of anatomy, physiology, pathophysiology, pharmacology, advanced airway management, intravenous therapy, and medication therapy. Paramedics must also apply problemsolving skills to formulate and implement rapid care plans for a wide array of situations including cardiac, trauma management, pediatric, geriatric, and other medical and behavioral emergencies.

The Emergency Medical Technician Basic (EMT-B) is the entry-level provider in the emergency medical services system. The EMT-B is concerned primarily with basic life support prehospital care of acutely ill and injured patients.

Paramedics and EMT-Bs can find career opportunities with ambulance services, fire departments, and industrial companies. In addition, paramedics are employed by emergency helicopter services, offshore oil platforms, and as military combat medics.

## THE PROGRAMS

The Department of Emergency Medical Sciences offers Associate's degree and certificate paramedic programs. Successful program completion satisfies the eligibility requirements to apply for the paramedic credentialing examinations offered by the National Registry of Emergency Medical Technicians (NREMT). The Associate's degree can be completed in five consecutive semesters. The certificate paramedic program can be completed in four consecutive semesters. Graduates who complete the certificate program are eligible to complete the Associate's degree at a later time as long as all requirements of the degree plan are met. The department also offers an intensive Six-Month Paramedic Program (contact the department for details). Students can also enroll in individual courses offered by the department, including the Introduction to Emergency Medical Sciences (EMS 1401), the Emergency Medical Responder (EMS 1291), and Anatomy and Physiology (EMS 1311). Students who successfully complete EMS 1401 may be eligible to challenge the Emergency Medical Technician-Basic (EMT-B) credentialing examinations offered by the NREMT.

**Note:** Successful completion of the above programs does not itself insure certification or registration. Each student is responsible for familiarizing himself/herself with the applicable certification and registration requirements.

## PREPROFESSIONAL REQUIREMENTS

**EMT-Paramedic (EMT-P):** All applicants must hold a current American Heart Association CPR Healthcare Provider card (contact the department for details). Based on the applicant's academic performance history, further eligibility requirements are listed below:

- 1. Applicants with a high school cumulative grade point average (CGPA) of 2.0 or above are eligible for consideration for admission. Those applicants with a high school grade point average less than 2.0 must successfully complete college course work for eligibility in the program (see # 3).
- 2. Those applicants with a General Education Diploma (GED) are eligible for consideration.
- 3. Applicants who did not earn a CGPA of a least 2.0 (on a 4-point scale) in high school must have completed at least 9 SC of course work chosen from the list of required general education courses for this program (see page 16) from a regionally accredited higher education institution. (Credit earned through completion of a college-level EMT course taken at a regionally accredited institution of higher education may be applied for up to 3 SC of the 9 SC requirement.) Applicants who have completed 9 SC must have earned a grade of "C" or better in each of the

courses in order to transfer that credit and be eligible for consideration for admission. Students who have completed 9 SC or more of college work must submit transcripts of all the courses taken, and earned a CGPA of at least 2.0 to be considered for admission.

College-level course work is encouraged before entry into the EMT-P program. Upon acceptance into the paramedic program, candidates must choose the Associate of Science Degree (A.S.) or the certificate track. Students accepted into the paramedic program begin in August. Approximately 30% of the paramedic program course work is delivered via the Internet.

Associate of Science in Emergency Medical Sciences: Students who choose to take the certificate track may also be eligible to complete the A.S. degree requirements. See the General Education Course Requirement section of this catalog and contact the department for additional details.

**EMT-B:** Individuals who possess a high school diploma (or equivalent) and hold a current American Heart Association CPR Healthcare Provider card are eligible to apply for this four (4) SC course. Classes begin each January and August. To be eligible for admission, applicants must be at least 18 years of age by the last day of the semester in which they wish to enroll.

## PROGRAM REQUIREMENTS

All paramedic students are required to have a thorough medical examination by a physician upon acceptance for admission and prior to registration for classes. Students are required to begin and complete a hepatitis B vaccination series if one has not been completed, or sign a waiver.

In order to progress to the next semester, all professional course work must be successfully completed with grade of "C" or higher. In addition, students must maintain a cumulative average of "C" or higher in all courses in order to enter any clinical area. All professional courses must be successfully completed in order to be eligible for certification and graduation.

Classes begin in August of every year. Clinical practicum is scheduled primarily on Saturdays with some weekday rotations. The following is a schedule of the required SC as they appear in each track.

## **PROFESSIONAL CURRICULUM**

| Associate of Science Degree Paramedic Program |       |                            |                 |
|---|-------|----------------------------|-----------------|
| Cours   | e# Ti | tle                        | Semester Credit |
| Fall (1                                       | り     |                            |                 |
| EMS   | 1401  | Introduction to EMS        | 4               |
| EMS   | 1311  | Anatomy and Physiology*    | 3               |
| EMS   | 2220  | Pathophysiology            | 2               |
| EMS   | 2210  | Foundations of the Paramed | ic 2            |
| EMS   | 1210  | Clinical Preparation       | 2               |
| CIS   | 1103  | Computer Concepts**        | _3              |
|   |       |                            | 16              |

## Spring (2)

| Spring  | (2)    |                                     |                               |
|---------|--------|-------------------------------------|-------------------------------|
| EMS     | 1201   | Patient Assessment                  | 2                             |
| EMS     | 1122   | EKG Interpretation                  | 1                             |
| EMS     | 1320   | Pharmacology                        | 3                             |
| EMS     | 1402   | Cardiovascular Care I               | 4                             |
| EMS     | 2120   | Cardiovascular Care II              | 1                             |
| EMS     | 1118   | Clinical Practicum I                | 1                             |
| EMS     | 1119   | Clinical Practicum II               | 1                             |
| SPCH    | 1300   | Speech Communication**              | <u>3</u><br>16                |
|         |        |                                     | 16                            |
| Summ    | er (3) |                                     |                               |
| EMS     | 1334   | Lifespan Development                | 3                             |
| EMS     | 1202   | Medical Emergencies I               | 2<br>3                        |
| EMS     | 1340   | Trauma Management                   |                               |
| EMS     | 2120   | Clinical Practicum III              | <u>1</u><br>9                 |
|         |        |                                     | 9                             |
| Fall (4 |        |                                     |                               |
| EMS     | 2230   | Medical Emergencies II              | 2                             |
| EMS     | 2330   | Medical Emergencies III             | 3                             |
| EMS     | 2250   | Assessment Based Management         | 2                             |
| EMS     | 2121   | Clinical Practicum IV               | 1                             |
| engl    |        | English Composition I**             | 3                             |
| MATH    | 1302   | College Algebra**                   | 2<br>1<br>3<br><u>3</u><br>14 |
|         |        |                                     | 14                            |
| Spring  |        |                                     |                               |
| EMS     | 2431   | Paramedic Field Internship          | 4                             |
| ENGL    | -      | English Composition II**            | 3<br>e** 3                    |
| PSYC    |        | Psychology and the Human Experience |                               |
| SOCI    |        | Intro to Sociology**                | 3                             |
| HIST    | 2311   | or POLS 1310 US History to 1877 or  |                               |
|         |        | American National Government**      | 3                             |
|         |        |                                     | 10                            |

## TOTAL

A grade of "D", "F", or a mark of "U" or "NC" is not acceptable for progression to the next semester, nor is it acceptable for graduation if it occurs in the last semester of the program. Successful completion of the American Heart Association Advanced Cardiac Life Support course is required for the student to progress to Field Internship (EMS 2431). The didactic portion of ACLS is taught during Cardiovascular Care I (EMS 1402). All ACLS testing is done during Cardiovascular Care II (EMS 2120).

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\*Anatomy and Physiology covering all body systems <u>or</u> EMS 1311 is required either as a prerequisite or corequisite for EMS 1401.

\*\*These courses must be completed at another regionally accredited institution of higher education at additional cost. The courses listed provide an example degree plan for students taking courses at Pulaski Technical College.

## **Certificate Paramedic Program**

| Cours   | e# Ti | tle                        | Semester Credit |
|---------|-------|----------------------------|-----------------|
| Fall (1 | り     |                            |                 |
| EMS     | 1401  | Introduction to EMS        | 4               |
| EMS     | 1311  | Anatomy and Physiology*    | 3               |
| EMS     | 2220  | Pathophysiology            | 2               |
| EMS     | 2210  | Foundations of the Paramed | ic 2            |
| EMS     | 1210  | Clinical Preparation       | _2              |
|         |       |                            | 13              |

| Spring  | <del>g</del> (2) |                             |               |
|---------|------------------|-----------------------------|---------------|
| EMS     | 1201             | Patient Assessment          | 2             |
| EMS     | 1122             | EKG Interpretation          | 1             |
| EMS     | 1320             | Pharmacology                | 3             |
| EMS     | 1402             | Cardiovascular Care I       | 4             |
| EMS     | 2120             | Cardiovascular Care II      | 1             |
| EMS     | 1118             | Clinical Practicum I        | 1             |
| EMS     | 1119             | Clinical Practicum II       | _1            |
|         |                  |                             | 13            |
| Summ    | ner (3)          |                             |               |
| EMS     | 1334             | Lifespan Development        | 3             |
| EMS     | 1202             | Medical Emergencies I       | 2             |
| EMS     | 1340             | Trauma Management           | 3             |
| EMS     | 2120             | Clinical Practicum III      | $\frac{1}{9}$ |
|         |                  |                             | 9             |
| Fall (4 | 9                |                             |               |
| EMS     | 2230             | Medical Emergencies II      | 2             |
| EMS     | 2330             | Medical Emergencies III     | 3             |
| EMS     | 2250             | Assessment Based Management | 2             |
| EMS     | 2121             | Clinical Practicum IV       | 1             |
| EMS     | 2431             | Paramedic Field Internship  | _4            |
|         |                  |                             | 12            |
| TOTA    | L                |                             | 47            |

A grade of "D", "F", or a mark of "U" or "NC" is not acceptable for progression to the next semester, nor is it acceptable for graduation if it occurs in the last semester of the program. Successful completion of the American Heart Association Advanced Cardiac Life Support course is required for the student to progress to Field Internship (EMS 1431). The didactic portion of ACLS is taught during Cardiovascular Care I (EMS 1402). All ACLS testing is done during Cardiovascular Care II (EMS 2120).

\*Anatomy and Physiology covering all body systems <u>or</u> EMS 1311 is required either as a prerequisite or corequiste for EMS 1401.

## APPLICATION PROCEDURES AND DEADLINES

**EMT-Paramedic:** Class size is limited and all applicants may not be selected for participation in the program. Early consideration will be given those who have submitted complete applications (see the required items below) by **March 31**. Applications must be received by **June 15** to be assured of consideration for admission. In the event the class is not filled from those applicants, the application deadline may be extended. Applicants must complete all application requirements (1-6) below in order to receive consideration. Applicants must provide:

- 1. **Application for Admission:** The College of Health Related Professions Application for Admission is required. Please contact the department office or the CHRP Office of Student Affairs for information.
- 2. **Application Fee:** A non-refundable application fee of \$10.00 is required and must accompany the application.
- 3. Official Transcripts: Arrange for each college or university you have attended to forward an official transcript of your course work to the CHRP Office of Student Affairs, 4301 West

Markham, Slot 619, Little Rock, Arkansas 72205. A college Cumulative Grade Point Average (CGPA) of 2.0 is required for admission to the program.

If no college/university course work has been completed, arrange for each high school attended to forward an official transcript of your course work to the CHRP Admissions Officer. A high school CGPA of 2.0 is required for admission to the program if no college work has been completed. Applicants who are not high school graduates must provide documentation of satisfactory scores on the General Education Development Test (GED).

- 4. Official Documentation: A copy of current AHA Healthcare Provider CPR card must be submitted by applicants to the EMT-Paramedic program.
- 5. Letter of Application: A letter written by the applicant is required. It should state the applicant's interest in the program and the field, and objective(s) to be achieved through completion of the course.
- 6. **Interview and Testing:** Qualified applicants are contacted to arrange an interview and to sit for the Asset Examination. This test assesses basic reading, writing, and mathematical skills.

**Special Courses:** Special courses, including Introduction to Emergency Medical Sciences (EMS1401); Anatomy and Physiology (EMS 1311); and Medical Emergency Responder (EMS 1291), can be taken individually without acceptance into the paramedic program. Application for any of the special courses must be made under the Nondegree/Noncertificate student guidelines published in the Admission to the College section of this catalog. Class size is limited and all applicants may not be selected for participation. Early consideration will be given those who have submitted complete applications (see the required items below) by the early consideration deadline. For applicants to the Fall semester courses, the early consideration deadline is March 31 (see page 8); applications must be received by June 15, to be assured of consideration for admission. For applicants to the Spring semester courses, the early consideration deadline is September 30, applications must be received by **December 1** to be assured of consideration for admission.

- 1. **Application for Admission:** The College of Health Related Professions Application for Admission is required. Please contact the department office or the CHRP Office of Student Affairs for information.
- 2. **Application Fee:** A non-refundable application fee of \$10.00 is required and must accompany the application for EMT.

- 3. **High School Transcripts:** Arrange for high school transcrips that show proof of high school graduation to be provided to: CHRP Office of Student Affairs, 4301 West Markham, Slot 619, Little Rock, Arkansas 72205. Applicants who are not high school graduates must provide documentation of satisfactory scores on the General Education Development Test (GED).
- 4. Letter of Application: A self-constructed letter stating the course in which you wish to enroll and the objective(s) to be achieved through completion of the course is required.
- 5. Nondegree/Noncertificate Form: A signed statement that indicates the applicant has read, understands, and agrees to the requirements governing nondegree/noncertificate applications must be submitted. A standard form is available from the Office of Student Affairs and from the department for this purpose.
- 6. **Documentation:** A copy of current AHA Healthcare Provider CPR card must be submitted (only for EMS 1401).

Transcripts "issued to the student" will not substitute for official transcripts forwarded directly to the College of Health Related Professions by the institution issuing the transcripts.

Arkansas residency will be considered during selection for admission.

Applicants are considered without regard to race, color, creed, age, marital status, national origin, or sex. Otherwise qualified individuals with disabilities receive equal consideration.

All documents should be submitted to: University of Arkansas for Medical Sciences, College of Health Related Professions, Office of Student Affairs, UAMS, #619, 4301 West Markham Street, Little Rock, Arkansas 72205. Telephone: (501) 686-5730.

## **PROFESSIONAL COURSE WORK**

## EMS 1118, 1119, 1120, 2121-Paramedic Clinical

Supervised rotations through selected clinical and field areas. Emphasis on developing and improving skills which reinforce classroom instruction.

#### EMS 1201—Patient Assessment

History taking, physical examination techniques, patient assessment in the field, clinical decision making, communications, and documentation. Emphasis on detecting, defining, and describing normal and pathological conditions.

## EMS 1202—Medical Emergencies I

Recognition, pathophysiology, and management of patients with respiratory, neurologic, diabetic, allergic, non-traumatic abdominal, and toxicological emergencies.

## EMS 1210—Clinical Preparation

Prepares the student to care for patients in the clinical area by teaching the principles of intravenous access, medication administration, and airway management.

#### EMS 1291—Emergency Medical Responder

Prepares individuals to function as Emergency Medical Responders. The Emergency Medical Responder is an integral part of the Emergency Medical Services System and is usually the first to arrive at the scene in emergency situations. The Emergency Medical Responder uses a limited amount of equipment to perform initial assessment and intervention and is trained to assist other EMS providers. This level of provider is not intended to be utilized as the minimum staffing for an ambulance.

#### EMS 1311—Anatomy & Physiology

Human Anatomy and Physiology from cellular structure to systems applications. Emphasis on the normal human anatomy and physiology process. Computer-aided instruction with a workbook. Recommended as a prerequisite but can be taken as a co-requisite.

## EMS1320—Pharmacology

Addresses the basic principles of pharmacology, including the history of pharmacology; drug regulation, nomenclature, and classification; and pathophysiological principles of drug uptake, utilization, and elimination in the body. This course will also cover basic medical terminology.

#### EMS 1334—Life Span Development

Recognition, pathophysiology, and management of emergencies among gynecologic, obstetric, neonatal, pediatric, and geriatric patients.

#### EMS 1340—Trauma Management

Trauma systems, mechanism of injury, pathophysiology, management, and treatment of traumatic injuries including hemorrhage, burns, thoracic trauma, soft tissue injury, head injury, spinal injury, abdominal injury, and musculoskeletal injury.

## EMS 1401—Introduction to Emergency Medical Sciences

Introduction to anatomy and physiology, medical terminology, wound control, splinting, moving of patients. Presented in both classroom and clinical settings.

#### EMS 1402—Cardiovascular Care I

Utilization of the assessment findings to formulate a field impression, to implement and evaluate the management plan for the patient experiencing a cardiac emergency. Includes ACLS didactic.

#### EMS 2120—Cardiovascular Care II

Integration of pathophysiological principles and assessment findings in order to formulate a field impression and implement a treatment plan for the patient with cardiovascular disease. Includes ACLS testing stations.

#### EMS 2210—Foundations of the Paramedic

A study of the roles and responsibilities within an EMS system, the importance of personal wellness, implementation of injury prevention activities, understanding legal issues, ethics, and principles of therapeutic communications.

## EMS 2220—Pathophysiology

Application of the general concepts of pathophysiology for the assessment and management of emergency patients. Pharmacological interventions are emphasized.

## EMS 2230—Medical Emergencies II

Recognition, pathophysiology, and management of allergies and anaphylaxis, toxicology, infectious and communicable diseases, and behavioral emergencies.

#### EMS 2250—Assessment Based Management

Integration of assessment findings in order to formulate a field impression and implement a treatment plan for those with common physical, mental, and social complaints, chronic care problems, and financial challenges; abuse victims; and assault victims.

## EMS 2330—Medical Emergencies III

Recognition, pathophysiology, and management of neurologic, endocrinologic, gastroenterologic, renal/urologic, hematologic, environmental, and chronic care patients.

## EMS 2431—Paramedic Field Internship

Supervised experience in prehospital care settings. Emphasis on the application of previous course work in the field environment.

In addition to regular course work, the following seminars and special workshops are offered occasionally to professionals in the field as continuing education course work: EMT Refresher, EMT-I Refresher, Paramedic Refresher; CPR Provider; CPR Instructor; EMT Instructor.

## GENETIC COUNSELING PROGRAM\* Department of Genetic Counseling

The Genetic Counseling Program has received provisional accreditation as a new program from The American Board of Genetic Counseling. The program will admit students in its initial class in Fall, 2006.

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Faculty: N. Agan, S. Barringer, B. Butler, S. Jackson

## THE PROFESSION

Genetic Counselors are health care professionals who are prepared to provide genetic services to families seeking information about the likelihood of occurrence or reoccurrence of particular genetic diseases or birth defects. Genetic Counselors must be able to adeptly communicate genetic, medical, scientific, and technical information to such families in a comprehensive, understandable, and nondirective manner. The genetic counselor does so with knowledge of and insight into the psychosocial and cultural experiences important to each family in a client- and/or family-oriented manner.

Graduates of this program will be able to 1) elicit and interpret individual and family medical, developmental, and reproductive histories; 2) determine the mode of inheritance and risk of re/occurrence of genetic diseases and birth defects; 3) explain the etiology, natural history, diagnosis, and management of these conditions; 4) interpret and explain the results of genetic tests and other diagnostic studies; 5) perform a psychosocial assessment to identify emotional, social, educational, and cultural issues; 6) evaluate the client/family responses to the conditions or risks of occurrence; 7) promote informed decision-making about testing, management, reproduction, and communication with family members; 8) identify and use community resources that provide medical, educational, financial, and psychosocial support and advocacy, and 9) provide written documentation of medical, genetic, and counseling information for the family and other healthcare professionals.

## THE PROGRAM

The Department of Genetic Counseling offers a Master of Science degree in Genetic Counseling, through the College of Health Related Professions at the University of Arkansas for Medical Sciences and is the lead institution in the Mid-America Genetics Education Consortium (University of Arkansas for Medical Sciences, University of Oklahoma Health Sciences Center, University of Kansas Medical Center, and University of Nebraska Medical Center). This unique educational consortium combines the academic and clinical resources of four major health science universities. The curriculum is

## NEW PROGRAM

At the time this catalog went to press, the precise details of this program had not been entirely defined. Please contact the department office for the latest information.

designed to emphasize the principles of human genetics, the applicability of related sciences to human medical genetics, the principles and practice of medical genetics, the psychosocial, social, ethical, and legal aspects of delivering genetic services, and the teaching skills and research methods needed to promote the use of genetic services.

The "classroom" portion of this curriculum uses a variety of distance education methods. Interactive video and Web-based lectures will be given both asynchronously and synchronously, depending on the material being presented. Students will be able to access the asynchronous portions of the curriculum via the Internet from the various campuses as well as from home and work areas. The clinical portion of the curriculum will take place in a face-to-face ("live") format, and may require students to travel relatively short distances to complete clinical rotations.

Practicums are an integral portion of this program. Clinical experiences provide students with first-hand experiences with families affected by a broad range of genetic diseases and birth defects. There is a sufficient number and variety of clinical experiences to ensure that all students receive adequate, supervised, genetic counseling experience and help prepare them for individual certification by the American Board of Genetic Counseling. This clinical experience may be provided at one, some, or all of the major medical universities and associated clinics involved in the Consortium.

## CERTIFICATION

Graduates of this Master of Science degree program will be academically and clinically eligible to apply for the Board Certification through the American Board of Genetic Counseling. Successful completion of the program does not itself insure such certification. Students are responsible for familiarizing themselves with applicable certification requirements.

## FINANCIAL ASSISTANCE

In addition to the financial aid opportunities described in the Financial Aid Information section of the UAMS Graduate catalog, the department may have programspecific financial assistance. Contact the financial aid office at (501) 686-5454 for more information.

## PREPROFESSIONAL REQUIREMENTS

Students applying for admission to this graduate program must have earned an appropriate undergraduate degree (e.g., BS, BA) from a regionally accredited college or university. Preferred degrees are in biology, genetics, chemistry, and/or psychology, nursing, or related fields. At least one semester each of statistics, biochemistry, and upper level genetics is required. To be considered for admission, applicants must have a minimum grade point average of at least 3.0 (on a 4.0 scale) for all undergraduate course work. Satisfactory scores on the Graduate Record Examination (GRE) verbal, analytical, and quantitative sections are required. In addition, it is recommended that counseling experience (i.e., paid or volunteer experience on a crisis hotline or social services agency) be obtained. Experience in a clinical genetic counseling setting is recommended. The essay requirement includes a personal statement with a discussion of career goals and interest in the field of medical genetics/genetic counseling. The applicant should submit three (3) letters of recommendation from previous instructors or practicing professionals in the field.

## PROFESSIONAL CURRICULUM

The program requires a minimum of 54 graduate hours. Students must pass comprehensive examinations offered at the end of the program of study. A degree is awarded upon successful completion of all academic and practicum requirements. More specific information about program requirements can be secured by contacting the UAMS graduate school.

|                   | new program are currently un<br>ct the department for further informati | der<br>on.     |
|-------------------|---|----------------|
| Course # Title    | Semester Cro  | edit           |
| Fall (1)          |   |                |
| GENC 5002 Introdu | ction to Molecular Genetics   | 2              |
| GENC 5013 Psycho  | social Genetic Counseling   | 3              |
| GENC 5023 Topics  | in Genetic Counseling I   | 3              |
| GENC 5032 Researc | ch, Writing, and Critical Analysis/                                     |                |
| Journ             | nal Club  | 2              |
| GENC 5042 Cytoge  | netics and Medical Genetics Review                                      | 2              |
|                   |   | 12             |
| Spring (2)        |   |                |
| GENC 5153 Counse  | eling/Interviewing/Family Theory  | 3              |
| GENC 5162 Popula  | tion Genetics   | 2              |
| GENC 5173 Embryol | logy, Teratogens, and Prenatal Diagnosis                                | 3              |
| GENC 5182 System  | s Disorders for Genetic Counselors                                      | 2              |
| GENC 5192 Geneti  | c Syndromes   | $\frac{2}{12}$ |
|                   |   | 12             |
| Summer (3)Field P | lacements   |                |
| GENC 5713 Prenata | al Diagnosis Practicum  | 3              |
| GENC 5613 Laborat | tory Practicum  | _3             |
|                   |   | 6              |

## Fall (4)

| 2 |
|---|
| 2 |
| 1 |
| 2 |
| 2 |
| 3 |
| 2 |
|   |
| 2 |
| 2 |
| 2 |
| 3 |
| 3 |
| 2 |
| 4 |
|   |

## **APPLICATION PROCEDURES AND DEADLINES**

Application for graduate study is made through the Graduate School Office, University of Arkansas for Medical Sciences, 4301 West Markham Street, # 601, Little Rock, Arkansas, 72205.

Admission will normally be for the Fall semester only. Contact the department office for the latest information and admission application deadlines.

## **PROFESSIONAL COURSE WORK**

## **GENC 5002—Introduction to Molecular Genetics**

Background in the principles of medical and molecular genetics, such as Mendelian inheritance patterns, and familiarizing the student with the genetic techniques and services now being provided in clinical medicine. The course will also assist students in developing the problemsolving skills required to extract and utilize genetic information from patients and families. Acceptance into the Genetic Counseling Program is the prerequisite.

## GENC 5013—Psychosocial Genetic Counseling

An overview of the psychological and sociological impact that genetic disease and birth defects have on affected individuals, families, and society at large. The theories of psychosocial counseling that represent the core of the profession will be explored. In addition, the students will examine their own beliefs and backgrounds, and learn how these may impact their ability to provide genetic counseling. Prerequisite for the course is acceptance into the Genetic Counseling Program.

## GENC 5023-Topics In Genetic Counseling I

An introduction to the profession of genetic counseling. Students will learn information necessary to functioning in a variety of settings. Teaching will include lectures, demonstrations, and special independent and group assignments. Topics include: history of the profession, obtaining accurate family histories, developing accurate pedigrees, multicultural sensitivity, and constructing an overall genetic counseling session.

## GENC 5032-Research, Writing, and Critical Analysis/Journal Club

An overview of the processes of developing research questions, methods, publications, and evaluations. The student will also be introduced to grant-writing and grantreview processes. In addition, critical analyses of scientific and lay articles will be performed by students through participation in a journal club. Projects may include grant writing, literature searches, and writing for publication.

#### **GENC 5042—Cytogenetics and Medical Genetics Review**

Instruction in Mendelian Inheritance, atypical patterns of inheritance of human disease, pathogenesis of genetic conditions and birth defects, the importance of the field of genetics in clinical medicine, including the basics of genetic screening, testing, and treatment. In addition, the role of chromosomes in heredity and human disease will be discussed.

**GENC 5153—Counseling, Interviewing, and Family Theory** Exploration of the basic concepts of group and family therapy as foundation for the facilitation of genetic counseling management of clients' healthcare needs in a holistic, efficacious, and timely manner. A major emphasis in this course provides students, through practice, with the knowledge to intervene effectively with families who may be experiencing the stress of a genetic diagnosis.

#### **GENC 5162—Population Genetics**

The basics of genetic epidemiology and population genetics, including interpretation of large-scale, population based genetic studies. The course will introduce into use, the important genetic concepts of probability theory, Hardy-Weinberg Equilibrium, segregation and linkage analysis, and the Bayesian theorem.

#### GENC 5173—Embryology, Prenatal Diagnosis, and Teratogens

Prenatal genetic counseling techniques and prenatal diagnosis procedures will be introduced, discussed, and demonstrated. Observation in a prenatal diagnosis clinic will be required. Will also introduce the basic facts and concepts of normal and abnormal human development. Presentation of basic information on known and potential human teratogens. Students will become familiar with the major teratogen references and databases. Participation in state teratogen information services will be required.

## **GENC 5182—Systems Disorders for Genetic Counselors**

An overview of human congenital malformations and inherited disorders of all organ systems, which will include diagnostic criteria as well as treatment. The course will be presented by a variety of lecturers in multiple clinical specialties.

## **GENC 5192—Genetic Syndromes**

Information on the genetic, clinical, and diagnostic testing bases of a variety of genetic syndromes. Information on normal and abnormal human development, and the study of dysmorphology.

# GENC 5232—Topics In Genetic Counseling II: Professional Issues

Instruction specific to the profession of genetic counseling. Topics include: awareness of available genetic services for appropriate patients including clinical, education, and psychosocial support, computer literacy with regard to important genetic databases, methods of genetic outreach in rural areas including telemedicine, and other professional issues of genetic counselors.

#### **GENC 5242—Cancer Genetics**

The genetic basis of inherited cancer and cancer syndromes, with an overview of the development and treatment of these cancers. In addition, exploration of cancer genetics, patient education, and psychosocial adjustment to presymptomatic testing.

## **GENC 5251—Ethics**

Methods of ethical case analysis through lecture, demonstrations, and problem-based learning. Focus will be placed on cases and situations that genetic counselors will encounter in everyday employment and other professional areas

## GENC 6152 and 6162—Thesis/Research Projects

Independent study for initiation, design, and completion of thesis study under the approval/guidance of the faculty advisory committee. For students who choose the nonthesis track, the special project course will enable them to complete independent projects or presentations that have been approved by the faculty advisory committee. Prerequisites include acceptance into the program and approval of topic(s) by appropriate faculty.

## **GENC 5262—Metabolic Genetics**

Discussion of the recognized clinical disorders that are caused by inherited errors in specific human metabolic pathways, including hemoglobinopathies, disorders of energy transport and storage, and mitochondrial disease. Students will be able to recognize the symptoms of such conditions as well as be able to discuss testing and treatment of these disorders.

## GENC 5312—Public Health Genetics

Introduction to the concept of genetic disease as a public health concern. Introduction to a variety of health care delivery systems, financial and reimbursement issues, and review of genetic screening issues. Students will have the ability to participate in one of several large/state/regional/national registries, such as the Komen Breast Cancer Foundation, other state cancer registries, the Arkansas Center for Birth Defects Registry, and in a variety of genetic disease support groups.

## **GENC 5322—Emerging Topics in Genetics**

An overview of epigenetics, the genetics of the immune system and genetic bases of autoimmune disorders, such as diabetes and lupus, will be explored. A portion of this course will also be devoted to a new field of research (pharmacogenetics) involving treatment of disease with specific combinations of drug therapies based on patient genotypes. In addition, the emerging field of psychiatric genetics will be explored.

## GENC 5713—Prenatal Diagnosis Practicum

Provide students with practical experience performing genetic counseling for patients/families referred to a prenatal diagnosis program for a variety of reasons. This includes advanced maternal age, abnormal maternal serum screening results, family histories of chromosomal or genetic disease, abnormal ultrasound findings, teratogen exposures, chronic maternal disease, and infertility issues. Students will observe and counsel patients under the supervision of trained genetic counselors and maternal-fetal medicine specialists.

## GENC 5613—Laboratory Practicum

Provide the student with practical experience in institutional chemistry and genetic laboratories: the cytogenetics laboratory at UAMS/ACH, the maternal serum screening laboratory at UAMS, the newborn screening laboratory at ADH. Students in the other Consortium states will have similar local experiences.

## **GENC 5813—Genetics Practicum**

Provide the student with practical experience performing genetic counseling in both pediatric and adult genetics clinics for patients and families referred for a variety of reasons, including family history of inherited or genetic diseases and/or chromosomal abnormalities, abnormal newborn screening results, and evaluation for features of specific syndromes. Students will observe and provide counseling under trained genetic counselors, medical geneticists, and other appropriate medical specialists.

## **GENC 5513—Cancer Genetics Practicum**

Provide the student with practical experience in providing patients/families with genetic counseling for a variety of cancer disorders and cancer syndromes. The student will observe and/or counsel these patients under the direct supervision of trained genetic counselors, oncologists, and medical geneticists.

## **GENC 5913—Specialty Clinics Practicum**

Provide the student with practical experience in providing patients and families with genetic counseling for a variety of genetic diseases in multidisclipinary specialty clinics, such as sickle cell disease clinic, hemophilia clinic, cystic fibrosis clinic, and Huntington's disease clinic

<sup>\*</sup>Students pursuing the Master of Science degree in Genetic Counseling are considered to be students in the Graduate School who are taking courses offered by the faculty of the College of Health Related Professions. Accordingly, the Graduate School Catalog is considered the primary catalog for all students in these programs. All provisions (including grievance procedures) in the Graduate School Catalog and the Graduate School Handbook are the authority applicable to students pursing the Master of Science degree in Genetic Counseling.

# HEALTH INFORMATION MANAGEMENT PROGRAM (MEDICAL RECORD TECHNOLOGY)

## Health Information Management Department

The Health Information Management Program is accredited by the Commission on Accreditation for Health Informatics and Information Management Education.

Kathy C. Trawick, Ed.D., R.H.I.A., Chairman and Associate Professor

Department of Health Information Management University of Arkansas for Medical Sciences College of Health Related Professions, UAMS #733 4301 West Markham Street, Little Rock, Arkansas 72205 Telephone: (501) 296-1059 E-mail: trawickkathyc@uams.edu Web site: http://www.uams.edu/chrp/him.htm

Faculty: K. Smith, K. Trawick Clinical Faculty: E. Crocker, A. Johnson, T. Rogers

## THE PROFESSION

Health Information Management professionals are the experts who compile, code, analyze, and prepare health information needed by the patient, the health care facility, the public, agencies that pay the claims, physicians and other members of the healthcare team. The professional may also be responsible for supervision of employees and functions. In addition to hospitals, there are many opportunities in a variety of health related organizations, such as clinics, nursing facilities, rehabilitation sites, behavioral health institutes, insurance companies, consulting agencies, vendors, managed care facilities, private physicians' offices, and specialty hospitals.

In addition to the professional HIM courses, the program offers an elective component (tumor) of cancer registry courses. Cancer registrars are data experts who provide a valuable resource of cancer information that affects cancer control efforts and supports cancer research. Cancer registrars identify cancer patients at the time of their diagnoses, then track them for the rest of their lives. They collect demographical information; diagnostic tests and their results; specific cancer information, such as the type of cancer, the tumor site, and the extent of the disease; and treatments and their outcomes. Certified cancer (tumor) registrars can work in several different types of health care settings. The need for qualified registrars in both hospital and state tumor registries is increasing.

This is a growing and changing profession, offering careers that combine an interest in patient care with computers and management. Employment opportunities are available in Arkansas and nationwide.

## THE PROGRAM

The Department of Health Information Management offers the Associate of Science degree in Medical Record Technology. The classes are taught in the evenings for part-time and full-time students with the exception of Professional Practice rotations. Professional Practice experiences are obtained in hospitals and other health care related agencies. Some travel is required. These rotations are scheduled according to the healthcare facilities' policies and may necessitate participation during regular working hours.

The cancer registry track is an additional track offered to students who wish to pursue this credential. Students can take the 10 semester credits in the cancer registry program at the same time or after they take the courses required for the associate's degree. In addition to three classroom courses, the cancer registry course work involves professional practice in cancer registries throughout the state. After successful completion of these 10 credits, they are eligible to take the certification examination of the National Cancer Registry Association (NCRA) to receive the credential of certified tumor registrar. The program will apply for accreditation within the year to join the other 13 NCRA-accredited cancer registry programs in the country.

## **CERTIFICATION AND LICENSURE**

Students who successfully complete the Associate of Science in Medical Record Technology degree will be eligible to take the National Certification Examination of the American Health Information Management Association. Upon successful completion of the examination the student will receive the Registered Health Information Technician (RHIT) credential. Completion of the degree program does not in itself insure certification.

## PREPROFESSIONAL REQUIREMENTS

Graduating high school students may apply to the program. There are no prerequisites. It is desirable to be computer literate and know how to use word processing and spreadsheets.

## **PROFESSIONAL CURRICULUM**

The associate's degree requires 27 SC of general education requirements that may be taken prior to or as co-requisites to the professional program. The professional courses (68 SC) are required to complete the program. Individualized curriculum will be developed for each student.

| Course #<br>Fall (1) | Title Semester Cre                       | edit           |
|----------------------|--|----------------|
| HIM 1308             | Health Record Systems & Issues           | 3              |
| HIM 1103             | Professional Issues Seminar              | 1              |
| ENGL 1311            | English Composition I*                   | 3              |
| CPSC 1370            | Computer Applications*                   | 3              |
| BIOL XXXX            | Anatomy & Physiology* (must cover        |                |
|                      | all body systems)                        | 4              |
| PSYC 2300            | General Psychology*                      | 3              |
| ())                  |  | 17             |
| Spring (2)           | A multiple Constants                     | n              |
| HIM 1307             | Applied Systems                          | 3              |
| HIM 1301             | Medical Terminology                      | 3              |
| HIM 1101             | Clinical Laboratory I                    | 1              |
| ENGL 1312            | English Composition II*                  | 3              |
| MATH 1302            | College Algebra* (or higher mathematics) | $\frac{3}{13}$ |
| Summer (3)           |  | 13             |
| HIM 1102             | Clinical Laboratory II                   | 1              |
| HIM 1304             | Pathophysiology w/Pharmacology           | 3              |
| HIM 2201             | Legal & Ethical Issues                   | 2              |
| 111/01/2201          | Legal & Luncal issues                    | <u>-</u> 2     |
| Fall (4)             |  | 0              |
| HIM 2301             | Quality in Health Care                   | 3              |
| HIM 1303             | Classification Systems (ICD-9-CM)**      | 3              |
| HIM 2303             | Data Management & Statistics             | 3              |
| HIM 2101             | Clinical Practice                        | 1              |
| SPCH 1300            | Speech*                                  | _2             |
|                      | - F                                      | 12             |
| Spring (5)           |  |                |
| HIM 2304             | Supervisory Management                   | 3              |
| HIM 2302             | Expanded Coding (CPT-4)**                | 3              |
| HIM 2203             | Preceptorship                            | 2              |
| HIM 2102             | Problem Solving Seminar                  | 1              |
| HIST 2311            | U.S. History to 1877* or                 |                |
| HIST 2312            | U.S. History from 1877* or               |                |
| POLS 1310            | American National Government*            | 3              |
| SOC 2300             | Introduction to Sociology*               | $\frac{3}{15}$ |
|                      |  | 15             |
| Summer (6)           |  | _              |
| HIM 2305             | Intermediate Coding & Reimbursement      | $\frac{3}{6}$  |
| TOTAL                |  | 66             |

The part-time students will follow an individualized degree plan to complete the curriculum.

\*Courses to be taken at UALR or at another regionally accredited educational institution. These courses may be taken in any sequence prior to or during enrollment in the program, but must be completed in order to be eligible to receive the associate of science degree.

A grade of "D" or "F" or a mark of "U" or "NC" in a professional course is not acceptable for progression to the next semester, nor is it acceptable for graduation if it occurs in the last semester of the program.

\*\*Students may not proceed with the coding course sequence in this program until Anatomy and Physiology, Medical Terminology, and Pathophysiology have been successfully completed.

## **CANCER REGISTRY TRACK**

| Course # | Title                          | Semester Credit |
|----------|--------------------------------|-----------------|
| Fall (1) |                                |                 |
| HIM 1202 | Registry Principles & Practice | e 2             |
| HIM 1302 | Epidemiology                   | 3               |
| HIM 2306 | Staging & Classification       | 3               |
| HIM 2202 | Registry Professional Practice | <u>2</u>        |
| TOTAL    |                                | 10              |

## APPLICATION PROCEDURES AND DEADLINES

Class size is limited and all applicants may not be selected for participation. A selective admission process will be utilized. Information about the process will be provided with the application packet. For applicants to the fall semester, applications must be received by **July 1** to be assured of consideration. For applicants to the spring semester, applications must be received by **December 1** to be assured of consideration. Applicants must provide:

- 1. **Application for Admission:** The College of Health Related Professions Application for Admission is required. Please contact the department office or the CHRP Office of Student Affairs for information.
- 2. **Application Fee:** A non-refundable application fee of \$10.00 is required and must accompany the application.
- 3. Official Transcript: Arrange for each college and university you have attended to mail an official transcript directly to the CHRP Admissions Officer. If you have completed no college/ university level course work, arrange for each high school you have attended to forward an official transcript. GED scores may be submitted for high school transcripts, if appropriate. Minimum CGPA for admission is 2.25.
- 4. ACT/SAT Scores: (If the accepted applicant has successfully completed nine (9) or more university/college hours, an ACT/SAT score is not required.) Scores may be documented on an official high school transcript or sent directly to the CHRP Admissions Office from ACT or SAT testing services.
- 5. **References:** Three reference forms from persons qualified to judge your promise of success in the program are required.
- 6. **Interview:** Applicants are contacted to arrange an interview after receipt of their application and transcript(s); based upon qualifications, not all applicants may be interviewed. The applicant's writing skills will be assessed during the interview.

Transcripts "issued to the student" will not substitute for official transcripts forwarded directly to the College of Health Related Professions by the institution issuing the transcripts.

Arkansas residency will be considered during selection for admission.

Applicants are considered without regard to race, color, creed, age, marital status, national origin, or sex. Otherwise qualified individuals with disabilities receive equal consideration.

All documents should be submitted to: University of Arkansas for Medical Sciences, College of Health Related Professions, Office of Student Affairs, UAMS, # 619, 4301 West Markham Street, Little Rock, Arkansas 72205. Telephone: (501) 686-5730.

## **PROFESSIONAL COURSE WORK**

#### HIM 1101-Clinical Laboratory I

The student will be given the opportunity to correlate the didactic experience of previous courses with on-site and on-campus laboratory learning experience.

#### HIM 1102—Clinical Laboratory II

The student will be given the opportunity to correlate the didactic experience of previous courses with on-site and on-campus laboratory learning experience.

## HIM 1103—Professional Issues Seminar

Introduction to the HIM profession, ethics, and professional organizations. Concepts of professionalism. Overview of basic skills required for the profession. Group and team building processes.

#### HIM 1201—Transcription Laboratory

Transcription of physician-dictated reports, representing body systems and medical specialties. Word processing and transcriber equipment will be used in the lab.

#### HIM 1202—Registry Principles & Practice (2 SC hrs)

Introduction to basic registry operations which include hospital registries and central registries, basics of staging and classification systems used in cancer registries, overview of the survey process, procedures, requirements and standards of a registry and accreditation. Topics are: statistics, reporting, data sets, data editing, quality control, case-finding principles, cancer committees, cancer conferences, agency reporting, legal issues, and confidentiality.

## HIM 1301—Medical Terminology

Introduction to the language of medicine. Emphasis is on terminology of all anatomical body systems, roots of words, suffixes, prefixes, and correlation with basic anatomy and physiology classes.

#### HIM 1302—Epidemiology (3 SC hrs)

Instruction in cancer disease processes, physiologic changes, and functions in the human body resulting from cancer. Includes study of laboratory, pathology, diagnostic, radiologic, and surgical procedures as well as tumor markers and other treatment modalities. Surveillance, cancer control, and patient care evaluation are introduced.

#### HIM 1303—Classification Systems (ICD-9-CM)

Introduction to ICD-9-CM coding and classification system. Instruction in coding diagnoses and procedures, sequencing and analyzing actual medical records to identify data elements to be coded. Introduction to coding software, grouper software, and an emphasis on basic principles of Uniform Hospital Discharge Data Set (UHDDS), ambulatory coding and Diagnosis Related Group (DRG) assignment.

#### HIM 1304—Pathophysiology with Pharmacology

Common pathological conditions of the organ systems and the drugs of choice used in their treatment.

## HIM 1307—Applied Systems

Application of methods for implementing and managing health information systems in acute and ambulatory health care environments.

#### HIM 1308—Health Record Systems and Issues

Basic concepts and functions in health information management to include development, storage, and maintenance of the health record in the health care delivery systems environment.

#### HIM 2101—Clinical Practice

The student will be given the opportunity to correlate the didactic experience of previous advanced courses with onsite and on-campus laboratory learning experience.

## HIM 2102—Problem Solving Seminar

Examination of the latest trends in health information management. Use of case studies for problem solving responses to management and supervisory issues.

#### HIM 2201-Legal and Ethical Issues

The health record as a confidential legal document; legal principles, policies, regulations and standards for the control and use of health information. The basic structure of the federal and state court system. Definition and application of professional ethics and consideration of contemporary legal and ethical issues.

#### HIM 2202—Registry Professional Practice (2 SC hrs)

Directed practice provides hands-on experience in all aspects of registry operations. Supervised practiced in a hospital registry includes skill and understanding in registry management, data collection and abstracting, coding and staging, follow-up, data utilization and reporting, computer applications, and quality assessment. The clinical rotations include 11 hours of directed practice each week during the 15-week semester.

#### HIM 2203—Preceptorship

The student will be given the opportunity to correlate the didactic experiences of previous and concurrent courses with on-site and on-campus laboratory learning experiences. Application of operational management theory and orientation to all aspects of practice as a supervisor of a health information department component in a hospital, long term care or ambulatory setting. Includes student project(s).

## HIM 2301-Quality in Health Care

Purpose, philosophy and processes of improving organizational performance through quality assessment, credentialing, utilization management, and risk management. Use of quality improvement tools for case review, data collection, data display, and data analysis.

## HIM 2302—Expanded Coding (CPT-4)

Introduction to nomenclature and classification systems with instruction in coding procedures with the CPT/HCPCS system. Coding data quality issues and methodology are introduced and related to the reimbursement system.

## HIM 2303-Data Management and Statistics

Computation and interpretation of healthcare statistics. Report generation, data display and data analysis.

## HIM 2304—Supervisory Management

Supervisory principles of a health care information service. Review of specific human resource management functions including communication, motivation, and supervision. Review of budgets, staffing schedules, policies, procedures, and productivity. Analysis of case study examples from health information departments, in the inpatient, ambulatory, and physician office environments.

## HIM 2305—Intermediate Coding & Reimbursement

Application of advanced guidelines of ICD-9-CM, CPT/HCPCS, and coding in the prospective payment and managed care environments for acute and ambulatory care reimbursement.

## HIM 2306—Staging and Classification (3 SC hrs)

In-depth study and practice of oncology coding and staging systems. Course covers International Classification of Diseases for Oncology (ICD-O); Surveillance, Epidemiology, and End Results (SEER) Summary Staging; and American Joint Committee on Cancer (AJCC) staging nomenclatures and classification systems. Abstracting principles and coding systems are emphasized using workbooks and actual patient records. Cancer staging software applications are introduced.

## MEDICAL DOSIMETRY PROGRAM Department of Imaging and Radiation Sciences

This program is jointly sponsored by the UAMS Department of Radiation Oncology, Central Arkansas Radiation Therapy Institute (CARTI), and the UAMS College of Health Related Professions.

Yulong Yan, Ph.D., D.A.B.R, Division Director and Assistant Professor

Division of Medical Dosimetry Department of Imaging and Radiation Sciences University of Arkansas for Medical Sciences College of Health Related Professions, UAMS #771 4301 West Markham, Little Rock, Arkansas 72205 Telephone: (501) 526-7474 FAX: (501) 686-7285 E-mail: yanyulong@uams.edu Web site: http://www.uams.edu/chrp/dosimetry/

Faculty and Clinical Faculty: H. Jiang, E. Moros, J. Peñagarícano, V. Ratanatharathorn, Y. Yan, E. Youssef Medical Director: J. Peñagarícano

Rebecca L. Ludwig, Ph.D., R.T.(R)(QM)(ARRT); Interim Chairman, Department of Imaging and Radiation Sciences

The mission of the medical dosimetry program is to provide an academic and clinical environment that will educate medical dosimetrists to the highest standards of the profession.

## THE PROFESSION

Medical dosimetry is a newly emerging health care profession designed to support radiation oncology physicians. Medical dosimetrists are part of the medical physics group and together with the medical physicists and the radiation oncologists design computer-based plans of treatment for cancer patients. Since all the calculations are derived from diagnostic scans (Xray, CT, MRI, PET), the medical dosimetrist works primarily with computers to develop the treatment plans; once approved, the treatment is delivered to the patient over a period of several weeks. Medical dosimetrists work primarily in radiation treatment centers and comprehensive cancer centers. Opportunities for work in industry as application support specialists or in sales are also available. The clinical work week is typically a standard 40-hour week, though weekend and evening shifts may be required.

The increased use of computers in treatment planning, the sophistication and delivery capabilities of modern treatment machines, and the developments in cross-sectional and three dimensional imaging (CT, MRI, PET) have increased tremendously the need for qualified medical dosimetrists. Employment is available nationally and regionally.

## THE PROGRAMS

This one-year, full-time, program can be taken to complete a bachelor's degree or, for those already holding a bachelor's degree, to obtain an advanced certificate. The educational program consists of classroom instruction, laboratory experience, and clinical rotations for 12 consecutive months beginning each August. There are four tracks in this program

designed for those students who have a radiation therapy degree and those that have science degrees who seek either the bachelor's degree or an advanced certificate.

The pre-professional curriculum for those seeking the bachelor's degree consists of 78-93 semester credits (SC) of course work with eight SC of physics and 12 SC of mathematics, including calculus I and II. The professional sequence is dependent on the entry-level credentials of the student. If the student is a registered radiation therapist, an additional 31 SC of course work is required over the 12 months. If the individual is a science major without the radiation therapy credential, 46 SC are required to complete the program (21 SC of radiation therapy course work and 25 SC of specific courses in medical dosimetry).

The pre-professional curriculum required for the advanced certificate is 50 SC with the same science sequence (39 SC hours) required in the bachelor's degree program. Courses taken previously as part of a bachelor's degree program can be counted toward the prerequisite requirements. The professional sequence is identical to that of those seeking a bachelor's degree. Students who have no radiation therapy credential must complete 46 SC and students with that credential must complete 31 SC of professional course work.

## ACCREDITATION

The Medical Dosimetry Program is in the process of applying for accreditation through the Joint Review Committee on Education in Radiologic Technology (JRCERT). The Medical Dosimetrist Certification Board (MDCB) has recently announced changes in the requirements for eligibility for the certification examination which may affect applicants to the program. Beginning in 2008, all candidates for the MDCB certification examination applying via "Route 1" must have graduated from a JRCERT-accredited program or a program having completed the JRCERT review process and awaiting JRCERT approval. Graduates from programs not accredited by JRCERT may be eligible for the MDCB certification examination via "Route 2 or 3". This may affect the graduates in the 2006–2007 class of medical dosimetry regarding their eligibility for the 2008 MDCB certification examinations. Graduates of the program who do not take the certification examination by December 31, 2007 may not be eligible to take it under "Route 1", though such graduates may be eligible for certification under routes two (2) or three (3). For more information, contact Yulong Yan, Ph.D., Division Director, Division of Medical Dosimetry or Tricia Reese the program coordinator at 501-526-7474. Applicants to the program may also wish to visit the MDCB Web site at http://www.mdcb.org/, especially the section on "Eligibility Change for the 2008 Route Exam" at http://www.mdcb.org/examinfo/eligibilitychanges.htm.

## **CERTIFICATION AND LICENSURE**

Graduation from the program in medical dosimetry may satisfy academic eligibility to take the medical dosimetry certification examination. Depending on an applicant's qualifications, a minimum of one year of full-time employment may be required by the Medical Dosimetrist Certification Board (MDCB) prior to sitting in for the examination.

## PREPROFESSIONAL CURRICULUM

The bachelor's degree prerequisites include successful completion of 78-93 SC of general education course work from a regionally accredited college or university and must fulfill all CHRP requirements regarding acceptance of transfer credit:

|   | Minimum   |  |  |
|---|---|--|--|
| Area/Typical Course Title                 | Semester Credit                                       |  |  |
| SCIENCE AND MATHEMATICS                   |   |  |  |
| College Algebra                           | 3   |  |  |
| Calculus I & II                           | 6   |  |  |
| Additional Mathematics Course Work        | 3   |  |  |
| Chemistry with Laboratory                 | 4   |  |  |
| Biology with Laboratory                   | 4   |  |  |
| Anatomy and Physiology I & II**           | 8   |  |  |
| Physics I & II (Algebra or Calculus based | $\frac{3}{39}$  |  |  |
| Medical Terminology                       | 3   |  |  |
|   | 39  |  |  |
| LIBERAL ARTS                              |   |  |  |
| English Composition I & II                | 6   |  |  |
| American History or National Governme     | ent 3   |  |  |
| World/Western Civilization I & II         | $\begin{array}{c} 6\\ \underline{3}\\ 18 \end{array}$ |  |  |
| Humanities                                | _3  |  |  |
|   | 18  |  |  |
| SOCIAL SCIENCES                           |   |  |  |
| Sociology/Psychology***                   | 6   |  |  |
| COMMUNICATIONS                            |   |  |  |
| Oral Communications/Speech                | 2   |  |  |
| COMPUTER SCIENCE                          | COMPUTER SCIENCE                                      |  |  |
| Computer Fundamentals/Applications        | 3   |  |  |
|   |   |  |  |

## **FINE ARTS**

Fine Arts (Art [including Architecture, Film,

Photography], Music or Theatre Art)\*\*\*

**ELECTIVES\*** TOTAL

\*Students who have completed radiation therapy course work from a regionally accredited college or university may apply 22 SC of electives to their prerequisite requirements from that course work. Students who have no radiation therapy background are required to complete 7 SC of electives from a regionally accredited college or university.

3 22/7

78/93

. . . .

The advanced certificate prerequisites include successful completion of 50 SC of general education course work from a regionally accredited college of university and must fulfill all CHRP requirements regarding acceptance of transfer credit:

|  | Minimum          |
|--|------------------|
| Area/Typical Course Title  | Semester Credit  |
| SCIENCE AND MATH   |                  |
| College Algebra  | 3                |
| Calculus I & II  | 6                |
| Additional Mathematics Course Work   | 3                |
| Chemistry with Laboratory  | 4                |
| Biology with Laboratory  | 4                |
| Anatomy and Physiology I & II**  | 8                |
| Physics I & II (Algebra or Calculus based  |                  |
| Medical Terminology  | $\frac{3}{39}$   |
|  | 39               |
| LIBERAL ARTS   |                  |
| English Composition I & II   | 6                |
| COMMUNICATIONS   |                  |
| Oral Communications/Speech   | 2                |
| COMPUTER SCIENCE   |                  |
| Computer Fundamentals/Applications   | 3                |
| TOTAL  | 50               |
| **Anatomy and physiology courses must cover<br>and include accompanying laboratory sections.   | all body systems |
| <b>***</b> These courses can be taken as co-requisit<br>completed within five years of the date of adr<br>program. Remaining preprofessional hours mu<br>before acceptance into the program. | nission into the |

Actual course titles may vary among institutions. Consult the division director for pre-professional counseling. Fulfillment of the radiation therapy pre-professional curriculum does not assure admittance into the professional program (please see Application Procedures and Deadlines). Not more than one course in the following group will be accepted in transfer to meet degree requirements: band, studio, physical education, military science, English as a second language (ESL), manual skills.

Students entering with a baccalaureate or higher degree from an accredited college or university must complete the following requirements for a CHRP bachelor's degree: (a) 32 SC in residence; (b) all program-specific mathematics and biological and physical science prerequisites; (c) all program-specific professional requirements; (d) if not completed as part of a previous degree program, a 3 SC college/university course in American history or national government, a 3 SC course in college algebra or higher level mathematics, and a 3 SC course in humanities.

## **PROFESSIONAL CURRICULUM**

For those holding the radiation therapy credential and seeking either the Bachelor's degree or the advanced certificate\*, the following 31 SC of course work are required:

| Course #   | Title                           | Semester Credit   |
|------------|---------------------------------|-------------------|
| Fall (1)   |                                 |                   |
| MED 4101   | Medical Ethics and Orientation  | 1                 |
| MED 4501   | Cross-Sectional Anatomy for Med | lical Dosimetry 5 |
| MED 4303   | Medical Dosimetry Physics       | 3                 |
| MED 4203   | Practicum I                     | _2                |
|            |                                 | 11                |
| Spring (2) |                                 |                   |
| MED 4306   | Research/Special Topics         | 6                 |
| MED 4304   | Treatment Planning              | 3                 |
| MED 4204   | Practicum II                    | 2                 |
| MED 4305   | Special Programs in Dosimetry   | _3                |
|            |                                 | 14                |
| Summer (3  | )                               |                   |
| MED 4605   | Practicum III                   | _6                |

## TOTAL

\*Students who hold radiation therapy certification who did not receive their education at a regionally accredited institution of higher education must elect the bachelor's degree track

A minimum of 32 SC of professional course work must be completed in residence at the College.

A grade of "D" or "F" or a mark of "NC" in a professional course is not acceptable for progression to the next semester, nor is it acceptable for graduation if it occurs in the last semester of the program.

For those with appropriate science preparation who are seeking either the Bachelor's degree or the advanced certificate, the following 46 SC are required:

| Course #   | Title                           | Semester Credit                    |
|------------|---------------------------------|------------------------------------|
| Fall (1)   |                                 |                                    |
| MED 4101   | Medical Ethics and Orientation  | 1                                  |
| MED 4501   | Cross-Sectional Anatomy for Med | dical Dosimetry 5                  |
| MED 4303   | Medical Dosimetry Physics       | 3                                  |
| RTH 4202   | Patient Care                    | 2                                  |
| RTH 4304   | Radiation Oncology I            | 3                                  |
| RTH 4413   | Radiation Therapy Physics I     | 4                                  |
| MED 4203   | Practicum I                     | $\frac{2}{20}$                     |
|            |                                 | 20                                 |
| Spring (2) |                                 |                                    |
| MED 4304   | Treatment Planning              | 3                                  |
| MED 4204   | Practicum II                    | 2                                  |
| MED 4305   | Special Programs in Dosimetry   | 3                                  |
| RTH 4404   | Radiation Oncology II           | 4                                  |
| RTH 4423   | Radiation Therapy Physics II    | 4                                  |
| RTH 4231   | Radiation Biology               | $\frac{2}{18}$                     |
|            |                                 | 18                                 |
| Summer (3  | 2)                              |                                    |
| MED 4605   | Practicum III                   | 6                                  |
| RTH 4222   | Radiation Therapy Physics III   | $\frac{\frac{2}{8}}{\frac{8}{46}}$ |
|            |                                 | 8                                  |
| TOTAL      |                                 | 46                                 |

A minimum of 32 SC of professional course work must be completed in residence at the College (CHRP).

A grade of "F" or a mark of "NC" in a professional course is not acceptable for progression to the next semester, nor is it acceptable for graduation if it occurs in the last semester of the program.

## **PROGRAM TRACKS/OPTIONS**

Bachelor of Science in Medical Dosimetry and Advanced Certificate: Students who successfully complete all prerequisites and the professional curriculum are eligible upon graduation to receive either a Bachelor of Science degree in Medical Dosimetry or an advanced certificate.

## APPLICATION PROCEDURES AND DEADLINES

Class size is limited, and all applicants may not be selected for participation in the program. Applications must be received by March 1 (see page 8) to be assured of consideration for admission. See page 7 for further information on deadlines and procedures for admission. Applicants must provide:

- 1. Application for Admission: The College of Health Related Professions Application for Admission is required. Please contact the department office or the CHRP Office of Student Affairs for information.
- 2. Application Fee: A non-refundable application fee of \$10.00 is required and must accompany the UAMS application.
- 3. Official Transcripts: Arrange for each college or university you have attended to forward an official transcript of your course work. Α prerequisite GPA of at least 2.7 is required to be considered for admission.
- References: Three letters of recommendation 4. are required for consideration for admission. References should be mentors/professors that you have worked with and who are familiar with your ability and academic performance. Reference letters must be sent to the CHRP Admissions Office. Forms, fees, and transcripts must be received by the first working day of March to ensure consideration for the fall term.
- 5. Testing and Personal Interview: Qualified applicants are encouraged to present themselves in person for interviews at UAMS scheduled by the department. A telephone interview can also be scheduled.
- 6. Professional Observation: Applicants are required to demonstrate an understanding of the responsibilities and duties of the profession through observation and discussion with a practicing professional in the field. Contact department for details.

## TOTAL

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Transcripts "issued to the student" will not substitute for official transcripts forwarded directly to the College of Health Related Professions by the institution issuing the transcripts.

Arkansas residency will be considered during selection for admission.

Applicants are considered without regard to race, color, creed, age, marital status, national origin, or sex. Qualified handicapped persons, capable of meeting academic standards essential to participation in the program, receive equal consideration.

All documents should be submitted to: University of Arkansas for Medical Sciences, College of Health Related Professions, Office of Student Affairs, UAMS, #619, 4301 West Markham Street, Little Rock, Arkansas 72205. Telephone: (501) 686-5730.

## **PROFESSIONAL COURSE WORK**

#### MED 4101-Medical Ethics and Orientation

Introductory course to the ethics and practice of medicine and medical dosimetry in a clinical environment and overview of the medical dosimetry profession.

## MED 4203—Practicum I

Both lectures and "hands-on" exercises will be included to help students develop sufficient skills in using and administrating radiation therapy planning systems. Basic planning techniques will also be taught.

#### MED 4204—Practicum II

Assigned exercises organized by treatment site and procedure type will be carried out under the direct supervision of an assigned advisor. These will be both simulated and real case assignments. The student will rotate to different facilities for the completion of the tasks.

#### MED 4303—Medical Dosimetry Physics

The course will review and expand upon the physics that govern the use of radiation in medicine as were discussed in the pre-requisite courses, RTH-Radiation Therapy Physics I,II.

#### MED 4304—Treatment Planning

Application of physics and anatomical principles in developing and understanding a manual and computerbased treatment plan for patients with lesions at different anatomical treatment sites.

#### MED 4305—Special Programs in Dosimetry

Discussion of special procedures in radiation therapy, such as intensity modulated radiation therapy, total skin irradiation, and tomotherapy as it pertains to treatment planning.

#### MED 4306—Research/Special Topics

Directed research and bibliography search on a current investigational topic in medical dosimetry.

# MED 4501—Cross-Sectional Anatomy for Medical Dosimetry

Fundamentals of acquisition and interpretation of crosssectional anatomy from CT and MRI for all anatomical systems.

#### MED 4605—Practicum III

Assigned exercises organized by treatment site and procedure type will be carried out under the direct supervision of an assigned advisor. These will be both simulated and real case assignments. The student will rotate to different facilities for the completion of the tasks.

For admission information call the Dean's Office at (501) 686-5730. Admission materials should be sent to the Office of Student Affairs, CHRP, 4301 West Markham, #619, Little Rock, AR 72205. For program information, contact School Administrative Office at 501-526-7474 or email reesetriciam@uams.edu.

## MEDICAL TECHNOLOGY PROGRAM Department of Laboratory Sciences

The Medical Technology Program is accredited by the National Accrediting Agency for Clinical Laboratory Sciences

Patrick F. Shen, Ph.D., M.T.(ASCP), Chairman and Program Director Department of Laboratory Sciences University of Arkansas for Medical Sciences College of Health Related Professions, UAMS #597 4301 West Markham Street, Little Rock, Arkansas 72205 Telephone: (501) 686-5776 E-mail: shenpatrickf@uams.edu Web site: http://www.uams.edu/chrp/medtech/

Faculty: S. Aycock, T. Beavers-May, C. Childs, G. Hall (Emeritus), S. Juretschko, M. Mitchell, K. Mugan, D. Pierce, P. Shen, S. Tank, K. Wagner, L. Woods Clinical Faculty: D. Sadler

## THE PROFESSION

Medical Technology involves definitive analyses on blood, spinal, and other body fluids to provide data essential to diagnosis and treatment.

The medical technologist, a health professional in laboratory medicine, is a vital link between the physician and patient. Some specific responsibilities are to identify pathogenic bacteria and to determine their drug sensitivities, to recognize bleeding disorders, to identify normal and abnormal blood cells, to prepare blood for transfusion, and to analyze serum for the presence of chemical elements and other components.

Career opportunities are excellent, particularly in hospital laboratories and in diagnostic clinics. Other settings which provide career opportunities include research facilities, industry, government agencies, public health offices, crime laboratories, food and cosmetic quality assurance programs, and insurance offices. Technologists may advance through laboratory service, education, research, or sales to the ranks of administration.

After graduation medical technologists may specialize in any major section of the laboratory or in laboratory management. Those who have specialist certifications or advanced degrees find opportunities in supervision, education, and administration in a number of different settings including health care institutions, universities, public service agencies, and private industry. Medical technology education provides excellent preparation for those who wish to become physicians and a sound background for those interested in medical sales work. There has been a demand for graduates from the program.

## **PROGRAM TRACK/OPTIONS**

Students accepted into the professional program begin their course of study in August. The traditional program has fulltime and part-time tracks. The full-time track requires four (4) semesters to complete. The part-time track allows students a maximum of six (6) semesters to complete the program. The MLT-to MT advanced placement track is designed for employed MLTs who desire to continue their education within the framework of their home environment. Upon completion of the full-time, part-time, or MLT-to-MT advanced placement tracks the Bachelor of Science degree in Medical Technology is awarded.

**The Traditional Program:** The preprofessional curriculum consists of 67 SC, including 27 SC specified in the sciences. The professional curriculum consists of 57 SC and requires (4) four semesters (two academic years) for completion.

The program receives significant support from the Department of Veterans Affairs, Central Arkansas Veterans Healthcare System (CAVHS), St. Vincent Infirmary Medical Center, Pine Bluff AHEC (Jefferson Regional Medical Center), Southwest Regional Medical Center, Washington Regional Medical Center, AHEC Southwest (Christus St. Michael Health Care System), St. Edwards Mercy Medical Center, University Hospital of Arkansas, Arkansas Children's Hospital, Conway Regional Medical Center, St. Joseph's Mercy Health Center, Siloam Springs Memorial Hospital, and the Arkansas Department of Health. Each facility provides clinical internship experiences for students.

Medical Technology students are strongly encouraged to complete the hepatitis B vaccine series. Contact the department for further information.

The program is accredited by the National Accrediting Agency for Clinical Laboratory Sciences, 8410 West Bryn Mawr Avenue, Suite 670, Chicago, IL 60631, (773) 714-8880.

**MLT-to-MT Distance Learning Program:** The MLT-to-MT Distance Learning Program allows medical laboratory technicians with an associate degree who are registered by the American Society for Clinical Pathologists (ASCP) or certified by the National Certification Agency for Medical Laboratory Personnel, Inc. (NCA) to complete the B.S. degree in Medical Technology in three years through a combination of distance education and concentrated laboratory and advanced clinical laboratory experiences. To be eligible for the program, students must submit proof of certification or registration from one of the above agencies.

The MLT-to-MT program is divided into the pre-professional curriculum and the professional curriculum and takes 124 SC to complete. The pre-professional program includes a minimum of 75 SC. Prior to enrollment in the professional program, students must complete 69 SC including all of the following courses: 8 SC of college and/or clinical chemistry; 8 SC biology electives or suitable MLT courses; 4 SC anatomy & physiology, or suitable MLT course; 4 SC microbiology or clinical microbiology; and 3 SC college algebra. An additional 6 SC of general education courses may be completed after enrolling in the program and prior to graduation. The general education courses must include: 6 SC English composition, 6 SC history of civilization or world history, 3 SC American history, 6 SC social science, 2 SC speech communication, 3 SC fine arts and 3 SC humanities. Students may complete the preprofessional curriculum at any regionally accredited college or university.

The professional MLT-to-MT curriculum at UAMS requires 49 SC of upper level MT courses to complete. In addition, all students are required to attend concentrated advancedskills laboratory courses on the UAMS campus in Little Rock. The laboratory sessions are conducted in one or two week sessions each spring and/or summer.

All MLT-to-MT students will need a computer with CD-ROM drive and Internet access in order to view and submit course material. Students will also be required to have an e-mail address where the Department can routinely contact them.

After completing the courses listed above, the students will progress to advanced clinical laboratory experiences and the senior curriculum. MLTs are allowed to demonstrate MT level clinical skill competencies in approved clinical laboratories. Additional selected experiences in clinical laboratories located in Little Rock may be required to provide advanced procedures and techniques.

For further information on the MLT-to-MT Advanced Track Program, call Cherry Childs at (800) 981-4427.

Northwest Arkansas Distance Education Program: The department offers a medical technology curriculum in northwest Arkansas in a collaborative effort with Northwest Arkansas Community College (NWACC). Pre-professional course work can be taken at the University of Arkansas, Fayetteville, NWACC or other approved regionally accredited colleges. Students who are admitted into the four-semester program take the core curriculum courses through distance education technologies. The first year student laboratory sessions are taken at NWACC to coincide with the lecture material. The second year of the program is a clinical internship at hospitals in the Fort Smith or Fayetteville areas. Contact Kathleen Mugan at (800) 981-4427 and check the web site at http://www.uams.edu/CHRP/medtech/.

## BACCALAUREATE SECOND DEGREE PROGRAM

The Medical Technology program offers an accelerated 12month track. The program is designed for students with a bachelor's degree in biology, chemistry, microbiology, or a related science from a regionally a accredited college or university. This intensive program includes two semesters of professional curriculum and approximately 16 weeks of clinical experience in central Arkansas. Graduates receive a bachelor of science degree in medical technology and are eligible to apply to sit for national certification examinations. For more information, contact Kathleen Mugan at (501) 686-5776 or (800) 981-4427 and/or view the Web site at http://www.uams.edu/CHRP/medtech/default.asp.

## **CERTIFICATION AND LICENSURE**

Successful completion of professional course work in the Medical Technology program satisfies academic eligibility to apply for certification examinations given by national agencies in the field of medical technology and for licensure examinations given by some states. Successful completion of the program does not itself insure certification or licensure. The granting of the B.S. degree is not contingent upon the student's performance on any type of external certification or licensure examination. Each student is responsible for becoming familiar with the applicable certification and licensure requirements.

## FINANCIAL ASSISTANCE

In addition to the general financial aid opportunities previously described in the Financial Information section of this catalog, the department can provide information on program-specific financial assistance. Contact the department chairman for further information regarding the following sources of aid which may be available to qualified medical technology students.

- 1. **Sharon Edwards Gibbert Memorial Scholarship:** This award is based primarily on academic merit, but other factors may be considered.
- 2. **M. Gene Hall Medical Technology Scholarship:** This award, based on scholarship, citizenship, and professionalism, is given each Fall and Spring semester.
- 3. Paula Peacock Medical Technology Scholarship: This award, based on faculty recommendations, Medical Technology Program GPA, and submission of a one-page essay, is given to one senior student in the Spring semester of each year.

## PREPROFESSIONAL CURRICULUM

A minimum of 67 SC are required from a regionally accredited college or university and must fulfill all College requirements regarding the acceptance of transfer credit. Students must complete 61 SC, including all of the science and mathematics requirements, prior to enrollment in the professional program. Upon acceptance into the program, an additional 6 SC of general education requirements must be reflected on the student's degree plan.

|  | Minimum          |
|--|------------------|
| Area/Typical Course Title                | Semester Credit  |
| GENERAL EDUCATION REQUIREMENTS           | S                |
| English Composition                      | 6                |
| History of Civilization/World History    | 6                |
| American History or National Governm     | nent 3           |
| Social Science [Psychology, Sociology,   | Anthropology,    |
| Geography, or Economics]                 | 6                |
| Speech Communication                     | 2                |
| Fine Arts [Art (including Architecture a | nd Film)         |
| Music, or Theatre Art] <sup>1</sup>      | 3                |
| Humanities [Philosophy, Political Scien  | ice, Literature, |
| or Humanities] <sup>2</sup>              | 3                |
| Electives <sup>3</sup>                   | <u>11</u>        |
|  | $\overline{40}$  |

## SCIENCE AND MATHEMATICS REQUIREMENTS

| Biological/Health Science: <sup>4</sup>       |    |
|---|----|
| Biology Electives                             | 8  |
| Anatomy & Physiology (or Physiology)          | 4  |
| Microbiology                                  | 4  |
| General Chemistry                             | 8  |
| College Algebra (or higher level mathematics) | 3  |
|   | 27 |

## TOTAL

<sup>1</sup>The Fine Arts requirement cannot be fulfilled with a studio course.

<sup>2</sup>Humanities requirements may be selected from the courses in the subject areas of philosophy, political science, literature and the humanities. The course in National Government, if selected to meet the US History/National Government requirement, cannot also be used to meet the Humanities requirement in Political Science. Acceptable courses in literature must be broad survey courses; world literature is especially recommended.

<sup>3</sup>Recommended electives include introductory courses in Computer Science, Statistics, Management, Genetics, Organic Chemistry, Biochemistry, and Quantitative Analysis.

<sup>4</sup>To include not more than 4 SC of botany.

Chemistry and Biology/Health Science courses must be suitable for majors in those disciplines and must include laboratory credit in required courses. Other courses may fulfill the program's requirements. Contact the department for course approval. CLEP credits are not acceptable to fulfill chemistry and biological science requirements.

Students entering with a baccalaureate or higher degree from an accredited college or university must complete the following requirements for a CHRP bachelor's degree: (a) 32 SC in residence; (b) all program-specific mathematics and biological and physical science prerequisites; (c) all program-specific professional requirements; (d) if not completed as part of a previous degree program, a 3 SC college/university course in American history or national government, a 3 SC course in college algebra or higher level mathematics, and a 3 SC course in humanities.

Fulfillment of the preprofessional curriculum does not assure admittance into the professional program (please see Application Procedures and Deadlines).

## **PROFESSIONAL CURRICULUM**

The following 57 SC are required in the traditional program professional curriculum:

| P. 0. 000. 01. 01.          |   |                |
|-----------------------------|---|----------------|
| Course #<br><i>Fall (1)</i> | Title Semester Cre                          | edit           |
| MET 3213                    | Intro to Medical Technology                 | 2              |
| MET 3110                    | Laboratory Procedures                       | 1              |
| MET 4223                    | Body Fluids                                 | 2              |
| MET 4311                    | Immunology                                  | 3              |
| MET 4312                    | Hematology                                  | 3              |
| MET 4212                    | Hematology Laboratory                       | 2              |
| MET 4114                    | Parasitology                                | 1              |
| MET 3212                    | Clinical Biochemistry                       | $\frac{2}{16}$ |
|                             |   | 16             |
| Spring (2)                  |   |                |
| MET 4315                    | Clinical Microbiology                       | 3              |
| MET 4215                    | Clinical Microbiology Laboratory            | 2              |
| MET 4217                    | Molecular Diagnostics                       | 2              |
| MET 4117                    | Molecular Diagnostics Laboratory            | 1              |
| MET 4316                    | Immunohematology                            | 3              |
| MET 4116                    | Immunohematology Laboratory                 | 1              |
| MET 4514                    | Clinical Chemistry                          | $\frac{5}{17}$ |
|                             |   | 17             |
| Fall (3)                    |   | -              |
| MET 4531                    | Hematology/Coagulation Internship*          | 5              |
| MET 4540                    | Chemistry/Urinalysis/Phlebotomy Internship* | 5              |
| MET 4134                    | Laboratory Medicine Seminar                 | 1              |
| MET 4138                    | Laboratory Management I                     | $\frac{1}{12}$ |
| Spring (4)                  |   | ΙZ             |
| MET 4535                    | Microbiology Internship*                    | 5              |
| MET 4535<br>MET 4541        | Blood Bank/Immunology Internship*           | 5              |
| MET 4341<br>MET 4135        | Laboratory Medicine Case Studies Seminar    |                |
| MET 4135<br>MET 4139        | Laboratory Management II                    | 1              |
| THE 1 4133                  | Luboratory management n                     | <u> </u>       |

## TOTAL

67

\*The sequencing of the six internship courses varies for each student. The student may be assigned any of the internship courses in any given clinical semester.

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A grade of "F" or a mark of "U" or "NC" is not acceptable for progression to the next semester, nor is it acceptable for graduation if it occurs in the last semester of the program. A grade of "D" in the following professional courses is not acceptable for progression to the next semester, nor is it acceptable for graduation if it occurs in the last semester of the program: Laboratory Procedures (MET 3110), Hematology Laboratory (MET 4212), Clinical Microbiology Laboratory (MET 4215), Molecular Diagnostics Laboratory (MET 4117), Immunohematology Laboratory (MET 4116), Hematology/Coagulation Internship (MET 4531), Blood Bank/Immunology Internship (MET 4541), Chemistry/Urinalysis/Phlebotomy Internship (MET 4540), Microbiology Internship (MET 4535), and Laboratory Medicine Case Studies Seminar (MET 4135). A first semester student who passes all courses but achieves a CGPA of less than 2.0 will be allowed to progress on probation to the second semester if he/she has achieved a CGPA of at least 1.8 in the professional courses. A student in subsequent semesters must maintain a GPA of not less than 2.0 for all courses taken since entering the program.

## MEDICAL TECHNOLOGY ESSENTIAL FUNCTIONS

These essential functions represent the non-academic demands of the program. All applicants are expected to meet these requirements in order to participate in the medical technology program.

- 1. **Essential Observational Requirements:** The medical technology student must be able to: Use a microscope and differentiate microscopic components of cells, tissues, etc.; observe laboratory demonstrations of techniques and procedures; discriminate color reactions; and read text, numbers, and graphs displayed in print or on a video monitor.
- Essential Movement Requirements: The medical 2. technology student must be able to: Move freely and safely about a laboratory and in patient rooms; reach laboratory benchtops and shelves, free-standing laboratory instruments, patients lying in hospital beds or patients seated in specimen collection furniture; control laboratory equipment (i.e., pipettes, inoculating loops, test tubes) and adjust instruments to perform laboratory procedures; perform delicate manipulations which require good eye-hand coordination; travel to clinical laboratory sites for practical experience; and perform moderately taxing continuous physical work, often requiring prolonged standing and/or sitting, over several hours.
- 3. Essential Communication Requirements: The medical technology student must be able to: Read and comprehend technical and professional materials (i.e., textbooks, journal articles, handbooks, and instruction manuals); effectively communicate with faculty, classmates, patients, physicians and other health care personnel in a professional, positive, and tactful manner; follow verbal and written instructions in English in order to correctly and independently perform laboratory test procedures; legibly record laboratory data; and independently prepare papers, prepare laboratory reports, and take paper, computer and laboratory practical examinations.
- 4. **Essential Intellectual and Conceptual Abilities:** The medical technology student must be able to: Measure, calculate, reason, analyze, evaluate and synthesize; recognize emergency situations and take appropriate actions in a timely manner; exercise critical thinking skills to solve problems; and exercise sufficient judgment to recognize and correct performance deviations.
- 5. **Essential Behavioral and Social Attributes:** The medical technology student must be able to: Maintain patient confidentiality and to exercise ethical judgment, integrity, honesty, dependability and accountability in the performance of their

laboratory responsibilities; perform laboratory tests carefully while maintaining efficiency and organization; maintain personal hygiene and wear garments appropriate to the work setting; tolerate taxing workloads, function effectively under stress and adapt to changing technology and environments; recognize potentially hazardous materials, equipment and situations and proceed safely in order to minimize risk of injury to patients, self and nearby individuals; and function as a supportive member of the health care team, maintaining highest laboratory standards in delivery of patient care.

## **APPLICATION PROCEDURES AND DEADLINES**

Each year, the Department of Medical Technology selects a limited number of students from the applications received for admission to the program. The deadline for submitting completed applications is **May 15** for Fall 2006 (see page 8). A minimum grade point average of 2.50 is required in the science/math courses and the general education courses to be considered for admission to the program. See page 7 for further information on deadlines and procedures for admission. In the event the class is not filled by those applicants, the application deadline may be extended to as late as **August 1**. Complete applications include:

- 1. **Application for Admission:** The College of Health Related Professions Application for Admission is required. Please contact the department office or the CHRP Office of Student Affairs for information.
- 2. **Application Fee:** A non-refundable application fee of \$10.00 is required and **must** accompany the application.
- 3. **Official Transcripts:** Arrange for each college or university you have attended to forward an official transcript of your course work.
- 4. **Interview:** Qualified applicants are contacted to arrange an interview after receipt of application and all official transcripts.

## EARLY ACCEPTANCE

Early consideration will be given to those who have submitted complete applications (see required items below) by the early consideration deadline. For applicants to the fall semester, the early consideration deadline is March 1 (see page 8); applications must be received by May 15 to be assured of consideration for admission. In the event the class is not filled from those applicants, the application deadline may be extended to as late as August 1.

Transcripts "issued to the student" will not substitute for official transcripts forwarded directly to the College of Health Related Professions by the institution issuing the transcripts.

Arkansas residency will be considered during selection for admission.

Applicants are considered without regard to race, color, creed, age, marital status, national origin, or sex. Otherwise qualified individuals with disabilities receive equal consideration.

All documents should be submitted to: University of Arkansas for Medical Sciences, College of Health Related Professions, Office of Student Affairs, UAMS, # 619, 4301 West Markham Street, Little Rock, Arkansas 72205. Telephone: (501) 686-5730.

# PROFESSIONAL COURSE WORK IN MEDICAL TECHNOLOGY

## **Traditional Program:**

#### MET 3110—Laboratory Procedures

Laboratory sessions are designed to introduce basic laboratory techniques including but not limited to safety, phlebotomy, pipetting and the use of basic instruments as well as techniques for the analysis of urine, cerebrosphinal and other body fluids.

## MET 3212—Clinical Biochemistry

Introduction to clinical biochemistry. Emphasis on material relevant for clinical laboratory sciences. Topics include metabolism, carbohydrates, lipids, amino acids, proteins, and nucleic acids.

## MET 3213—Introduction to Medical Technology

Introduction to principles and techniques used in clinical and research laboratories. Emphasis on general laboratory topics including but not limited to laboratory mathematics, safe practices, basic instrumentation, quality assurance and quality control. Prerequisite: Admission to the professional program in medical technology.

## MET 4114—Parasitology and Virology

Pathogenic parasites and viruses are covered. Emphasis is on the identification of parasites and the clinical significance of viruses. Epidemiology is included as appropriate.

## MET 4116—Immunohematology Laboratory

Laboratory for Immunohematology 4316. Emphasis is on testing methods to assure the safe and effective transfusion of blood components. Includes techniques to manage maternal and neonatal blood incompatibilities.

#### MET 4117—Molecular Diagnostics Laboratory

Laboratory for Molecular Diagnostics 4217. Emphasis on basic molecular techniques such as DNA extraction and quantitation, restriction enzyme digestion, polymerase chain reaction and agarose gel electrophoresis.

#### MET 4134—Laboratory Medicine Seminar

Presentation of laboratory medicine topics by each student and attendance at laboratory seminars presented by others. Requires guided individual investigations.

## MET 4135—Laboratory Medicine Case Studies Seminar

Presentation of laboratory medicine case studies to correlate the student's didactic knowledge with the clinical experience.

#### MET 4138—Laboratory Management I

Focuses on knowledge and techniques needed to identify and resolve management problems in the laboratory. Students learn basic management concepts, how to manage diversity issues, development of educational objectives, and how to select a laboratory information system.

#### MET 4139—Laboratory Management II

This continuation of Laboratory Management I includes preparing and reviewing technical procedure manuals, conducting interviews, writing and reviewing résumés and cover letters, and becoming familiar with laboratory compliance, regulations, and codes of conduct.

## MET 4212—Hematology Laboratory

Laboratory for Hematology 4312. Emphasis on quantitative and qualitative techniques to evaluate the number, function and morphology of bood cells in bone marrow and peripheral blood. Includes testing methods to diagnose and monitor treatment for hematologic and hemostatic disorders.

## MET 4215—Clinical Microbiology Laboratory

Laboratory for the Clinical Microbiology course. Emphasis is on the laboratory procedures for isolating, culturing, and identifying microorganisms.

## MET 4217—Molecular Diagnostics

Explores the use of molecular techniques for the diagnosis of disease. Includes tests for genetic disorders (both inherited and acquired); infectious diseases, such as HIV and hepatitis C; tissue histocompatibility for organ transplants; and human identity testing.

## MET 4223—Body Fluids

Theory and techniques of analyzing urine, cerebrospinal, synovial, amniotic, and other body fluids. Correlates chemical, cellular, and micro-biological findings in normal and disease states.

#### MET 4311—Immunology

Introduction to the mechanisms of normal and abnormal immune response. Emphasis on laboratory diagnosis by agglutination, precipitation, immunofluorescence and enzyme immunoassay.

## MET 4312—Hematology

Normal and abnormal hematopoiesis and hemostasis. Emphasis on recognizing alterations correlating with diagnosis and treatment. Includes quantitation techniques and morphologic evaluation and function of blood cells in bone marrow and peripheral blood.

## MET 4315—Clinical Microbiology

Pathogenic microorganisms are covered. Emphasis is on isolation, cultivation, and identification. Fundamental microbiology, epidemiology and pathogenesis are also included as appropriate.

#### MET 4316—Immunohematology

Study of the immunochemical reactivity of blood antigens and antibodies, blood grouping, and compatibility testing. Includes basic problems relating to hemolytic disease of the newborn and component therapy.

#### MET 4514—Clinical Chemistry

Detection and quantitation of metabolic compounds of major clinical significance in the diagnosis and treatment of disease. Emphasis on principles of analysis and diagnostic significance on biological constituents.

#### MET 4531—Hematology/Coagulation Internship

Supervised clinical internship in the area of hematology/coagulation. Emphasis on manual and automated techniques and development of professional behavior. Includes diagnostic correlations, quality assurance, and management practices.

#### MET 4535—Microbiology Internship

Supervised practical experience in the microbiology laboratory. Emphasis on principles, procedures, and quality assurance. Includes management practices and development of professional behavior.

#### MET 4540—Chemistry/Urinalysis/Phlebotomy Internship

Supervised clinical internship in the areas of chemistry, urinalysis, and phlebotomy. Emphasis on automated techniques, quality control, diagnostic correlations, management practices, and development of professional behavior. Practical application of course work in the area of urinalysis. Emphasis on principles, procedures, and quality assurance.

#### MET 4541—Blood Bank/Immunology Internship

Supervised practical experience in the blood bank laboratory and immunology/serology. Emphasis on principles, procedures, and quality assurance. Includes management practices and development of professional behavior.

## **Baccalureate Second Degree Program:**

**MET 4224—Urinalysis/Immunology/Phlebotomy Internship** Supervised clinical internship in the areas of urinalysis, immunology, and phlebotomy. Emphasis on manual and automated techniques and development of professional behavior. Includes diagnostic correlations, quality assurance, and management practices.

#### MET 4226—Blood Bank Internship

Supervised practical application of course work and experience in the area of blood banking. Emphasis on principles, procedures, and quality assurance. Includes management practices and development of professional behavior.

#### MET 4600—Chemistry/Clinical Microbiology/Hematology-Coagulation Internship

Supervised practical application of course work and experience in the areas of chemistry, microbiology, and hematology. Emphasis on principles, procedures, automated techniques, quality control, diagnostic correlations, and quality assurance. Includes management practices and development of professional behavior.

## BIOTECHNOLOGY

A B.S. in biology with an emphasis in biotechnology at UALR is offered cooperatively between the Department of Laboratory Sciences at UAMS and the Department of Biology at UALR. The program is designed for students who wish to pursue a

research career in biotechnology at the bachelors level. The curriculum will prepare students for technical occupations in basic and applied biotechnology research.

## BIOTECHNOLOGY APPLICATION PROCEDURES AND DEADLINES

The following requirements are necessary for admission to the College of Health Related Professions. The Biotechnology Program is housed at the University of Arkansas at Little Rock (UALR), but you must apply to both campuses. Interested students are advised to consult the UALR Undergraduate Catalog or their Webpage at www.ualr.edu/~biology/biotech/biotech.html for additional admission requirements and application procedures and deadlines at UALR.

- 1. **Application for Admission:** The College of Health Related Professions Application for Admission is required. Please contact the department office or the CHRP Office of Students Affairs for information.
- 2. Letter of Good Standing: Arrange for each college or university you are attending to send a letter of good standing.

## PROFESSIONAL COURSE WORK IN BIOTECHNOLOGY

#### MET 3210—Laboratory Principles and Techniques

Introduction to principles and techniques used in clinical and research laboratories. Emphasis on laboratory mathematics, safe practices, and basic instrumentation. Prerequisite: Admission to the professional program in medical technology or molecular biotechnology.

#### MET 4117—Molecular Diagnostics Laboratory

Laboratory for Molecular Diagnostics. Prerequisites: Admission to the professional program in Biotechnology and UALR Biology 4417 and Biology 4418.

#### MET 4138—Laboratory Management I

Focuses on knowledge and techniques needed to identify and resolve management problems in the laboratory. Students learn basic management concepts, how to manage diversity issues, development of educational objectives, and how to select a laboratory information system. Prerequisites: Admission to the professional program in medical technology or biotechnology.

#### MET 4139—Laboratory Management II

This continuation of Laboratory Management I includes preparing and reviewing technical procedure manuals, conducting interviews, writing and reviewing resumes and cover letters, and becoming familiar with laboratory compliance, regulations and codes of conduct. Both management courses are independent study, Internet classes do not meet on a regular basis. Prerequisites: Admission to the professional program in medical technology or biotechnology.

#### MET 4217—Molecular Diagnostics

Explores the use of molecular techniques for the diagnosis of disease. Includes tests for genetic disorders (both inherited and acquired); infectious diseases, such as HIV and hepatitis C; tissue histocompatibility for organ transplants; and human identity testing. Two hours of lecture, three hours of laboratory per week. Prerequisites: Admission to the professional program in Biotechnology and UALR Biology 4417 and Biology 4418.

#### MET 4507—Biotechnology Laboratory Internship

Supervised experience in a biotechnology research laboratory. Emphasis on manual and automated techniques and development of professional behavior. Includes research principles and techniques, laboratory organization, and materials management. Prerequisite: Admission to the professional program in biotechnology at UALR and UALR BIOL 4417 and BIOL 4418.

## NUCLEAR MEDICINE IMAGING SCIENCES PROGRAM Department of Imaging and Radiation Sciences

The Nuclear Medicine Imaging Sciences Program is accredited by the Joint Review Committee on Educational Programs in Nuclear Medicine Technology.

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## THE PROFESSION

Nuclear medicine involves the use of radioactive tracers in studying a wide variety of normal and abnormal body functions and in treating certain diseases. A radiotracer, or radiopharmaceutical, is simply an element that emits radiation which, when administered to a patient, can be detected outside the body. Under the direction of a qualified physician, a nuclear medicine technologist prepares and administers radiopharmaceuticals, operates radiation detection equipment that measures the quantity or distribution of the radiopharmaceutical in the patient, and performs any calculations or computer analyses needed to complete the patient's examination.

The most common procedures include cardiac imaging in which the technologist analyzes the blood flow through the heart and creates computerized images of the beating heart to map damaged heart tissue. Bone scans are usually performed to evaluate the spread of cancer in the body, but might also be used to test for bone infections or stress fractures. The thyroid can be scanned to determine its size or for the presence of nodules. In addition, special techniques can be used to determine the amount of thyroid hormones in the patient's blood. These are just a few of the many types of procedures technologists will perform. Certified nuclear medicine technologists work primarily in the hospital setting or outpatient clinics.

In general, professionals in the nuclear medicine imaging sciences are "people persons." That is, they work well with others, including their co-workers, physicians, hospital employees, and especially with patients. Good technologists are concerned about patient welfare and demonstrate empathy toward others. Above all, they demonstrate the highest ethical behavior in dealings with others in the practice of their profession.

Technologists must demonstrate a high degree of motivation and be able to work independently. Because the practice of nuclear medicine requires patient cooperation, the technologist must be able to communicate effectively, speak clearly and be easily understood. Writing skills are also important, especially as the technologist gains more responsibility in the workplace.

Nuclear medicine technologists work closely with nuclear medicine physicians and other professionals in the field of medical imaging. Technologists with additional skills in radiography, magnetic resonance imaging, sonography, laboratory and cardiac procedures are excellent candidates for employment.

## THE PROGRAM

The College of Health Related Professions offers the Bachelor of Science degree in Nuclear Medicine Imaging Sciences. The nuclear medicine imaging sciences major will learn how to use radioactive tracers to diagnose and treat a wide variety of abnormal conditions. Nuclear medicine technologists receive their education in two parts: the preprofessional component which lasts three years and the professional component which lasts one year and is taken through UAMS beginning in the Fall semester.

The "classroom courses" are conducted via distance education, primarily through the Internet, by faculty at UAMS. Clinical education is conducted at a variety of clinical affiliates in Fayetteville, Jonesboro, Little Rock, Rogers, Springdale, and Texarkana, Arkansas; Shreveport and Baton Rouge, Louisiana; Dallas and Tyler, Texas; Springfield, Missouri; and Tulsa, Oklahoma. The number and location of clinical affiliates may change. Students from these areas are encouraged to apply for admission and if accepted will be able to complete the program from any of these locations that house active affiliates.

The clinical education locations in Arkansas include Arkansas Children's Hospital, Cardinal Health Nuclear Pharmacy Services (Jonesboro, Little Rock, and Springdale), Central Arkansas Cardiovascular Institute, Central Arkansas Veterans Healthcare System (CAVHS), Christus St. Michael Health System, Heart Clinic Arkansas, Highland Oncology Group, Northwest Medical Center of Washington County, Rebsamen Regional Medical Center, St. Bernards Medical Center, St. Joseph Regional Health Center, St. Mary's Hospital, St. Vincent Infirmary Medical Center, University Hospital of Arkansas, Wadley Regional Medical Center, and Washington Regional Medical Center.

The clinical education locations for Shreveport include Christus Schumpert Health Systems, LSU Health Sciences Center, Overton Brooks VA Medical Center, P.E.T. Imaging Center of the Biomedical Research Foundation, and Willis Knighton Medical Systems.

The clinical education locations for Dallas include Cardiology Consultants of Texas, Children's Medical Center, Mallinckrodt Radiopharmaceuticals, Medical Center of Lewisville, P.E.T.-Net Pharmaceutical Services, Presbyterian Hospital, St. Paul Medical Center, VA North Texas Healthcare System, and Zale Lipshy University Hospital.

The clinical education locations for Tyler include East Texas Medical Center, NuTech, Inc., Tyler Cardiovascular Consultants in Tyler, Trinity Mother Frances Regional Healthcare System, and the University of Texas Health Center at Tyler.

The clinical education locations for Springfield include Cardinal Health Nuclear Pharmacy Services (Springfield), Cox Medical Center North, Cox Medical Center South, Freeman Hospital (Joplin), Phelps County Medical Center (Rolla), Smith-Glynn-Calloway Clinic, and St. John's Regional Health Center.

The clinical education sites for Baton Rouge are the Baton Rouge General Medical Center, Cardinal Health Nuclear Pharmacy Services (Baton Rouge), North Oaks Medical Center (Hammond), Our Lady of the Lake Regional Medical Center, and Southeastern Cardiology Consultants.

The clinical education locations for Tulsa include Cardinal Health Nuclear Pharmacy Services (Tulsa), Saint Francis Hospital, and St. John Health System.

## **CERTIFICATION AND LICENSURE**

Graduation from the program in Nuclear Medicine Imaging Sciences satisfies academic eligibility to apply for certification examinations given by the Nuclear Medicine Technologists Certification Board (NMTCB) or the American Registry of Radiologic Technologists (ARRT). Successful completion of the program does not itself ensure certification or registration. Each student is responsible for familiarizing himself/herself with the applicable certification and registration requirements.

## PREPROFESSIONAL CURRICULUM

Persons admitted into the professional portion of the nuclear medicine imaging sciences program must have maintained a minimum GPA of 2.0, both cumulatively and in science and mathematics courses, and completed a minimum of 85 SC, at least six (6) of which are upper level (junior/senior). Beginning in the fall of 2007, persons admitted into the professional portion of the program must have maintained a minimum GPA of 2.5, both cumulatively and in science and mathematics courses, and completed a minimum of 85 SC, at least six (6) SC of which are upper level (junior/senior). These credits may be completed at any regionally accredited college or university, but must fulfill all College requirements regarding acceptance of transfer credit (see additional transfer requirements on page 12, item 3). The 47 SC listed below plus 38 SC of electives must be included<sup>1</sup>. In addition, advanced course work in the sciences, such as anatomy, physiology, chemistry, physics, mathematics, statistics, and computer science as well as social sciences, such as psychology, sociology, and health education are recommended. Radiologic technologists (radiographers), medical technologists, and nurses will have met most or all of the preprofessional requirements in their professional programs and are encouraged to apply.

| Area/Typical Course Title Se                          | Minimum<br>emester Credit |
|---|---------------------------|
| Human Anatomy and Physiology <sup>2</sup>             | 3                         |
| General Physics                                       | 4                         |
| General Chemistry                                     | 8                         |
| College Algebra                                       | $\frac{3}{18}$            |
| COMMUNICATIONS  | 10                        |
| Speech <sup>1</sup>                                   | 2                         |
|   |                           |
| LIBERAL ARTS<br>English Composition I                 | 3                         |
| English Composition II                                | 3                         |
| American History or National Government               |                           |
| History of Civilization or World History <sup>1</sup> | <u>6</u><br>15            |
|   | 15                        |
| FINE ARTS   |                           |
| Art, Music or Theatre Art <sup>1</sup>                | 3                         |
| HUMANITIES  |                           |
| Philosophy, Political Science, Literature, or H       | lumanities <sup>1</sup> 3 |
| SOCIAL SCIENCES                                       |                           |
| Psychology, Sociology, Anthropology, Geo              | ography,                  |
| or Economics <sup>1</sup>                             | 6                         |
| ELECTIVES <sup>1</sup>                                | <u>38</u>                 |
| TOTAL   | 85                        |

<sup>1</sup>Up to 9 SC of course work may be taken as co-requisites. Those applicants who have completed 85 SC or more of the preprofessional curriculum prior to enrollment will have priority in admission decisions.

<sup>2</sup>Students must successfully complete a human anatomy and physiology course that covers all body systems.

Fulfillment of the preprofessional curriculum does not assure admittance into the professional program (please see Application Procedures and Deadlines).

Students entering with a baccalaureate or higher degree from an accredited college or university must complete the following requirements for a CHRP bachelor's degree: (a) 32 SC in residence; (b) all program-specific mathematics and biological and physical science prerequisites; (c) all program-specific professional requirements; (d) if not completed as part of a previous degree program, a 3 SC college/university course in American history or national government, a 3 SC course in college algebra or higher level mathematics, and a 3 SC course in humanities.

Effective for students begining classes in the fall, 2008 semester, the 60 SC of specific course work listed below plus 25 SC of electives must be completed as prerequisites.<sup>1</sup>

|   | Minimum                    |
|---|----------------------------|
| Area/Typical Course Title   | Semester Credit            |
| Human Anatomy and Physiology <sup>2</sup>   | 8                          |
| General Chemistry I and II  | 8                          |
| General Physics I and II <sup>3</sup>   | 8                          |
| College Algebra   | 3                          |
| Biological Sciences or Microbiology <sup>4</sup>  | -                          |
|   | $\frac{4}{31}$             |
| COMMUNICATIONS  |                            |
| Speech or Oral Communications <sup>1</sup>  | 2                          |
| LIBERAL ARTS  |                            |
| English Composition I   | 3                          |
| English Composition II  | 3                          |
| American History or National Governm  |                            |
| History of Civilization or World History  |                            |
| , , ,   | <sup>1</sup> <u>6</u> 15   |
| FINE ARTS   |                            |
| Art, Music or Theatre Art <sup>1</sup>  | 3                          |
| HUMANITIES  |                            |
| Philosophy, Political Science, Literature, or H   | -lumanities <sup>1</sup> 3 |
|   |                            |
| SOCIAL SCIENCES<br>Psychology, Sociology, Anthropology, G   | Coography                  |
| or Economics <sup>1</sup>   | Geography,                 |
| of economics.   | $\frac{6}{60}$             |
| ELECTIVES <sup>1</sup>  |                            |
| TOTAL   | <u>25</u><br><b>85</b>     |
| <sup>1</sup> Up to 9 SC of course work indicated may<br>requisites. Those applicants who have complete<br>of the preprofessional curriculum prior to enro<br>priority in admission decisions. | ed 85 SC or more           |

 $^2\mbox{Course}$  work must cover all body systems and include laboratory credit.

 $^{3}\mbox{Course}$  work must require a minimum of college algebra and include laboratory credit.

<sup>4</sup>Biology courses taken as prerequisites to the human anatomy and physiology courses will satisfy this requirement.

Effective for students begining classes in the fall, 2009 semester, the 66 SC of specific course work listed below plus 19 SC of electives must be completed as prerequisites.<sup>1</sup>

| To be of electives must be completed as prefequisites.  |                        |
|---|------------------------|
| Minir<br>Area/Typical Course Title Semester C<br>SCIENCE  | -                      |
| Human Anatomy and Physiology <sup>2</sup>   | 8                      |
| General Chemistry I and II <sup>3</sup>   | 8                      |
| General Physics I and II <sup>4</sup>   | 8                      |
| College Algebra   | 3                      |
| Biological Sciences or Microbiology <sup>5</sup>  | 4                      |
| Statistics  | $\frac{3}{34}$         |
| COMMUNICATIONS  | 54                     |
| Speech or Oral Communications <sup>1</sup>  | 2                      |
| specer of oral communications   | 2                      |
| LIBERAL ARTS  | _                      |
| English Composition I   | 3                      |
| English Composition II  | 3<br>3                 |
| American History or National Government <sup>1</sup><br>History of Civilization or World History <sup>1</sup>   |                        |
| Thistory of Civilization of World Thistory.   | $\frac{6}{15}$         |
| FINE ARTS   | 15                     |
| Art, Music or Theatre Art <sup>1</sup>  | 3                      |
|   |                        |
| HUMANITIES<br>Philosophy, Political Science, Literature, or Humanities <sup>1</sup>   | 3                      |
| <b>SOCIAL SCIENCES</b><br>Psychology, Sociology, Anthropology, Geography,<br>or Economics <sup>1</sup>  | 6                      |
| COMPUTER SCIENCE  |                        |
| Computer fundamentals/Applications  | 3                      |
|   | $\frac{3}{66}$         |
| ELECTIVES <sup>1</sup><br>TOTAL   | <u>19</u><br><b>85</b> |
| <sup>1</sup> Up to 9 SC of course work indicated may be taken as co<br>requisites. Those applicants who have completed 85 SC or more<br>of the preprofessional curriculum prior to enrollment will have | e                      |
| priority in admission decisions.  |                        |
| <sup>2</sup> Course work must cover all body systems and include laboratory credit.   | /                      |
| <sup>3</sup> Course work should be suitable for majors in chemistry and include laboratory credit.  | ł                      |
| <sup>4</sup> Course work must require a minimum of college algebra and include laboratory credit.   | ł                      |
| <sup>5</sup> Biology courses taken as prerequisites to the human anatomy and physiology courses will satisfy this requirement.  | ł                      |

## PROFESSIONAL CURRICULUM

The following 39 SC are required in the professional program.

|                                 | •   | 0  |
|---------------------------------|---|--|
| Title S                         | emester   | Credit   |
|                                 |   |  |
| Introduction to Nuclear Medicin | ne  | 2  |
| Clinical Procedures and Diagno  | osis I  | 3  |
| Nuclear Physics                 |   | 2  |
| Instrumentation I               |   | 2  |
| Radiopharmacy I                 |   | 1  |
| Clinical Internship I           |   | 5  |
| Seminar I                       |   | 1  |
| Journal Review and Research N   | 1ethods   | _1   |
|                                 |   | 17   |
|                                 |   |  |
| Health Physics                  |   | 2  |
| Clinical Procedures and Diagno  | osis II   | 3  |
| Instrumentation II              |   | 2  |
| Radiation Biology               |   | 2  |
| Seminar II                      |   | 1  |
| Clinical Internship II          |   | 5  |
| Radiopharmacy II                |   | 1  |
|                                 |   | 16   |
|                                 |   |  |
| Clinical Internship III         |   | _6   |
| -                               |   | 39   |
|                                 | Introduction to Nuclear Medicia<br>Clinical Procedures and Diagno<br>Nuclear Physics<br>Instrumentation I<br>Radiopharmacy I<br>Clinical Internship I<br>Seminar I<br>Journal Review and Research <i>N</i><br>Health Physics<br>Clinical Procedures and Diagno<br>Instrumentation II<br>Radiation Biology<br>Seminar II<br>Clinical Internship II<br>Radiopharmacy II | Introduction to Nuclear Medicine<br>Clinical Procedures and Diagnosis I<br>Nuclear Physics<br>Instrumentation I<br>Radiopharmacy I<br>Clinical Internship I<br>Seminar I<br>Journal Review and Research Methods<br>Health Physics<br>Clinical Procedures and Diagnosis II<br>Instrumentation II<br>Radiation Biology<br>Seminar II<br>Clinical Internship II<br>Radiopharmacy II |

A grade of "D" or "F" or a mark of "U" or "NC" in a professional course is not acceptable for progression to the next semester, nor is it acceptable for graduation if it occurs in the last semester of the program.

## APPLICATION PROCEDURES AND DEADLINES

Class size is limited and all applicants may not be selected for participation in the program. The professional component of the major is demanding and rigorous, and applicants are encouraged to visit a nuclear medicine department and talk with technologists and the division director to learn what would be expected of them as students. **First consideration** will be given those who have submitted complete applications (see the required items below) by the deadline that is **March 1**. Applications after that date will be considered only if the class has not been filled. See page 7 for further information on deadlines and procedures for admission. Applicants must provide:

- 1. **Application for Admission:** The College of Health Related Professions Application for Admission is required. Please contact the department office or the CHRP Office of Student Affairs for information.
- 2. **Application Fee:** A non-refundable application fee of \$10.00 is required and must accompany the application.
- 3. **Official Transcripts:** Arrange for each college or university you have attended to forward an official transcript of your course work.
- 4. **References:** Three reference forms are required. The forms will be mailed to individuals upon receipt of the application for admission.

- 5. TOEFL scores, if applicable.
- 6. **Interview:** Qualified applicants will be contacted to arrange an interview after receipt of application and transcripts.

Transcripts "issued to the student" will not substitute for official transcripts forwarded directly to the College of Health Related Professions by the institution issuing the transcripts.

Arkansas residency will be considered during selection for admission for the Arkansas-based program.

Applicants are considered without regard to race, color, creed, age, marital status, national origin, or sex. Otherwise qualified individuals with disabilities receive equal consideration.

All documents should be submitted to: University of Arkansas for Medical Sciences, College of Health Related Professions, Office of Student Affairs, UAMS, # 619, 4301 West Markham Street, Little Rock, Arkansas 72205. Telephone: (501) 686-5730.

## **PROFESSIONAL COURSE WORK**

#### NMIS 4115—Radiopharmacy I

Radiopharmaceutical preparation for diagnostic use to include quality control. Chemical, physical, and biological properties of radiopharmaceuticals will be examined.

#### NMIS 4116-Journal Review and Research Methods

Critical evaluation of medical scientific literature to include statistical evaluation methods and presentation techniques.

#### NMIS 4125—Radiopharmacy II

Radiopharmaceutical preparation for diagnostic use, to include quality control. Chemical, physical, and biological properties of radiopharmaceuticals will be examined. Prerequisite: NMIS 4115.

#### NMIS 4211—Introduction to Nuclear Medicine

Survey course for all phases of nuclear medicine technology.

#### NMIS 4213—Nuclear Physics

Presents concepts and physical properties governing the atom to include systems and units of measurement, atomic and nuclear structure, particulate and electromagnetic radiation.

#### NMIS 4214—Instrumentation I

Operational principles of radiation detection equipment to include statistical applications and quality control.

#### NMIS 4221—Health Physics

Legal, biological, and administrative aspects of radiation protection in nuclear medicine. Emphasis on practical means of minimizing radiation exposure to the patient, nuclear medicine staff, and the general public. Prerequisite: NMIS 4213.

#### NMIS 4223—Instrumentation II

Advanced application of radiation detection theory and instrumentation. Prerequisite: NMIS 4214.

### NMIS 4224—Radiation Biology

A study of the interactions of ionizing radiation with human tissues and the potential biological effects resulting from such interactions.

#### NMIS 4312—Clinical Procedures and Diagnosis I

Current uses of radiopharmaceuticals for organ visualization and function with evaluation of results for diagnostic value. Emphasis placed on in vivo procedures.

#### NMIS 4322—Clinical Procedures and Diagnosis II

Continued study of application of radiopharmaceuticals for diagnostic use. In vitro and therapeutic procedures are introduced. Prerequisite: NMIS 4312.

#### NMIS 4517—Clinical Internship I\*

Practical application of course work presented in the classroom. Students are assigned educational experiences in clinical imaging, radioimmunoassay, and radiopharmaceutical preparation.

#### NMIS 4524—Clinical Internship II\*

Continuation of clinical course work at the intermediate level. Prerequisite: NMIS 4517.

#### NMIS 4631—Clinical Internship III\*

Continuation of clinical course work at the advanced level. Prerequisite: NMIS 4524.

\*This course is offered on a satisfactory/unsatisfactory marking basis.

## **ELECTIVE COURSE WORK**

#### NMIS 4302—Interdisciplinary Diagnostic Cardiac Imaging

This course provides the student with an understanding of the major modalities for the diagnostic imaging of the human heart. Included are overviews of the methods, effectiveness, advantages and disadvantages of echocardiography, nuclear medicine, magnetic resonance, computerized tomography, and cardiac catheterization for the diagnosis of heart disease.

#### NMIS 4303—Clinical Pharmacology

A study of pharmacodynamics, medication administration, drug categories, and implications in patient care. Emphasizes pharmaceuticals frequently used in medical imaging.

#### NMIS 4341—CT Physics and Instrumentation

An Internet course presenting a study of the basic principles of x-ray physics, production, and interactions; instrumentation of computed tomography, computed tomographic image formation, manipulation, and quality assurance; and radiation dose and safety concerns.

# **OPHTHALMIC MEDICAL TECHNOLOGY PROGRAM Ophthalmic Technologies Department**

The Ophthalmic Medical Technology Program is accredited by the Committee on Accreditation for Ophthalmic Medical Personnel (CoA-OMP).

Christopher Westfall, M.D.; Chairman and Professor Department of Ophthalmic Technologies University of Arkansas for Medical Sciences College of Health Related Professions, UAMS #619 4301 West Markham Street, Little Rock, Arkansas 72205 Telephone: (501) 526-5880 E-mail: OMT@uams.edu Web site: http://www.uams.edu/chrp/omt

Faculty: S. Brummett, R. Davis, K. Fray, S. Hansen, S. Staples, M. Wiggins Medical Director: C. Westfall

## THE PROFESSION

Ophthalmic medical technologists are highly skilled professionals who perform a wide range of delegable tasks and patient care activities in ophthalmology. Modern ophthalmic practice relies upon an array of specialized diagnostic procedures to assess visual function, and ophthalmic medical technologists are proficient at maximizing the quality of data they produce.

Ophthalmic medical technologists have a thorough understanding of the anatomy and physiology of the human visual system. They can take visual and medical histories, measure the eye's optical system and calculate basic corrections for deficiencies of near- or far-sightedness, use ultrasound for measurements and diagnosis, create ophthalmic photographs to document lesions of the retina and cornea, assist in ophthalmic surgery, assess abnormalities of color vision and measure function of the eye muscles.

Because many ophthalmic patients suffer great stress at the prospect of catastrophic eye disease and possible blindness, ophthalmic medical technologists must have a caring demeanor along with strong communication skills.

There are many opportunities available for ophthalmic medical technologists in private offices, group practices and in academic departments of ophthalmology. Because technologists are the most highly skilled technical personnel in the field, many assume supervisory roles and teach other members of the allied health team.

## THE PROGRAM

**Ophthalmic Medical Technology:** The program is divided into the preprofessional curriculum and the professional curriculum and requires 124 SC to complete. The preprofessional portion includes a minimum of 55 SC, which students must complete prior to enrollment in the professional component. These credits must include the following science courses: 6 SC of college anatomy and physiology covering all the body systems; 4 SC microbiology; 6 SC biology electives; 4 SC physics; 3 SC chemistry; 3 SC college algebra (or higher level mathematics). These general education courses must also be included: 6 SC English composition, 6 SC history of civilization or world history, 3 SC American history, 6 SC social science, 2 SC speech communication, 3 SC fine arts and 3 SC humanities. Students may complete the preprofessional curriculum at any regionally accredited college or university.

Students accepted into the professional component begin their course of study in August. A full-time track is offered which requires four (4) semesters and two (2) summers (two years) to complete.

The professional curriculum at UAMS requires 69 SC of upper level courses. Upon completion of these requirements, students will be awarded a Bachelor of Science in Ophthalmic Medical Technology. For further information call the Office of Student Affairs at (501) 686-5730.

The program receives significant support from the Harvey and Bernice Jones Eye Institute, the Department of Veterans Affairs, and Arkansas Children's Hospital (ACH). Each facility provides clinical internship experiences for students.

## CERTIFICATION AND LICENSURE

Successful completion of professional course work in the Ophthalmic Medical Technology program satisfies academic eligibility to apply for certification examinations given by national agencies in the field of ophthalmic medical technology. Successful completion of the program does not itself ensure certification. The granting of the B.S. degree is not contingent upon the student's performance on any external certification examination. Each student is responsible for becoming familiar with the applicable certification requirements.

## PREPROFESSIONAL CURRICULUM

A minimum of 55 SC is required from a regionally accredited college or university and must fulfill all College requirements regarding the acceptance of transfer credit. Students must complete 55 SC, including all of the science and mathematics requirements, prior to enrollment in the professional program.

|                                       | Minimum         |
|---------------------------------------|-----------------|
| Area/Typical Course Title             | Semester Credit |
| GENERAL EDUCATION REQUIREMENTS        |                 |
| English Composition                   | 6               |
| History of Civilization/World History | 6               |
| American History or National Governme | nt 3            |
| Social Science <sup>1</sup>           | 6               |
| Speech Communication                  | 2               |
| Fine Arts                             | 3               |
| Humanities                            | _3              |
|                                       | 29              |

#### SCIENCE AND MATHEMATICS REQUIREMENTS

| Biological/Health Science: <sup>2</sup>       |    |
|---|----|
| Biology Electives                             | 6  |
| Anatomy & Physiology (or Physiology)          | 6  |
| Microbiology                                  | 4  |
| Chemistry                                     | 3  |
| Physics                                       | 4  |
| College Algebra (or higher level mathematics) | _3 |
|   | 26 |

#### TOTAL

<sup>1</sup>To include 3 SC of general psychology.

<sup>2</sup>To include at least one upper-level biological sciences course and not more than 4 SC of botany.

Biology/Health Science courses must be suitable for majors in those disciplines and must include laboratory credit in required courses. Other courses may fulfill the program's requirements. Contact the department for course approval. If completed seven or more years prior to application, knowledge should be updated by taking appropriate current courses in Microbiology. CLEP credits are not acceptable to fulfill biological science requirements.

Arkansas residency will be considered during selection for admission.

Marks of Pass/Credit will be considered grades of C and marks of Fail/No Credit will be considered grades of F for admission purposes.

Fulfillment of the preprofessional curriculum does not assure admittance into the professional program (please see Application Procedures and Deadlines).

Students entering with a baccalaureate or higher degree from an accredited college or university must complete the following requirements for a CHRP bachelor's degree: (a) 32 SC in residence; (b) all program-specific mathematics and biological and physical science prerequisites; (c) all program-specific professional requirements; (d) if not completed as part of a previous degree program, a 3 SC college/university course in American history or national government, a 3 SC course in college algebra or higher level mathematics, and a 3 SC course in humanities.

## **PROFESSIONAL CURRICULUM**

The following 69 SC are required in the professional program:

| Course # | Title Semester Cre                      | dit |
|----------|---|-----|
| Fall (1) |   |     |
| OPH 3201 | General Medical Knowledge & Terminology | 2   |
| OPH 3202 | Introduction to Ophthalmic Technology,  |     |
|          | Medical Law, & Ethics                   | 2   |
| OPH 3203 | Ocular Anatomy & Physiology             | 2   |
| OPH 3204 | Physical & Geometric Optics             | 2   |
| OPH 3101 | Clinical Skills Laboratory I            | 1   |
| OPH 3510 | Clinical Practicum I                    | _5  |
|          |   | 14  |

#### Spring (2)

| Spring (2) |                                      |                |
|------------|--------------------------------------|----------------|
| OPH 3105   | Clinical Skills Laboratory II        | 1              |
| OPH 3206   | Physiologic Optics                   | 2              |
| OPH 3207   | Contact Lenses/Opticianry            | 2              |
| OPH 3208   | Ophthalmic Pharmacology              | 2              |
| OPH 3209   | Ocular Motility I                    | 2              |
| OPH 3611   | Clinical Practicum II                | <u>6</u><br>15 |
|            |                                      | 15             |
| Summer (3) |                                      |                |
| OPH 3106   | Clinical Skills Laboratory III       | 1              |
| OPH 3412   | Clinical Practicum III               | $\frac{4}{5}$  |
|            |                                      | 5              |
| Fall (4)   |                                      |                |
| OPH 4201   | Ocular Motility II: Abnormalities of |                |
|            | Binocular Vision                     | 2              |
| OPH 4202   | Survey of Eye Diseases               | 2<br>3         |
| OPH 4303   | Special Testing                      |                |
| OPH 4204   | Ophthalmic Photography & Angiography | 2              |
| OPH 4205   | Ocular Emergencies & Oculoplastics   | 2              |
| OPH 4101   | Clinical Skills Laboratory IV        | 1              |
| OPH 4510   | Clinical Practicum IV                | $\frac{5}{17}$ |
| <b>.</b>   |                                      | 17             |
| Spring (5) |                                      |                |
| OPH 4306   | Special Topics                       | 3              |
| OPH 4207   | Advanced Concepts in Ophthalmology   | 2              |
| OPH 4108   | CPR                                  | 1              |
| OPH 4309   | Ophthalmic Surgical Assisting        | 3              |
| OPH 4511   | Clinical Practicum V                 | $\frac{5}{14}$ |
| Summon (C) |                                      | 14             |
| Summer (6) | Clinical Practicum VI                | 1              |
| OPH 4412   |                                      | 4              |
| TOTAL      |                                      | $\frac{4}{60}$ |

#### TOTAL

55

A grade of "F" or a mark of "U" or "NC" is not acceptable for progression to the next semester, nor is it acceptable for graduation if it occurs in the last semester of the program. A grade of "D" in the following professional courses is not acceptable for progression to the next semester, nor is it acceptable for graduation if it occurs in the last semester of the program: Clinical Practicum II (OPH 3611), Clinical Practicum III (OPH 3412), Clinical Practicum IV (OPH 4510), Clinical Practicum V (OPH 4511), and Clinical Practicum VI (OPH 4412). A first semester student who passes all courses but achieves a CGPA of less than 2.0 will be allowed to progress on probation to the second semester if he/she has achieved a CGPA of at least 1.8 in the professional courses. A student in subsequent semesters must maintain a GPA of not less than 2.0 for all courses taken since entering the program.

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## APPLICATION PROCEDURES AND DEADLINES

Each year, the Department of Ophthalmic Technologies selects a limited number of students from the applications received for admission to the program. The deadline for submitting completed applications is **May 15**. A minimum grade point average of at least 2.25 is required in the prerequisite science and mathematics courses and the general education courses to be considered for admission to the program. See page 7 for further information on deadlines and procedures for admission.

Early consideration will be given to those who have submitted complete applications (see required items below) by the early consideration deadline. For applicants to the Fall semester, the early consideration deadline is April 15 (see page 8); applications must be received by May 15 to be assured of consideration for admission. In the event the class is not filled from those applicants, the application deadline may be extended to as late August 1.

Complete applications include:

- 1. **Application for Admission:** The College of Health Related Professions Application for Admission is required. Please contact the department office or the CHRP Office of Student Affairs for information.
- 2. **Application Fee:** A non-refundable application fee of \$10.00 is required and must accompany the application.
- 3. **Official Transcripts:** Arrange for each college or university you have attended to forward an official transcript of your course work.
- 4. **Professional Observation:** Applicants are required to demonstrate an understanding of the responsibilities and duties of the profession through observation and discussion with a practicing professional in the field. Contact the department for details.
- 5. **Interview:** Qualified applicants are contacted to arrange an interview after receipt of application and all official transcripts.

Transcripts "issued to the student" will not substitute for official transcripts forwarded directly to the College of Health Related Professions by the institution issuing the transcripts.

Arkansas residency will be considered during selection for admission.

Applicants are considered without regard to race, color, creed, age, marital status, national origin, or sex. Otherwise qualified individuals with disabilities receive equal consideration.

All documents should be submitted to: University of Arkansas for Medical Sciences, College of Health Related Professions, Office of Student Affairs, UAMS, #619, 4301 West Markham Street, Little Rock, Arkansas 72205. Telephone: (501) 686-5730.

## **PROFESSIONAL COURSE WORK**

#### OPH 3101-Clinical Skills Lab I

Focus on ophthalmic exam protocol; subsequent clinical skills lab courses are aimed at developing ophthalmic clinical skills in a logical progression with increasing levels of complexity.

#### OPH 3105—Clinical Skills Lab II

This course will familiarize students with various ophthalmic equipment and testing protocols emphasizing concepts underlying construction of equipment; proper usage of the equipment, focus on lensmeter, tonometry, retinoscopy, and refractometry concepts and skills.

#### **OPH 3106—Clinical Skills Laboratory III**

Continuation of previous clinical laboratory course in order to develop and enhance clinical skills focusing on the areas of advanced refractometry techniques, advanced retinoscopy techniques, and basic Goldmann perimetry.

#### **OPH 3201—General Medical Knowledge & Terminology**

Provides the student instruction in basic medical terminology, a general overview of human anatomy and physiology, and systemic illnesses.

#### **OPH 3202—Introduction to Ophthalmic Technology, Medical Law, and Ethics**

Introduces the student to ophthalmic technology, including the role of the ophthalmic technologist, duties and responsibilities of the technologist, basic ocular examination techniques, measurement of visual acuities, basic lensometry, identification and usage of ophthalmic equipment, maintenance of ophthalmic examination lanes and special testing areas, and ethics: medical-legal aspects of ophthalmology.

#### OPH 3203—Ocular Anatomy & Physiology

Provides the student a detailed knowledge of the normal anatomy and physiology of the eye and orbit.

### **OPH 3204—Physical & Geometric Optics**

Introduces principles of physical and geometric optics. Students use ray tracing to examine refraction, reflection, diffraction, dispersion, vergence, lenses and mirrors. Discusses object-image relationships, magnification, and graphical analysis of lenses. Introduces sphere and spherocylinder lenses, optical crosses and astigmatism.

#### **OPH 3206—Physiologic Optics**

Examines the human eye as an optical system by discussing physiology of image formation, and factors affecting vision. Students will participate in "hand-on" activities to apply these optical principles when possible.

#### **OPH 3207—Contact Lenses/Opticianry**

Familiarizes the student with contact lenses including types, fitting procedures, care and storage procedures, indications for use, complications and patient instruction, spectacle dispensing, ordering, and verification.

#### **OPH 3208—Ophthalmic Pharmacology**

Detailed exploration of the various ophthalmic pharmaceuticals, indications for their use, sites of action, side effects, proper instillation of agents, and various abbreviations used for medications and their schedules.

#### **OPH 3209—Ocular Motility I**

Acquaints the student with normal and abnormal binocular vision, including evaluation of motor and sensory status.

#### OPH 3412—Clinical Practicum III

Continues to develop clinical skills and build on previous clinical courses. The student will begin to gain more specialized skills. New skills will be demonstrated and supervised by one or more members of the faculty. Clinical applications and classroom portions of the course will coincide where possible. Return demonstrations will be required at various times during this course.

#### **OPH 3510—Clinical Practicum I**

Introduction to procedures for care of ophthalmology patients. Students observe techniques in various specialty clinics performed by a faculty member. Many procedures will be observed, but emphasis will be on basic skills needed to begin patient examination. When possible, clinical applications will coincide with the classroom portions of the course. Students will be introduced to appropriate equipment and instruments for patient examination, assigned examination rooms to maintain, taught basic procedures for information gathering in an examination, and become contributing members of the health care team.

#### **OPH 3611—Clinical Practicum II**

Continuation of Clinical Rotation I, with further instruction in patient care and examination techniques. The course will build on the newly acquired basic skills as well as introduce new skills to be learned. More specific examination techniques will be observed, discussed, and return demonstrations given for these more advanced tasks. Students will begin to greet patients and start examinations. Clinical applications will reflect, where possible, the classroom portions of the course.

#### **OPH 4101—Clinical Skills Laboratory IV**

Continue to develop clinical skills including familiarizing the student with advanced protocols required for performing the following ophthalmic tests and procedures: advanced tonometry, ophthalmic photography and angiography, advanced Goldmann perimetry.

#### OPH 4108-CPR

Teaches student cardiopulmonary resuscitation for certification by the American Red Cross.

#### **OPH 4201—Ocular Motility II: Abnormalities of Binocular** Vision

Continuation of Motility I, and acquaints the student with advanced motility problems. The diagnosis and treatment of amblyopia are also studied.

#### **OPH 4202—Survey of Eye Diseases**

Familiarizes the student with pathophysiological conditions of the globe and orbital region, encompassing both the more common conditions as well as some of the more unusual diseases.

#### **OPH 4204—Ophthalmic Photography & Angiography**

Familiarizes the student with the more common forms of ophthalmic photography, and includes lectures and handson training in fluorescein angiography, fundus and external photography, and slit-lamp biomicrography.

#### **OPH 4205—Ocular Emergencies & Oculoplastics**

Familiarizes students with varying degrees of ocular emergencies, triage of patients, immediate interventions, long-term complications, and preventative measures. Familiarizes the student with various aspects of oculoplastics including surgical interventions.

#### **OPH 4207—Advanced Concepts in Ophthalmology**

This course will use journals and ophthalmic literature to introduce students to on-going research in clinical and surgical ophthalmology, and re-introduce important ophthalmic concepts to enable the student to become more effective in assisting ophthalmologists deliver eye care to patients.

#### **OPH 4303—Special Testing**

Familiarizes the student with special testing procedures not normally accomplished during routine ophthalmic examinations.

#### **OPH 4306—Special Topics**

Introduces student to concepts of billing and coding, and management and supervision of allied health personnel. Additional topics may be added as new techniques, protocols, and treatments emerge.

#### **OPH 4309—Ophthalmic Surgical Assisting**

Prepares the student to serve as a sterile scrub assistant, sterile first assistant, and circulator for the more common ophthalmic surgical procedures. Students will also learn about various ophthalmic surgical procedures.

#### OPH 4412—Clinical Practicum VI

The final course in patient care experiences. Students are expected to act as full members of the health care team in all clinical areas. Students will use this semester to advance their skills across the discipline.

#### **OPH 4510—Clinical Practicum IV**

Continuation of previous clinical experiences completed in the junior year. Students will begin to develop autonomy in patient care, and basic skills will become more advanced. New tasks will be demonstrated first by a member of the faculty, followed by student performance. When possible, classroom portions will coincide with clinical experiences in this course.

#### **OPH 4511—Clinical Practicum V**

Continuation of previous clinical experiences in patient care. The student will be required to perform at a high level of competence in all phases of ophthalmic technology. Classroom instruction will decrease, as most of this material will already have been presented. Emphasis will be placed on advanced supervision techniques, specialized testing techniques, and autonomy.

## RADIATION THERAPY PROGRAM Department of Imaging and Radiation Sciences

The Radiation Therapy Program is accredited by the Joint Review Committee on Education in Radiologic Technology (JRCERT). This program is jointly sponsored by Central Arkansas Radiation Therapy Institute (CARTI) and The College of Health Related Professions at the University of Arkansas for Medical Sciences (UAMS-CHRP)

Debra G. Tomlinson, M.A., R.T.(R)(T)(ARRT); Division Director and Assistant Professor

Division of Radiation Therapy Department of Imaging and Radiation Sciences University of Arkansas for Medical Sciences College of Health Related Professions, and CARTI P.O. Box 55050, Little Rock, Arkansas 72215 CARTI Telephone: (501) 660-7623 FAX: (501) 663-1746 E-mail: dtomlinson@carti.com Web site: http://www.uams.edu/chrp/radiationtherapy/

**Faculty:** L. Berkley, P. Bruce, D. Campbell, R. Garner, J. Grant, A. Ivy, S. Randolph, T. Smith, D. Tanner, D. Tomlinson, L. Wingfield, S. Yakoubian **Clinical Faculty:** D. Hutslar, S. Kimball, D. Martin, G. Randolph, G. Spencer **Medical Director:** C. Pope

Rebecca L. Ludwig, Ph.D., R.T.(R)(QM)(ARRT); Interim Chairman, Department of Imaging and Radiation Sciences

The mission of the Radiation Therapy Program is to provide an educational atmosphere of distinction for the development of exceptional radiation therapists who are competent, compassionate, and professional.

## THE PROFESSION

The profession combines technical knowledge and expertise in cancer treatment with direct patient contact. The radiation therapist performs or assists in all aspects of radiation therapy treatment delivery and documentation. Following the prescription of a radiation oncologist, the therapist uses sophisticated equipment to deliver high-energy ionizing radiation to a localized target volume within the patient. Using the latest technology and treatment procedures, the therapist manipulates the linear accelerator while utilizing centering lasers to localize the treatment volume. Once the treatment area is defined and aligned appropriately on the machine, the therapist selects the proper settings on the control panel to deliver a specified amount of radiation (in monitor units) to each treatment field. The therapist is responsible for accurate calculation and documentation of all treatment parameters. Working closely with cancer patients and their families, the therapist provides technical support to the physician and physicist to ensure high quality, compassionate care for oncology patients. Employment opportunities are available statewide, regionally, and nationally in radiation therapy departments and freestanding outpatient clinics.

## THE PROGRAMS

The Department of Imaging and Radiation Sciences offers a Bachelor of Science degree in Radiation Therapy through a program of study jointly sponsored by Central Arkansas Radiation Therapy Institute (CARTI) and the University of Arkansas for Medical Sciences (UAMS), College of Health Related Professions. Aspects of the program include study in oncology, pathology, patient care, psychology, radiobiology, radiation physics, radiation protection and safety, treatment planning, and technical radiation therapy. In addition, the program is supported by clinical education involving rotations on tumor localization and simulation equipment, multiple high energy therapy machines (linear accelerators), and dosimetry treatment planning devices.

Prerequisites include successful completion of 42 SC of specified general education course work **and** successful completion of a radiologic technology program accredited by the Joint Review Committee on Education in Radiologic Technology (JRCERT) with a minimum accumlative GPA of 3.0.

The CARTI/UAMS program provides 46 SC of professional hours in radiation therapy taken mostly at a CARTI facility located in the central Arkansas area. The curriculum consists of classes and clinical rotations held Monday through Friday each week for 12 consecutive months beginning each August. Students are expected to be full-time while enrolled in the program. The CARTI/UAMS program is fully accredited by the JRCERT as a radiation therapy educational provider.

## **CERTIFICATION AND LICENSURE**

Graduation from the program in radiation therapy satisfies academic eligibility to take the national certifying examination in radiation therapy given by the American Registry of Radiologic Technologists (ARRT). Candidates who pass this examination become Registered Radiation Therapists [R.T.(T.)(A.R.R.T.)]. Successful completion of the program does not itself insure registration. Each student is responsible for familiarizing himself/herself with the applicable registration requirements.

## FINANCIAL ASSISTANCE

In addition to the general financial aid opportunities previously described in the Financial Information section of this catalog, the department can provide information on program-specific financial assistance. Contact the division director for further information regarding the following source of aid, which may be available to qualified radiation therapy students.

H.O. McKenzie Scholarship: This fund was established in 1987 with a contribution to CARTI by Mr. McKenzie for the education of radiation therapy students. Program officials determined that the funds should be used as a tuition assistance scholarship. This scholarship is awarded after completion of six months of course work in the program. A Committee, comprised of the Medical Director, Division Director, and Student Clinical Coordinator will evaluate the scholarship applicants using a numerical system based on both program clinical and classroom course grades, absenteeism, financial need, personal leadership, and willingness to be employed by CARTI if offered a position. The categories will be weighed according to areas of importance. Application and evaluation forms for the scholarship can be obtained from the Division Director/Student Clinical Coordinator.

## PREPROFESSIONAL CURRICULUM

The following 42 SC are required from a regionally accredited college or university and must fulfill all College requirements regarding acceptance of transfer credit:

|   | Minimum         |
|---|-----------------|
| Area/Typical Course Title                 | Semester Credit |
| SCIENCE AND MATH                          |                 |
| PreCalculus (or College Algebra and Trig  | onometry) 3     |
| Anatomy and Physiology*                   | 4               |
| General Physics                           | _3              |
| General Thysics                           | _ <u></u><br>10 |
|   | 10              |
| LIBERAL ARTS                              | 2               |
| English Composition I                     | 3               |
| English Composition II                    | 3               |
| American History or National Governme     |                 |
|   | 9               |
| SOCIAL SCIENCES                           |                 |
| Psychology                                | 3               |
| Sociology**                               | 3               |
|   | 6               |
| COMMUNICATIONS                            |                 |
| Speech or Oral Communication              | 2               |
| COMPUTER SCIENCE                          |                 |
| Computer Fundamentals/Applications        | 3               |
|   | 3               |
| ADDITIONAL HOURS                          |                 |
| Fine Arts**                               | 3               |
| History of Civilization or World History* | ** 6            |
| Humanities**                              | 3               |
|   | 12              |
| TOTAL                                     | 42              |
|   |                 |

To be considered for acceptance into the program, the applicant must have earned a CGPA of 2.0 or higher at the time of application. In addition, only grades of "C" or higher are accepted in prerequisite course work.

\*Anatomy and physiology courses must cover all body systems and include accompanying laboratory sections.

\*\*These courses do not have to be completed before acceptance into the program but can be taken with the professional courses or following completion of the professional curriculum. They must be completed within five years of the date of admission into the program. The other prerequisite hours listed must be completed before acceptance into the program.

Actual course titles may vary among institutions. Consult the department chairman for preprofessional counseling.

Fulfillment of the radiation therapy preprofessional curriculum does not assure admittance into the professional program (please see Application Procedures and Deadlines).

Not more than one course in the following group will be accepted in transfer to meet degree requirements: band, studio, physical education, military science, English as a second language (ESL), manual skills.

Students entering with a baccalaureate or higher degree from an accredited college or university must complete the following requirements for a CHRP bachelor's degree: (a) 32 SC in residence; (b) all program-specific mathematics and biological and physical science prerequisites; (c) all program-specific professional requirements; (d) if not completed as part of a previous degree program, a 3 SC college/university course in American history or national government, a 3 SC course in college algebra or higher level mathematics, and a 3 SC course in humanities.

## **RADIOLOGIC TECHNOLOGY CURRICULUM**

Prospective students must be graduates (or eligible to graduate) from a JRCERT accredited Radiologic Technology (Radiography) program and must have a CGPA of 3.0 or better. The following 39 SC will be transferred from this professional program and must be successfully completed prior to admission into the radiation therapy program.

| Course Title                           | Semester Credit |
|--|-----------------|
| Radiologic Anatomy                     | 2               |
| Basic Patient Care                     | 3               |
| Radiographic Procedures and Laboratory | 8               |
| Radiographic Exposure and Laboratory   | 4               |
| Radiation Protection and Radiobiology  | 3               |
| Radiation Physics                      | 3               |
| Radiologic Imaging                     | 2               |
| Clinical Practicum                     | 10              |
| Imaging Electives                      | $\frac{4}{39}$  |
| TOTAL                                  | 39              |

## **PROFESSIONAL CURRICULUM**

The following 46 SCs are offered in the CARTI/UAMS radiation therapy program.

| Course #<br>Fall (1) | Title S   | emester Credit  |  |
|----------------------|---|-----------------|--|
| . ,                  | Orientation of Radiation Therapy                  | 1               |  |
|                      | Patient Care                                      | 2               |  |
| -                    |   | 2               |  |
|                      | Principles & Practices I<br>Rediction Operatory I | 2 3             |  |
|                      | Radiation Oncology I                              |                 |  |
|                      | Radiation Physics I                               | 4               |  |
| RIH 4601             | Clinical Practicum I and Laborato                 | ·               |  |
|                      |   | 18              |  |
| Spring (2)           |   |                 |  |
| RTH 4404             | Radiation Oncology II                             | 4               |  |
| RTH 4221             | Principle & Practices II                          | 2               |  |
| RTH 4423             | Radiation Physics II                              | 4               |  |
| RTH 4231             | Radiation Biology                                 | 2               |  |
|                      | Clinical Practicum II and Laborate                | ory <u>6</u>    |  |
|                      |   | 18              |  |
| Summer (3            |   |                 |  |
| •                    | Radiation Physics III                             | 2               |  |
|                      | Principle & Practices III                         | 1               |  |
|                      | Radiation Therapy Review                          | 2               |  |
|                      | Clinical Practicum III and Laborat                |                 |  |
|                      |   | $\frac{10}{10}$ |  |
| TOTAL                |   | $\frac{10}{46}$ |  |

#### TOTAL

A minimum of 32 SC of professional course work must be completed in residence at the College.

A grade of "F" or a mark of "NC" in a professional course is not acceptable for progression to the next semester, nor is it acceptable for graduation if it occurs in the last semester of the program.

## PROGRAM TRACKS/OPTIONS

Bachelor of Science in Radiation Therapy: Students who successfully complete all 39 SC prerequisites, all radiography requirements, and the 46 radiation therapy requirements for a total of 124 SC are eligible upon graduation to receive the Bachelor of Science degree in Radiation Therapy.

Transfer Student Requirements: Students who complete 39 hours of pre-professional (general education requirements) with a CGPA of at least 2.0 and graduates from a JRCERT accredited radiologic technology program with a CGPA of at least 3.0 may transfer credits to UAMS and be considered for acceptance into the UAMS/CARTI Bachelor of Science in Radiation Therapy program.

## **GENERAL TECHNICAL REQUIREMENTS**

In order to graduate from the radiation therapy program, students must be able to perform certain technical skills (requirements) to ensure the safe performance of radiologic procedures.

Due to the nature of typical employment assignments, a graduate of this program must be able to:

1. Work in a clinical setting for eight (8) hours per day performing physical tasks requiring physical energy without jeopardizing patient safety.

Examples of these tasks include, but are not limited to: pushing wheelchairs and stretchers; lifting and carrying radiographic film holders weighing up to fifteen (15) pounds; reaching, manipulating, and operating radiographic and therapeutic tables, stands, tubes, and other equipment; cleaning and preparing tables, stands, and other accessory equipment; moving and assisting patients on and off treatment tables and stretchers or in and out of wheelchairs.

2. Interact with patients and other medical personnel in providing appropriate patient care and in performing radiation therapy procedures.

Examples of these interactions include, but are not limited to: effectively communicating with patients and medical staff; providing patients with a clear and complete explanation of the procedure or treatment; providing oral and written information, reading written information, and receiving oral and written information from patients and medical staff relevant to patient care; responding appropriately to unusual patient situations; making appropriate judgments in critical and noncritical patient care situations.

## APPLICATION PROCEDURES AND DEADLINES

Class size is limited and all applicants may not be selected for participation in the program. The application and transcripts must be received by March 1 to be assured of consideration for the fall term. See page 7 for further information on deadlines and procedures for admission. Applicants must provide:

- 1. Application for Admission: The College of Health Related Professions Application for Admission is required. The application may be downloaded from the CHRP Web site or applicants may contact the department office or the CHRP Office of Student Affairs for information.
- 2. Application Fee: A non-refundable application fee of \$10.00 is required and must accompany the UAMS application.
- 3. Official Transcripts: Applicants must arrange for each college or university attended to forward an official transcript directly to the CHRP Office. Transcripts issued to the applicant will not be accepted.

Upon receipt of the application and official transcripts, student information will be reviewed to ensure that minimal qualifications for interview have been met. Interview qualifications include completion of, or current enrollment in, an accredited Radiologic Technology program with a CGPA of 3.0 or better and completion of the Prerequisite Preprofessional Curriculum courses (see Preprofessional Curriculum) with a 2.0 GPA or better. Once these qualifications have been met, the applicant is sent an interview packet. This packet includes additional information needed for the interview. The interview process includes the following:

- 1. **Datasheet and Essay:** Applicants must complete the CARTI Datasheet and write a short essay describing their interests, goals, and potential contributions to the field.
- 2. **References:** Applicants must submit one reference from each of the following: a radiography program director, a radiologist, a radiologic technologist. Reference forms are provided in the interview packet.
- 3. **Testing and Personal Interview:** Qualified applicants must present themselves in person for an interview at CARTI scheduled by the department during the Spring semester. Applicants will complete an examination administered during the interview.

Transcripts "issued to the student" will not substitute for official transcripts forwarded directly to the College of Health Related Professions by the institution issuing the transcripts.

Arkansas residency will be considered during selection for admission.

Applicants are considered without regard to race, color, creed, age, marital status, national origin, or sex. Qualified handicapped persons, capable of meeting academic standards essential to participation in the program, receive equal consideration.

All documents should be submitted to: University of Arkansas for Medical Sciences, College of Health Related Professions, Office of Student Affairs, UAMS, #619, 4301 West Markham Street, Little Rock, Arkansas 72205. Telephone: (501) 686-5730.

## **PROFESSIONAL COURSE WORK**

#### RTH 4101-Orientation to Radiation Therapy

An overview of the foundations in radiation therapy and the practitioner's role in the health care delivery system. Principles, practices, and policies of the educational program, health care organizations, principles of radiation and health safety, and professional responsibilities of the radiation therapist will be discussed and examined.

#### RTH 4102—Principles and Practice III

Content is designed to focus on the evolution of quality management (QM) programs and continuing quality improvements in radiation oncology. Topics include the need for quality assurance (QA) checks; QA of the clinical aspects and chart checks; film checks; the various types of evaluations and tests performed on simulators, megavoltage therapy equipment and therapy planning units; the role of radiation therapists in quality management programs; legal and regulatory implications for maintaining appropriate QM guidelines as well as the role computers and information systems serve within the radiation oncology department. In addition, a focus on various radiation therapy operational issues including CQI project development, evaluation and assessment techniques will be emphasized. Human resource issues and regulations impacting the radiation therapist will be examined. Accreditation agencies and the radiation therapist's role in the accreditation process will be emphasized. Billing and reimbursement issues pertinent to the radiation therapy department will be presented.

#### RTH 4202—Patient Care

Concepts and competencies in assessment and evaluation of the patient for health service delivery with emphasis placed on radiation therapy include: Psychological and physical needs and factors affecting treatment outcome; routine and emergency care procedures; the use of medical oncology.

#### RTH 4211—Principles and Practice I

Knowledge base for assessing, comparing and contrasting types of radiation therapy equipment, procedures and techniques for appropriate tumor localization and treatment delivery. Roles and responsibilities of the radiation therapist including treatment documentation and delivery, emergency procedures and patient needs; ethical behaviors as providers within a defined scope of practice within the context of the health care delivery system; law and regulations affecting the radiation therapy in employment, employment contracts and liability; the relationship between the standards of care, law, ethics, and competence.

#### **RTH 4221—Principles and Practice II**

A continuation of the study of radiation therapy equipment, procedures, and techniques. Therapeutic imaging and computer tomography including a review of cross-sectional anatomy for tumor localization and a study of normal sectional anatomy via diagrams and images is included. The treatment prescription and the documentation of treatment perimeters and delivery will be discussed. Basic principles of radiation protection and safety are presented. Radiation health and safety requirements of federal and state regulatory agencies, accreditation agencies and health care organizations are incorporated. Specific responsibilities of the radiation therapist are discussed and examined.

#### **RTH 4222—Radiation Physics III**

Further development of physics concepts as they relate to treatment techniques used in brachytherapy and electron beam therapy. Class demonstrations/labs are incorporated to complement specific content areas and are focused on clinical application of theory.

#### RTH 4231—Radiation Biology

Content is designed to present basic concepts and principles of radiation biology. The interactions of radiation with cells, tissues and the body as a whole and resultant biophysical events will be presented. Discussion of the theories and principles of tolerance dose, time-dose relationships, fractionation schemes and the relationship of the clinical practice of radiation therapy will be discussed, examined and evaluated.

#### RTH 4304—Radiation Oncology I

Pathology and physiology of malignant disease processes; epidemiology, etiology, detection, diagnosis, patient condition, treatment and prognosis of neoplastic disease in relationship to histology, anatomical site and patterns of spread; the radiation therapists' responsibility in the management of neoplastic disease.

#### RTH 4404—Radiation Oncology II

The management of specific neoplastic disease including epidemiology, etiology, detection, diagnosis, patient condition, treatment, and prognosis of neoplastic disease in relationship to histology, anatomical site, and patterns of spread; the radiation therapists' responsibility in the management of neoplastic disease. This is a continuation of Radiation Oncology I

#### RTH 4413—Radiation Therapy Physics I

The course will establish knowledge of physics pertinent to developing an understanding of radiation used in the radiation therapy clinical setting. Detailed analysis of the structure of matter, properties of radiation, nuclear transformations and x-ray production are emphasized.

#### RTH 4423—Radiation Therapy Physics II

Expansion of concepts and theories presented in Radiation Physics I. Factors that influence and govern clinical planning of patient treatment; encompassed are isodose descriptions, patient contouring, radiobiological considerations, dosimetric calculations, compensation, and clinical application of treatment beams. Optimal treatment planning is emphasized along with particle beams, calibration, and related equipment. Class demonstrations/laboratories and projects are incorporated to complement specific content areas and are focused on clinical applications.

#### **RTH 4503—Clinical Practicum III**

A continuation of Clinical Practicum II. The course will have content and clinical practice experiences designed for sequential development in radiation therapy.

#### RTH 4601—Clinical Practicum I

Knowledge of appropriate care to the patient in the therapeutic setting through structured sequential assignments in simulation, treatment planning, and administration of radiation therapy, concepts of team practice, patient-centered care, and professional development.

#### RTH 4602—Clinical Practicum II

A continuation of Clinical Practicum I with an emphasis on clinical dosimetry. Course content focused on clinical practice experiences designed for sequential development in radiation therapy.

For admission information call the Dean's Office at (501) 686-5730. Admission materials should be sent to the Office of Student Affairs, CHRP, 4301 West Markham, #619, Little Rock, AR 72205. For program information, contact School Administrative Office at 501-660-7623, mailing address: CARTI, P.O. Box 55050, Little Rock, AR 72215, or e-mail address carti.com.cv

## RADIOLOGIC IMAGING SCIENCES PROGRAMS Department of Imaging and Radiation Sciences

The Medical Radiography and Radiologic Imaging Sciences Programs are accredited by the Joint Review Committee on Education in Radiologic Technology.

Joseph R. Bittengle, M.Ed., R.T.(R)(ARRT); Division Director and Assistant Professor

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Rebecca L. Ludwig, Ph.D., R.T.(R)(QM)(ARRT); Interim Chairman, Department of Imaging and Radiation Sciences

The mission of the Radiologic Imaging Sciences Programs is to provide a progressive academic and clinical educational environment for qualified students and prepare them as competent and compassionate health care providers.

## THE PROFESSION

Radiologic Imaging Sciences (radiologic technology) is a dynamic health care profession and an integral part of the health care team concept. The registered radiographer performs a variety of radiographic (x-ray) procedures while maintaining good patient care and observing radiation safety guidelines. The products of these procedures are used in the diagnosis and treatment of disease.

Employment opportunities are available throughout the state and nation in hospitals, clinics, doctor's offices, public health institutions, and industrial medical clinics. With additional education and/or experience, graduates may specialize in fields within or closely related to radiography, such as radiation therapy, nuclear medicine, special procedures, medical sonography, computed tomography, cardiac catheterization, magnetic resonance imaging, administration, and education.

## THE PROGRAMS

**Radiologic Imaging Sciences/Little Rock:** The Associate of Science in Medical Radiography professional portion of the curriculum consists of four (4) semesters and two (2) summers over 24 continuous months of full-time course work, with classes beginning each August. Clinical experience accompanies classroom course work in each semester. The Bachelor of Science in Radiologic Imaging Sciences professional portion of the curriculum consists of six (6) semesters and three (3) summers over 36 continuous months of full-time course work, with classes beginning each August. The student must declare by the time they enter the

program either the Associate of Science degree (60 SC of professional course work) or the Bachelor of Science degree (85 SC of professional course work).

**Radiologic Imaging Sciences/Texarkana:** The Associate of Science in Medical Radiography and Bachelor of Science in Radiologic Imaging Sciences degree programs are offered in Texarkana in conjunction with the Area Health Education Center (AHEC) Southwest. The prerequisite and professional components of that program are the same as those of the Little Rock program as described above and on the following pages. For information contact: William Pedigo, R.T. (R)(ARRT); Program Director; AHEC Southwest; 300 East 6th Street; Texarkana, Arkansas 75504. Telephone: (870) 779-6054. Availability of this program at this location is dependent upon receiving continuing funding.

**Radiologic Imaging Sciences/Fayetteville:** The Associate of Science in Medical Radiography and Bachelor of Science in Radiologic Imaging Sciences degree programs are offered in Fayetteville in conjunction with the Area Health Education Center (AHEC) Northwest. The prerequisite and professional components of that program are the same as those of the Little Rock program as described above and on the following pages. For information contact: Stanley Olejniczak, R.T.(R)(ARRT); Program Director; AHEC Northwest; 2907 E. Joyce Boulevard; Fayetteville, Arkansas 72703. Telephone: (479) 521-8269. Availability of this program at this location is dependent upon receiving continuing funding.

For a listing of other locations where courses may be offered, contact the Division.

## **CERTIFICATION AND LICENSURE**

Graduation from the program in Medical Radiography (A.S. degree program) or Radiologic Imaging Sciences (B.S. degree program) satisfies academic eligibility to apply to take the national certifying examination given by the American Registry of Radiologic Technologists. Candidates who pass

this examination become Registered Technologists in Radiography [R.T.(R)(ARRT)]. Successful completion of the program does not itself insure registration. Each student is responsible for familiarizing himself/herself with the applicable registration requirements.

Successful completion of the program does not itself insure registration. Each student is responsible for familiarizing himself/herself with the applicable registration requirements.

## FINANCIAL ASSISTANCE

In addition to the general financial aid opportunities previously described in the Financial Information section of this catalog, the department can provide information on program-specific financial assistance. Contact the division director for further information regarding the following source of aid that may be available to qualified radiologic imaging sciences students.

**Kenneth C. Pedersen Scholarship:** This scholarship provides an amount not to exceed one-half of a semester's tuition fee to a junior radiologic imaging sciences student of merit. Selection criteria and applications are available in the division office.

## PREPROFESSIONAL CURRICULUM

The following 27 SC for the associate's degree are required from a regionally accredited college or university and must fulfill all College requirements regarding acceptance of transfer credit:

| Area/Typical Course Title<br>SCIENCE                            | Minimum<br>Semester Credit |
|---|----------------------------|
| College Algebra*  | 3                          |
| Anatomy and Physiology*, **                                     | $-\frac{4}{7}$             |
| LIBERAL ARTS  |                            |
| English Composition I   | 3                          |
| English Composition II  | 3                          |
| American History or National Governme                           | ent <u>3</u><br>9          |
| SOCIAL SCIENCES   |                            |
| Psychology  | 3                          |
| Sociology   | <u>_3</u><br>6             |
| COMMUNICATIONS  | 0                          |
| Speech or Oral Communication                                    | 2                          |
| COMPUTER SCIENCE<br>Computer Fundamentals/Applications<br>TOTAL | $\frac{3}{27}$             |
| Additional preprofessional requirements fo                      | r the Bachelor of          |

Additional preprofessional requirements for the Bachelor of Science degree that may be obtained either prior to or concurrent with the professional program are:

|  | Minimum         |
|--|-----------------|
| Bachelor of Science Degree               | Semester Credit |
| Fine Arts                                | 3               |
| History of Civilization or World History | 6               |
| Humanities                               | _3              |
| TOTAL                                    | 12              |

To be considered for acceptance into the program, the applicant must have earned a CGPA of 2.5 or higher at the time of application. In addition, only grades of "C" or higher are accepted in prerequisite course work.

\*Human anatomy and physiology and college algebra must be completed within seven years prior to admission into the program.

\*\*Anatomy and physiology courses must cover all body systems and include accompanying laboratory sections.

Actual course titles may vary among institutions. Consult the division director for preprofessional counseling.

Fulfillment of the radiologic technology preprofessional curriculum does not assure admittance into the professional program (please see Application Procedures and Deadlines).

Not more than one course in the following group will be accepted in transfer to meet degree requirements: band, studio, physical education, military science, English as a second language (ESL), manual skills.

Students entering with a baccalaureate or higher degree from an accredited college or university must complete the following requirements for a CHRP bachelor's degree: (a) 32 SC in residence; (b) all program-specific mathematics and biological and physical science prerequisites; (c) all program-specific professional requirements; (d) if not completed as part of a previous degree program, a 3 SC college/university course in American history or national government, a 3 SC course in college algebra or higher level mathematics, and a 3 SC course in humanities.

## **PROFESSIONAL CURRICULUM**

Associate of Science in Medical Radiography Degree: The following 60 SC are offered in the Associate of Science in Medical Radiography professional program. All courses as listed below must be successfully completed to obtain the Associate of Science degree.

| Course #   | Title                          | Semester Credit |
|------------|--------------------------------|-----------------|
| Fall (1)   |                                |                 |
| RAD 2212   | Radiologic Anatomy             | 2               |
| RAD 2321   | Basic Patient Care             | 3               |
| RAD 2322   | Radiographic Procedures I      | 3               |
| RAD 2123   | Radiographic Procedures I Lab  | oratory 1       |
| RAD 2324   | Radiographic Exposure          | 3               |
| RAD 2125   | Radiographic Exposure Laborat  | ory 1           |
| RAD 2226   | Clinic Practicum I             | _2              |
|            |                                | 15              |
| Spring (2) |                                |                 |
| RAD 2331   | Radiation Physics              | 3               |
| RAD 2332   | Radiographic Procedures II     | 3               |
| RAD 2133   | Radiographic Procedures II Lab | oratory 1       |
|            | Radiologic Imaging             | 2               |
|            | Clinic Practicum II            | $\frac{3}{12}$  |
|            |                                | 12              |
| Summer (3  | 8)                             |                 |
| •          | Clinic Practicum III           | _5              |

5

#### Fall (4)

| RAD 3351 Special Imaging Procedures            | 3  |
|--|----|
| RAD 3352 Radiation Protection and Radiobiology | 3  |
| RAD 3253 Radiographic Procedures III           | 2  |
| RAD 3554 Clinic Practicum IV                   | _5 |
|  | 13 |
| Spring (5)                                     |    |
| RAD 3461 Radiologic Pathology                  | 4  |
| RAD 3362 Quality Management                    | 3  |
| RAD 3563 Clinic Practicum V                    | 5  |
|  | 12 |
| Summer (6)                                     |    |
| RAD 3371 Clinic Practicum VI                   | 3  |
| TOTAL  | 60 |
|  |    |

**Bachelor of Science in Radiologic Imaging Sciences Degree:** In addition to the 60 SC professional courses listed above for the Associate of Science degree, the student must successfully complete a minimum of an additional 25 SC of professional courses outlined below to earn the Bachelor of Science degree.\*

| Course #   | Title                                      | <b>Semester Credits</b> |
|------------|--|-------------------------|
| Core Imag  | ing Curriculum                             |                         |
| RIS 4281   | Geriatric Imaging                          | 2                       |
| RIS 4382   | Advanced Patient Care                      | 3                       |
| RIS 4291   | Current Issues in Health Care              | 2                       |
| RIS 4XXX   | Imaging Electives                          | 18                      |
| TOTAL      |  | 25                      |
| *RAD 4     | 4XXX IMAGING ELECTIVES                     |                         |
| Course     | # Title Se                                 | mester Credits          |
| Mamm       | ography Electives                          |                         |
| RIS 438    | 33 Advanced Mammography                    | 3                       |
| RIS 458    | 35 Mammography Practicum**                 | 5                       |
| CT Elec    | tives                                      |                         |
| RIS 438    | 36 Physics of Computed Tomogr              | aphy 3                  |
| RIS 438    |  |                         |
| RIS 458    |  | 5                       |
| MRI Ele    | ectives                                    |                         |
| RIS 439    |  | maging 3                |
| RIS 439    | , 0  |                         |
| RIS 459    |  | 5                       |
| Vascula    | ar Electives                               |                         |
| RIS 439    |  | 3                       |
| RIS 439    | 5 5 I J                                    | 3                       |
| RIS 459    | 97 Vascular Practicum**                    | 5                       |
| Genera     | l Electives                                |                         |
| RIS 430    |  | liac Imaging 3          |
| RIS 438    |  |                         |
| RIS 439    |  |                         |
| RIS 439    | 98 Managerial Leadership                   | 3                       |
| RIS 439    | 99 Research in the Radiologic Sc           | iences <u>3</u>         |
| TOTAL      | RAD 4XXX IMAGING ELECTIVES                 | 18                      |
| * If an ap | plicant has not completed 45 hours of upp  | er division course      |
|            | or to admission to the B.S. program, there |                         |
|            | vork required beyond the 39 hours of gene  |                         |
| 25 nours   | s of upper division professional course wo | 4K.                     |

\*\*Courses in the specialty area must be successfully completed prior to enrollment in the practicum course.

A minimum of 32 SC of professional course work must be completed in residence at the College.

A grade of "D" or "F" or a mark of "U" or "NC" in a professional course is not acceptable for progression to the next semester, nor is it acceptable for graduation if it occurs in the last semester of the program.

### **PROGRAM TRACKS/OPTIONS**

Associate of Science in Medical Radiography: By successfully completing the associate's degree preprofessional and professional curriculum the degree requirements have been met. Upon graduation the Associate of Science degree in Medical Radiography is awarded.

**Bachelor of Science in Radiologic Imaging Sciences:** Students who successfully complete all 27 SC preprofessional, 60 SC Associate of Science professional, 25 SC Bachelor of Science professional, and 12 SC of additional preprofessional requirements for a total of 124 SC are eligible upon graduation to receive the Bachelor of Science degree in Radiologic Imaging Sciences.

Students may select one or two areas of concentration in mammography, computed tomography (CT), magnetic resonance imaging (MRI), cardiac studies, or vascular studies.

Advanced Placement: The Division offers an advanced placement opportunity for certified radiologic technologists who have earned a Associate of Science degree and who want to pursue the Bachelor of Science in Radiologic Imaging Sciences degree. Contact the division director for more information.

## **GENERAL TECHNICAL REQUIREMENTS**

In order to graduate from the Medical Radiography program, students must be able to perform certain technical requirements prior to graduation. Graduates of this program must be able to meet certain physical and mental requirements to ensure the safe performance of radiologic procedures.

Due to the nature of typical employment assignments, a graduate of this program must be able to:

1. Work in a clinical setting for eight (8) to ten (10) hours performing physical tasks requiring physical energy without jeopardizing patient safety.

Examples of these tasks include but are not limited to: Pushing wheelchairs, stretchers, and mobile radiographic equipments; lifting and carrying radiographic film holders weighing up to fifteen (15) pounds; wearing a five (5) pound lead apron when needed; reaching, manipulating, and operating radiographic tables, stands, tubes, and other radiographic equipment to obtain the requested radiographic image; cleaning and preparing radiographic tables, stands, and other accessory equipment; moving and assisting patients on and off radiographic tables and stretchers, or in and out of wheelchairs.

2. Interact with patients and other medical personnel in providing appropriate patient care and in performing radiographic procedures.

Examples of these interactions include but are not limited to: Effectively communicating with patients and medical staff; providing patients with a clear and complete explanation of the procedure; providing oral and written information, reading written information, and receiving oral and written information from patients and medical staff relevant to patient care; responding appropriately to unusual patient situations; making appropriate judgments in critical and noncritical patient care situations.

### **PROCEDURES AND DEADLINES**

Class size is limited and all applicants may not be selected for participation in the radiologic imaging sciences program. Early consideration will be given to those who have submitted complete applications (see the required items below) by the last working day in January. Applications must be received by **March 1** to be assured of consideration for admission. See page 7 for further information on deadlines and procedures for admission. Applicants must provide:

- 1. **Application for Admission:** The College of Health Related Professions Application for Admission is required. Please contact the division office or the CHRP Office of Student Affairs for information.
- 2. **Application Fee:** A non-refundable application fee of \$10.00 is required and must accompany the application.
- 3. **Official Transcripts:** Arrange for each college or university you have attended to forward an official transcript of your course work.
- 4. **Professional Observation:** Applicants are required to demonstrate an understanding of the responsibilities and duties of the radiologic technologist through observation in a hospital radiology department and discussion with a current radiologic technologist in the field. Details and a verification form will be sent to the applicant upon receipt of the completed application and application fee. The professional observation must be completed by the first working day in **April**.
- 5. Advisory Session: Qualified applicants must present themselves in person for an advisory session in the division. This session will be scheduled by the division during the Spring semester.

Transcripts "issued to the student" will not substitute for official transcripts forwarded directly to the College of Health Related Professions by the institution issuing the transcripts.

Arkansas residency will be considered during selection for admission.

Applicants are considered without regard to race, color, creed, age, marital status, national origin, or sex. Qualified handicapped persons, capable of meeting academic standards essential to participation in the program, receive equal consideration.

All documents should be submitted to: University of Arkansas for Medical Sciences, College of Health Related Professions, Office of Student Affairs, UAMS, #619, 4301 West Markham Street, Little Rock, Arkansas 72205. Telephone: (501) 686-5730.

## **PROFESSIONAL COURSE WORK**

#### RAD 2123-Radiographic Procedures Laboratory I

Laboratory session to accompany Radiographic Procedures I. Guided practice in principles of radiographic positioning.

#### RAD 2125—Radiographic Exposure Laboratory

Laboratory session to accompany Radiographic Exposure. Guided practice in radiographic equipment manipulation.

#### RAD 2133—Radiographic Procedures II Laboratory

Laboratory session to accompany Radiographic Procedures II. Guided practice in principles of radiographic positioning.

#### RAD 2212—Radiologic Anatomy

An investigation of human anatomy of the skeletal, gastrointestinal, genitourinary, cardiovascular, and central nervous systems as demonstrated on radiologic images.

#### RAD 2226—Clinical Practicum I

Supervised clinical experience emphasizing radiographic procedures of the chest, abdomen, and extremities.

#### RAD 2234—Radiologic Imaging

A study of the physical aspects of advanced imaging systems such as automatic exposure devices, fluoroscopic systems, tomography, computed tomography, and magnetic resonance imaging. The use of computers in radiology is emphasized.

#### RAD 2321—Basic Patient Care

A discussion of common patient care theories, procedures, and techniques emphasizing the physical and psychological wellness of the patient during diagnostic imaging procedures. Ethical and legal principles and a laboratory session are included.

#### RAD 2322—Radiographic Procedures I

A study of radiographic positioning of the chest, abdomen, extremities, and vertebral column.

#### RAD 2324—Radiographic Exposure

A study of radiographic density, contrast, detail, and distortion; radiographic film, screens, and accessory imaging equipment; factors affecting technique selection; and automatic processing.

#### **RAD 2331—Radiation Physics**

A study of the instrumentation of radiographic equipment, x-ray tubes, the production of x-rays, properties of electromagnetic radiation, and x-ray interactions.

#### RAD 2332—Radiographic Procedures II

A study of radiographic positioning of the cranium, gastrointestinal structures, and genitourinary structures.

#### RAD 2335—Clinical Practicum II

Supervised clinical experience emphasizing radiographic procedures of the extremities and vertebral column.

#### RAD 3253—Radiographic Procedures III

A study of alternate radiographic projections, pediatric radiography, geriatric radiography, and trauma radiographic procedures.

#### **RAD 3351—Special Imaging Procedures**

A study of advanced radiologic procedures of the skeletal, cardiovascular, genitourinary, and gastrointestinal systems emphasizing pharmacology, the use of radiologic contrast media, and the equipment used during these procedures.

#### RAD 3352-Radiation Protection and Radiobiology

A study of the principles and practices of the safe application of radiation and of the responses of biological systems to irradiation.

#### RAD 3362—Quality Management

A study of the principles and practices of radiologic quality control with an emphasis on image assessment.

#### RAD 3371—Clinical Practicum VI

Supervised clinical experience in elective clinical rotations and the demonstration of terminal clinical skills.

#### RAD 3461—Radiologic Pathology

A study of disease processes emphasizing major organrelated and multiple system disease from a clinical and radiologic standpoint.

#### RAD 3541—Clinical Practicum III

Supervised clinical experience emphasizing radiographic procedures of the cranium, gastrointestinal system, and genitourinary system.

#### RAD 3554—Clinical Practicum IV

Supervised clinical experience emphasizing pediatric and trauma radiographic procedures and the refinement of radiographic skills in orthopedic, gastrointestinal, and genitourinary procedures.

#### RAD 3563—Clinical Practicum V

Supervised clinical experience emphasizing geriatric and advanced skeletal, cardiovascular, genitourinary, and gastrointestinal radiographic procedures; an introduction to various imaging modalities; and the refinement of orthopedic, gastrointestinal, and genitourinary procedures.

#### **RIS 4281— Geriatric Imaging**

Investigation of the phenomena of aging, including selected biological, medical, and psychosocial issues. Methods of radiography are emphasized.

#### RIS 4291—Current Issues in Health Care

An emphasis on the critical evaluation of ethical, legal, and economic problems associated with health care delivery.

#### RIS 4302—Interdisciplinary Diagnostic Cardiac Imaging

This course provides the student with an understanding of the major modalities for the diagnostic imaging of the human heart. Included are overviews of the methods, effectiveness, advantages and disadvantages of echocardiography, nuclear medicine, magnetic resonance, computerized tomography, and cardiac catheterization for the diagnosis of heart disease.

#### **RIS 4382—Advanced Patient Care**

A study of advanced patient care skills emphasizing the cardiovascular and respiratory systems.

#### **RIS 4383—Advanced Mammography**

A study of patient care, mammographic positioning, and technical aspects involved in producing quality radiographs. The principles of mammography, anatomy and physiology of the breast, psychological aspects, image evaluation, pathological conditions, protection, and quality control are included.

#### **RIS 4386—Physics of Computed Tomography**

A study of the instrumentation of computed tomography, computed tomographic image formation, and radiation dose and safety concerns.

#### **RIS 4387—Computed Tomographic Procedures**

A study of computed tomographic procedures of the head, neck, vertebral column, chest, extremities, abdomen, and pelvis. Anatomy, positioning, scanning procedures, post-processing procedures, and patient care are emphasized.

#### **RIS 4389—Community Health and Education**

A discussion of community health, preventive health care, and holistic care for various populations. Effective communication and instructional theory and techniques are also discussed.

#### **RIS 4391—Advanced Quality Management**

The focus of this course is on comprehensive quality management for the radiation sciences including radiography, mammography, digital imaging, ultrasound, nuclear medicine, CT, and MRI. Advanced concepts, current quality management theory, accreditation, and audit documentation are covered.

#### **RIS 4392—Physics of Magnetic Resonance Imaging**

A study of the instrumentation of magnetic resonance imaging, magnetic resonance image formation, and magnetic field safety concerns.

#### **RIS 4393—Magnetic Resonance Imaging Procedures**

A study of magnetic resonance imaging procedures of the head, neck, vertebral column, chest, extremities, abdomen, and pelvis. Anatomy, positioning, scanning procedures, postprocessing procedures, and patient care are emphasized.

#### RIS 4395—Advanced Angiography I

Advanced vascular angiographic procedures performed using angiographic equipment. This course includes an indepth study of vascular imaging equipment, cerebral angiography, abdominal visceral angiography, and upper and lower extremity angiography.

#### **RIS 4396—Advanced Angiography II**

Advanced vascular angiographic procedures performed using angiographic equipment. This course includes an in-depth study of pulmonary and thoracic angiography, cardiac catheterization, the venous system, and non-vascular special procedures.

#### **RIS 4398—Managerial Leadership**

Basic principles and practices necessary for effective supervision and leadership in a health care environment. Includes principles and practices in human resource management in health care settings.

#### **RIS 4585—Mammography Practicum**

Supervised clinical experience in mammography.

#### **RIS 4588—CT Practicum**

Supervised clinical experience in computed tomography.

### **RIS 4594—MRI Practicum**

Supervised clinical experience in magnetic resonance imaging.

#### **RIS 4597—Vascular Practicum**

Supervised clinical experience in vascular imaging.

#### **RIS 4399—Research in the Radiologic Sciences**

Under supervision of a faculty member, the student will design and conduct a research project in the radiologic sciences and write a paper including a review of the literature, identification of the problem, methodology, results and discussion, and summary.

# RADIOLOGIST ASSISTANT PROGRAM Department of Imaging and Radiation Sciences

The Radiologist Assistant Program is offered through the Division of Radiologic Imaging Sciences in the Department of Imaging and Radiation Sciences.

### Rebecca Ludwig, Ph.D., R.T.(R)(QM)(ARRT); Interim Chairman and Associate Professor

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Faculty: A. Baker, M. Baker, J. Bittengle, C. Coley, L. Deloney, L. Lingar, J. Livoni, R. Ludwig, P. Thaxton, Q. Young

## THE PROFESSION

Rapid technological innovations place imaging sciences at the forefront of diagnostic medicine. The Radiologist Assistant (RA) program is designed to meet the growing demand for advanced imaging practitioners as new procedures are developed and as imaging procedures are utilized more extensively. Graduates of the program will provide enhanced patient care and diagnostic services in a variety of urban and rural health care delivery settings by assuming a lead role in patient assessment and by providing a wider range of specific procedures than do current imaging technologists.

## THE PROGRAM

The Radiologist Assistant Program, graduates of which earn the Master of Imaging Sciences (MIS) degree, is designed to prepare highly qualified and exceptionally motivated diagnostic imaging technologists for careers as competent and compassionate advanced practice radiologic health care providers. The MIS degree is designed to accommodate multiple educational tracks as the demand for advanced practitioners in specific modalities emerge, beginning with the Radiologist Assistant (RA). Core courses will address educational needs for advanced practice across the imaging disciplines, and specific program tracks will focus on specialized areas of imaging expertise.

## **RADIOLOGIST ASSISTANT**

Program applicants must be certified Radiologic Technologists (RTs) experienced in assisting radiologists with fluoroscopic examinations and interventional procedures. As a specialized radiologist extender, the RA will utilize advanced expertise in imaging technology and radiation protection strategies to demonstrate the appropriate anatomical features, injuries, and diseases that may be present in a patient while applying the lowest possible radiation exposure. The RA will be academically prepared to provide patient services in fluoroscopic and interventional imaging, including preparation of pertinent patient histories, and anatomical, physiological, and pathological data, and the images necessary for the radiologist to diagnose an increasing variety of conditions and diseases. The curriculum integrates classroom, laboratory, and clinical instruction with physician interaction and supervision.

## CERTIFICATION

The American Society of Radiologic Technologists (ASRT) provides practice standards and a curriculum model for the academic preparation of RAs. Graduates of the program will be eligible for the national RA credentialing examination administered by the American Registry of Radiologic Technologists (ARRT), pending program recognition by the ARRT. The program is offered through the Division of Radiologic Imaging Sciences in the Department of Imaging and Radiation Sciences.

## **PROFESSIONAL CURRICULUM**

The curriculum for the RA program is under development. Course requirements listed in this catalog are subject to change.

Geriatric Imaging (RIS 4281) or its equivalent is a prerequisite course from the undergraduate professional curriculum. Students who have not completed RIS 4281 or its equivalant prior to being accepted into the RA program must complete the graduate level Geriatric Imaging course (MIS 5281) as part of the R.A. degree plan. Other recommended, but not required, undergraduate courses are Advanced Patient Care (RIS 4391), Current Issues in Health Care (RIS 4291), Community Health & Education (RIS 4389), and Research in Radiologic Sciences (RIS 4399).

The program is designed to be completed in five consecutive semesters on a full time basis. A flexible degree plan starting in any semester and extending the program up to a maximum of nine semesters may be arranged, resources permitting; however, the five required clinical internship courses must be completed consecutively. The courses include:\*

| Course #    | Title                           | Semester Credit |
|-------------|---------------------------------|-----------------|
| MIS 5311    | Patient Assessment              | 3               |
| MIS 5315    | Statistics & Research Methods   | 3               |
| MIS 5413    | Clinical Internship I           | 4               |
| MIS 5321    | Clinical Pharmacology           | 3               |
| MIS 5423    | Clinical Internship II          | 4               |
| MIS 6V31    | Research Project I              | 1-3             |
| MIS 6433    | Clinical Internship III         | 4               |
| MIS 6341    | Pathophysiology & Clinical Corr | elation 3       |
| MIS 6V42    | Research Project II (optional)  | 1-3             |
| MIS 6443    | Clinical Internship IV          | 4               |
| MIS 6351    | Healthcare Systems              | 3               |
| MIS 6453    | Clinical Internship V           | 4               |
| Elective(s) |                                 | 3               |
| TOTAL       |                                 | 41-44           |
| * ~         |                                 |                 |

\*Course requirements are subject to change.

## APPLICATION PROCEDURES

The Radiologist Assistant program may begin in any semester. Applications postmarked by June 1 will be considered for fall semester, by November 1 will be considered for spring semester, and by March 1 will be considered for summer semester. The process for admission consideration includes the following:

- 1. Certification as a Radiologic Technologist by the American Registry of Radiologic Technologists (ARRT): Applicants must submit evidence of current certification in radiography as a radiologic technologist.
- 2. **Application for Admission:** A completed College of Health Related Professions Graduate Program Application for Admission is required. Please contact the CHRP Office of Student Affairs at (501) 686-5730 to obtain the form.
- 3. **Application Fee:** A non-refundable application fee of \$10.00 is required and must accompany the application.
- 4. Official Transcripts: Arrange for each college or university attended to forward an official transcript to the CHRP Admissions Office. An earned bachelor's degree, or higher degree, from a regionally accredited college or university is required.
- 5. Graduate Record Examination (GRE): Applicants are required to submit their GRE scores (from an examination taken within five years of the date of application to the RA program) to the CHRP Office of Student Affairs, University of Arkansas for Medical Sciences, 4301 West Markham Street, #619, Little Rock, Arkansas 72205. Use GRE code number 6146 to have scores sent directly to the College of Health Related Professions.

- 6. Course Completion for Advanced Cardiac Life Support (ACLS): Applicants must submit evidence of satisfactory completion of ACLS requirements within the last 3 years.
- 7. **Post-Certification Clinical Experience:** Applicants must submit evidence of completion of a minimum of two years of full-time equivalent clinical experience in imaging sciences following certification. This experience must have been completed within the past three years. Teaching experience in an accredited radiologic technology program may be submitted for consideration in meeting this requirement.
- 8. **Radiology Supervisor References:** Applicants must submit two (2) reference forms completed by their radiology supervisors, including their current supervisor.
- 9. **Preceptor and Affiliate Agreement Forms:** Each applicant must submit at least one Preceptor Agreement Form completed by a radiologist who is willing to serve as the applicant's clinical preceptor. An Affiliate Agreement form to be completed by the clinical facility will be provided upon receipt of the radiologist preceptor form. Information for radiologists about their role as preceptors is available from the department.
- 10. **Interview:** Qualified applicants must present themselves in person at UAMS for an interview, if requested by the department.

Transcripts "issued to the student" will not substitute for official transcripts forwarded directly to the College of Health Related Professions by the institution issuing the transcripts.

Arkansas residency will be considered during selection for admission.

Applicants are considered without regard to race, color, creed, age, marital status, national origin, or sex. Qualified handicapped persons, capable of meeting academic standards essential to participation in the program, receive equal consideration.

GRE results should be submitted to the CHRP Office of Student Affairs (see item (5) above). All documents should be submitted to: University of Arkansas for Medical Sciences, College of Health Related Professions, Office of Student Affairs, UAMS, #619, 4301 West Markham Street, Little Rock, Arkansas 72205. Telephone: (501) 686-5730.

## **PROFESSIONAL COURSE WORK**

#### MIS 5281—Geriatric Imaging

Investigation of the phenomena of aging, including selected biological, medical, and psychosocial issues. Methods of radiography are emphasized.

#### MIS 5311—Patient Assessment

Assessment of health status emphasizing cultural, ethnic, and age differences. Focuses on taking patient histories, inspection, palpation, percussion, and auscultation. Body systems and functional health patterns are used to organize data and to develop clinical pathways in medical imaging.

#### MIS 5315-Statistics & Research Methods

Introduction to research designs, epidemiology, probability, test statistics, sample size, power, correlations, non-parametric tests, regression, and analysis of variance.

#### MIS 5321—Clinical Pharmacology

Study of pharmacodynamics, medication administration, drug categories, and implications in patient care. Emphasizes pharmaceuticals frequently used in medical imaging.

#### MIS 5341—CT Physics and Instrumentation

An Internet course presenting a study of the basic principles of x-ray physics, production, and interactions; instrumentation of computed tomography, computed tomographic image formation, manipulation, and quality assuance; and radiation dose and safety concerns.

#### MIS 5413—Clinical Internship I

The focus of this clinical internship course is on thoracic and abdominal imaging procedures. Radiologist Assistant (RA) interns are required to document a minimum of 260 clock hours, excluding breaks, in the clinical setting for the clinical internship course. Sixty-five of these 260 hourse must be devoted to observing the radiologists' interpretations of images.

#### MIS 5423—Clinical Internship II

The focus of this clinical internship course is on muscoskeletal imaging procedures. Radiologist Assistant (RA) interns are required to document a minimum of 260 clock hours, excluding breaks, in the clinical setting for the clinical internship course. Sixty-five of these 260 hourse must be devoted to observing the radiologists' interpretations of images.

#### MIS 6341—Pathophysiology and Clinical Correlation

Application of the concepts of pathophysiology for the assessment and management of medical imaging patients. Emphasizes the characteristic manifestations, pattern recognition, and image assessment of pathologies observed in medical images specific to the program track selected.

#### MIS 6351—Health Care Systems in America

Analysis of the health care services provided within the United States of America. The evolution, structure, financing, and regulation of the nation's health care institutions will be covered. In addition, ethics and legal issues related to the health professions will be studied.

#### MIS 6433—Clinical Internship III

The focus of this clinical internship course is on gastrointestinal and genitourinary imaging procedures. Radiologist Assistant (RA) interns are required to document a minimum of 260 clock hours, excluding breaks, in the clinical setting for the clinical internship course. Sixty-five of these 260 hourse must be devoted to observing the radiologists' interpretations of images.

#### MIS 6443—Clinical Internship IV

RA track emphasizes invasive imaging procedures.

#### MIS 6453—Clinical Internship V

RA track emphasizes specialized modalities.

#### MIS 6V31—Research Project I

Practical experience in conducting research. A written plan describing the project's objectives and goals must be approved by the student's research mentor and program director prior to implementation. The student will submit the completed project for consideration to be published in a peer reviewed journal or to be presented at a professional meeting as a poster or lecture. A minimum of 3 SC is required for program completion.

#### MIS 6V42—Research Project II (optional)

A minimum of 3 SC in this research project course is required for program completion. This course may be taken for up to 6 SC.

## **RESPIRATORY CARE PROGRAM** Department of Respiratory and Surgical Technologies

The Respiratory Care Program is accredited by the Committee on the Accreditation of Allied Health Education Programs; Committee on Accreditation for Respiratory Care.

**Erna L. Boone, M.Ed., R.R.T.**, Chairman and Assistant Professor Department of Respiratory and Surgical Technologies University of Arkansas for Medical Sciences College of Health Related Professions, UAMS #704 (14-B/NLR) 4301 West Markham Street, Little Rock, Arkansas 72205 Telephone: (501) 257-2348 E-mail: booneernal@uams.edu Web site: http://www.uams.edu/chrp/respiratorycare/

Faculty: M. Anders, E. Boone, K. Diles, P. Evans, T. Gramlich (VA), H. Neal-Rice, K. Rye, D. Shelledy Clinical/Adjunct Faculty: J. Bates, J. Standridge Medical Directors: M. Erbland, M. Smith, R. Warren

## THE PROFESSION

Respiratory care is concerned with the assessment, diagnosis and management of patients with cardiopulmonary deficiencies or abnormalities. The Respiratory Therapist works in hospitals, clinics, home care agencies and other health care settings under the direction of a physician. Respiratory Therapists use sophisticated equipment in the assessment and treatment of patients with such lung disorders as asthma, emphysema, pneumonia and bronchitis. The Respiratory Therapist also provides patient and community education and develops patient care plans.

Respiratory Therapists are important members of the critical care team in hospital Intensive Care Units where patients are seriously ill. They use highly technical mechanical ventilators and monitoring equipment to support breathing in patients who have sustained a life-threatening illness or injury.

In the Pulmonary Function, Cardiopulmonary Stress Testing and Arterial Blood Gas Laboratories, the Respiratory Therapist assists the physician in the determination of the type and extent of cardiopulmonary disease and monitors the responsiveness to a particular treatment regimen.

As an important member of a rapidly changing health care environment, the Respiratory Therapist possesses skills which allow flexibility in a variety of practice settings. Some practitioners choose to specialize in areas such as newborn and pediatric care, rehabilitation, patient and staff education, home care, research, cardiopulmonary diagnostics or critical care.

There are two credential levels for respiratory care practitioners: the Certified Respiratory Therapist (CRT) and the Registered Respiratory Therapist (RRT). Those designated as CRT administer general respiratory care and may assume clinical responsibilities for specified respiratory care modalities involving the application of well-defined therapeutic techniques under the supervision of a respiratory therapist and/or physician. RRTs apply scientific knowledge and theory to practical clinical problems of respiratory care and are qualified to assume primary responsibility for all respiratory care modalities, including the supervision of certified respiratory therapists (CRTs). Under the supervision of a physician, the RRT is often required to exercise considerable independent clinical judgment in the respiratory care of patients.

## THE PROGRAMS

UAMS respiratory care educational programs offer a variety of options for prospective students. All of the programs are fully accredited by the Committee on Acreditation for Respiratory Care Education (CoARC).

## Traditional Programs

The UAMS offers traditional programs for students who do not hold a CRT and/or RRT credential.

The UAMS offers a B.S. Degree program, which leads to the RRT credential. This program is available on both the Little Rock and Texarkana campuses.

The Little Rock program receives significant support from the Central Arkansas Veteran's Healthcare System and is located at the North Little Rock VA facility. Contact the Little Rock program at (501) 257-2348.

The Texarkana program is sponsored by the UAMS and the AHEC-Southwest. It is located in the AHEC-Southwest facility. Contact the Texarkana program at (870) 770-6054.

## **Non-Traditional Programs**

A three-year program option is available to prospective students who must still complete some program prerequisites, or who wish to take a reduced course load due to work or family obligations. In order to be eligible for the three-year track, students must have completed a minimum of 34 SC of the required 63 SC of program prerequisites prior to enrolling in the Respiratory Care Program. The student may then complete up to 29 SC of program prerequisite coursework during Years 1 and 2 of the three-year track. Year 3 of this program option is a full time course load. <u>All</u> other program admission requirements must be met in order

to be admitted to the three-year program option. Prospective students who are interested in this track should contact the program for additional information.

The UAMS offers two non-traditional programs for practicing professionals who hold the CRT and/or RRT credential. These programs are offered substantially via the Internet and Independent Study. Contact the department for information about the pre-professional curricula, the professional curricula, and the application requirements.

CRT-to-B.S.: This program is for those practitioners holding the CRT credential who wish to qualify for the RRT credential.

RRT-to-B.S.: This program is for those practitioners holding the RRT credential who wish to complete the B.S. degree.

## **CERTIFICATION AND LICENSURE**

R.R.T: Successful completion of professional course work in the Bachelor of Science degree program offered in both Little Rock and Texarkana satisfies academic and clinical eligibility requirements to apply for the Entry-Level Practitioner Examination and the Advanced Practitioner Examination offered by the National Board for Respiratory Care (NBRC). Successful candidates earn the Certified Respiratory Therapist (CRT) and Registered Respiratory Therapist (RRT) credentials. Successful completion of professional course work in the CRTto-B.S. degree program satisfies academic and clinical eligibility requirements to apply for the Advanced Practitioner Examination offered by the NBRC. Successful candidates earn the Registered Respiratory Therapist (RRT) credential. Successful completion of these programs does not itself insure certification or registration. Each student is responsible for familiarizing himself/herself with the applicable requirements, including the examination schedules.

L.R.C.P.: Successful completion of professional course work in the Bachelor Degree program satisfies the academic requirements to apply for a license in the State of Arkansas.

## PREPROFESSIONAL CURRICULUM

B.S. Degree in Cardio-Respiratory Care: The following 39 SC are required from a regionally accredited college or university and must fulfill all College of Health Related Professions requirements regarding acceptance of transfer credit.

| Area/Typical Course Title Semester Co<br>SCIENCE*          |      |
|--|------|
| Human Anatomy & Physiology (must cover all body system     | s) 4 |
| Microbiology   | 4    |
| Chemistry  | 4    |
| Physics  | 4    |
| Computer Fundamentals                                      | 3    |
|  | 19   |
| MATHEMATICS<br>College Algebra or Higher Level Mathematics | 3    |
| COMMUNICATIONS   | 2    |
| Speech   | 2    |

#### LIBERAL ARTS

| ELECTIVES<br>TOTAL  | <u>12</u><br>63           |
|---|---------------------------|
| Introduction to Sociology   | $\frac{3}{6}$             |
| SOCIAL SCIENCES<br>Introduction to Psychology   | 3                         |
| HUMANITIES<br>Humanities  | 3                         |
| FINE ARTS<br>Fine Arts  | 3                         |
| English Composition<br>American History or U.S. Government<br>Western Civilization or World History | 6<br>3<br><u>_6</u><br>15 |
| LIDERAL ARIS  |                           |

| TAL |  |
|-----|--|
|-----|--|

\*Must be suitable for science or health profession majors.

A final grade of "C" or better is required in each of the above courses. Documentation of successful completion is required by the date of registration for the first semester.

Actual course titles may vary among institutions. Consult the department for preprofessional counseling.

Science courses must be suitable for science or health professions majors and include a laboratory.

Fulfillment of the preprofessional curriculum does not in itself insure admittance into the professional program (please see Application Procedures and Deadlines).

Students entering with a baccalaureate or higher degree from an accredited college or university must complete the following requirements for a CHRP bachelor's degree: (a) 32 SC in residence; (b) all program-specific mathematics and biological and physical science prerequisites: (c) all program-specific professional requirements; (d) if not completed as part of a previous degree program, a 3 SC college/university course in American history or national government, a 3 SC course in college algebra or higher level mathematics, and a 3 SC course in humanities.

## **PROFESSIONAL CURRICULUM**

Advanced-Level Bachelor of Science Degree (Little Rock and Texarkana): The following 61 SC will be required in the professional program:

| Course #   | Title Semester Cr                         | edit |
|------------|---|------|
| Fall (1)   |   |      |
| RES 3311   | Cardio-Respiratory Anatomy & Physiology   | 3    |
| RES 3412   | Equipment and Techniques I                | 4    |
| RES 3113   | Equipment and Techniques I Laboratory     | 1    |
| RES 3414   | Basic Assessment and Diagnosis            | 4    |
| RES 3115   | Basic Assessment and Diagnosis Laboratory | 1    |
| RES 3117   | Clinical Practicum I                      | _1   |
|            |   | 14   |
| Spring (2) |   |      |
| RES 3321   | Cardio-Respiratory Diseases               | 3    |
| RES 3322   | Equipment and Techniques II               | 3    |
| RES 3223   | Equipment and Techniques II Laboratory    | 2    |
| RES 3224   | Pediatrics & Perinatology                 | 2    |
| RES 3127   | Pediatrics & Perinatology Laboratory      | 1    |
| RES 3125   | Cardio-Respiratory Care Cases             | 1    |
| RES 3226   | Clinical Practicum II                     | _2   |
|            |   | 14   |

#### Advanced-Level Bachelor of Science Degree (Little Rock and

Texarkana): The following 33 SC will be required in addition to the 28 SC listed above in Fall (1) and Spring (2):

| Course #   | Title Seme                           | ester Credit   |  |
|------------|--------------------------------------|----------------|--|
| Summer (3  | 3)                                   |                |  |
| RES 3216   | Pharmacology                         | 2              |  |
| RES 4230   | Introduction to Research             | 2              |  |
| RES 3231   | Clinical Internship                  | 6              |  |
|            |                                      | 6              |  |
| Fall (4)   |                                      |                |  |
| RES 4341   | Advanced Assessment & Diagnosis      | 3              |  |
| RES 4342   | Critical Care Practices              | 3              |  |
| RES 4344   | Evidence-Based Medicine in Respirat  | ory Care 3     |  |
| RES 4252   | Advanced Pediatric/Perinatology      |                |  |
|            | Cardio-Respiratory Care              | 2              |  |
| RES 4445   | Clinical Practicum III               | 4              |  |
|            |                                      | 15             |  |
| Spring (5) |                                      |                |  |
| RES 4251   | Cardio-Respiratory Care in Alternate | Sites 2        |  |
| RES 4353   | Community Health and Education       | 3              |  |
| RES 4254   | Leadership and Supervision           | 2              |  |
| RES 4255   | Respiratory Care Seminar             | 2              |  |
| RES 4356   | Clinical Practicum IV                | $\frac{3}{12}$ |  |
|            |                                      | <u>12</u>      |  |
| TOTAL      |                                      | 61             |  |

#### TOTAL

A grade of "D" or "F" or a mark of "U" or "NC" in a professional course is not acceptable for progression to the next semester, nor is it acceptable for graduation if it occurs in the last semester of the program.

## RESPIRATORY CARE ESSENTIAL FUNCTIONS

These essential functions represent the non-academic requirements of the program. All applicants must meet these requirements in order to participate in the respiratory care program. Graduates of the program must be able to meet certain physical and mental requirements to ensure the safe performance of respiratory care procedures.

Due to the nature of typical clinical assignments, applicants must be able to meet the criteria listed below related to hearing, mobility, motor skills (fine & gross), tactile, visual, physical endurance, and mental/attitudinal standards.

1. Auditory ability sufficient to hear and understand patients and staff, assess and monitor patient sounds.

Examples: Communicate and interact with patients and families from a variety of backgrounds. Follow oral instructions. Hear heart and breath sounds. Detect and discriminate between sounds of normal respiration. Identify and localize alarm sounds emitted from patient care equipment.

Mobility and strength sufficient to support and 2. move patients.

Examples: Support and transfer patients, move in and out of treatment areas. Reach equipment or parts of patient's body.

3. Perform multiple motor tasks simultaneously. Fine and gross motor skills sufficient to handle equipment and provide safe and effective patient care: steady arm and hand movements while manipulating objects or assisting patients.

Examples: Operate and manipulate equipment, blood collection devices, several items at once. Administer aerosols, suction patient, and adjust pressure gauges. Lift and transport oxygen cylinders, move in and out of treatment areas. Push/pull hospital beds.

4. Tactile ability sufficient to assess patient's response to therapy.

Examples: Distinguish textures, degrees of firmness, temperature differences, and pulse rate.

5. Visual ability sufficient to monitor and assess patient and equipment function to provide safe and effective respiratory care.

Examples: Read written instructions/orders. Read fine print, monitors, and gauges. Differentiate color/character of sputum for signs/nature of infection/disease. Chart procedures and observation in a permanent medical record.

Physical endurance ability sufficient to work in a 6. clinical setting for eight (8) to twelve (12) hours performing physical tasks requiring physical energy without jeopardizing patient safety.

Examples: Remain standing and walking between patient care areas for at least an hour. Perform chest compressions during CPR. Manually ventilate a patient for at least 30 minutes during resuscitation.

7. Mental/attitudinal ability sufficient to interact with patients and other health care personnel in providing appropriate patient care and exhibiting attitudes and actions consistent with the ethical standards of the profession.

Examples: Function safely, effectively, and calmly under stressful situations. Maintain composure while managing multiple tasks simultaneously. Prioritize multiple tasks. Exhibit social skills necessary to interact effectively with patients, families, supervisors, and co-workers of the same or different cultures, such as respect, politeness, tact, collaboration, teamwork, and discretion. Maintain personal hygiene consistent with the close personal contact associated with patient care.

## APPLICATION PROCEDURES AND DEADLINES

Class size is limited and all applicants may not be selected for participation in the program. Early application is encouraged.

Advanced-Level Associate of Science and Bachelor of Science Degree (Little Rock and Texarkana): Application for fall semester admission to the professional phase of the program

must be made between September 1 and May 15 in any academic year. Individuals selected for admission will be notified by the chairman of the department. Applications may be accepted after the deadline depending on class capacity. Individuals are encouraged to apply early, as qualified applicants may receive conditional acceptance to the program prior to application deadline. Applicants must provide:

- 1. **Application for Admission:** The College of Health Related Professions Application for Admission is required. Please contact the department office or the CHRP Office of Student Affairs for information.
- 2. **Application Fee:** A non-refundable application fee of \$10.00 is required and must accompany the application.
- 3. **Official Transcripts:** Arrange for each college or university you have attended to forward an official transcript of your course work.
- 4. **Professional Observation:** Applicants are required to demonstrate an understanding of the responsibilities and duties of the profession through observation and discussion with a practicing professional in the field. Contact the Department for details.
- 5. **Interview:** Qualified applicants are contacted to arrange an interview following receipt of application requirements 1–4 listed above.
- 6. **Testing Results:** All applicants will be required to take the Health Occupations Admission Examination (HOAE) administered by the department. The cost of the on-line examination is \$15.00.

# Transcripts "issued to the student" will not substitute for official transcripts forwarded directly to the College of Health Related Professions by the institution issuing the transcript.

Arkansas residency will be considered during selection for admission.

Applicants are considered without regard to race, color, creed, age, marital status, national origin, or sex. Otherwise qualified individuals with disabilities receive equal consideration.

All application forms may be obtained from the program office.

All documents should be submitted to: University of Arkansas for Medical Sciences, College of Health Related Professions, Office of Student Affairs, UAMS Slot 619, 4301 West Markham Street, Little Rock, Arkansas 72205. Telephone: (501) 686-5730.

Upon acceptance into the professional program, students must complete the following admission requirements:

1. **CPR Certification:** Students must be certified in Basic Cardiac Life Support (BCLS, Health Care Providers) according to American Heart Association (AHA) standards prior to the first clinical course. The course must be administered or approved by the Department. The AHA "Heartsaver" and the Red Cross CPR course do not fulfill this requirement. All current CPR certifications which expire prior to the program graduation date will require recertification as a prerequisite to the first clinical course.

2. **Physical Examination:** Physical examination forms must be completed and signed by a physician and are due no later than three (3) weeks before the date of registration for the first semester.

## **PROFESSIONAL COURSE WORK**

# Advanced-Level Bachelor of Science Degree (Little Rock and Texarkana):

#### **RES 3113—Equipment and Techniques I Laboratory**

Respiratory care equipment function, maintenance, and use; guided practice prior to clinical experiences.

#### **RES 3115—Basic Assessment and Diagnosis Laboratory**

Cardio-respiratory assessment and diagnostic equipment function, maintenance and use; guided practice prior to clinical experience.

#### **RES 3117—Clinical Practicum I**

Supervised clinical experience in basic respiratory care procedures and practices. Prerequisites: RES 3311, 3312, 3313, 3314, 3115, 3216.

#### **RES 3125—Cardio-Respiratory Care Cases**

Clinical case studies presented by students, practicing respiratory care practitioners and physicians.

#### **RES 3127—Pediatrics and Perinatology Laboratory**

Survey of pediatric and perinatal respiratory care, including neonatal critical care equipment function, maintenance and use; guided practice prior to clinical experiences.

#### **RES 3216—Pharmacology**

Practical and clinical pharmacology.

#### **RES 3223—Equipment and Techniques II Laboratory**

Critical respiratory care equipment and function, maintenance and use; guided practice prior to clinical experiences.

#### **RES 3224—Pediatrics and Perinatology**

Survey of pediatric and perinatal respiratory care, NRP and PALS concepts are introduced.

#### **RES 3226—Clinical Practicum II**

Continuation of Clinical Practicum I; includes an introduction to critical respiratory care procedures and practice.

#### **RES 3231—Clinical Internship**

Concentrated clinical experiences in critical and non-critical respiratory care procedures and practices.

## **RES 3311—Cardio-Respiratory Anatomy and Physiology**

Emphasis on the respiratory and cardiac systems.

#### **RES 3321—Cardio-Respiratory Disorders**

Study of common respiratory and cardiac diseases.

#### **RES 3322—Equipment and Techniques II**

Cardio-respiratory Care of critically ill patients with emphasis on mechanical ventilation and physiologic monitoring.

#### **RES 3412—Equipment and Techniques I**

Respiratory Care procedures and equipment; emphasis on basic respiratory care procedures and practice.

#### **RES 3414—Basic Assessment and Diagnosis**

Basic cardio-respiratory assessment and diagnostic procedures and practice.

### **RES 4143—Current Topics in Cardio-Respiratory Care I**

A directed discussion of topics currently significant to the practice of respiratory care.

#### **RES 4230—Introduction to Research**

An introduction to the methods of scientific research to include research design and statistical analysis. Critical review of the components of research reports will be performed to include definition of the problem, review of the literature, research design, data analysis, and results.

RES 4251—Cardio-Respiratory Care in Alternate Care Sites

Theory and application of cardio-respiratory diagnostics and therapeutic intervention, including cardio-respiratory care in alternate care sites.

# RES 4252—Advanced Pediatric/Perinatal Cardio-Respiratory Care

Advanced theory and application of pediatric and perinatal cardio-respiratory care.

#### **RES 4253—Community Health and Education**

Introduction to the methods and materials of patient, community, and professional staff education; project development required.

#### **RES 4254—Leadership and Supervision**

Basic concepts, principles, and practices necessary for effective supervision and leadership in a health care environment.

#### **RES 4255—Respiratory Care Seminar**

Continuation of RES 4143—Current Topics in Cardio-Respiratory Care I.

#### **RES 4341—Advanced Assessment and Diagnosis**

Advanced cardio-respiratory assessment and diagnostic procedures and practices.

#### **RES 4342—Critical Care Practices**

Special techniques, case studies and pathological complications associated with the critically ill patient; emphasis on the care of the cardiac and trauma patient.

#### **RES 4344—Evidence-Based Medicine in Respiratory Care**

The course is an introduction to the ascertainment and critical appraisal of the best available scientific evidence for the purpose of formulating evidence-based clinical recommendations.

#### **RES 4356—Clinical Practicum IV**

Continuation of Clinical Practicum III; includes alternate care site and additional critical care practices and procedures.

#### **RES 4445—Clinical Practicum III**

A continuation of Clinical Practicum II; includes neonatal and diagnostic procedures and practices.

# SURGICAL TECHNOLOGY PROGRAM Department of Respiratory and Surgical Technologies

The Surgical Technology Program is accredited by the Committee on the Accreditation of the Allied Health Education Programs; Accreditation Review Committee for the Surgical Technologist.

Gennie Castleberry, B.S., C.S.T.(R.), Program Director and Instructor Department of Respiratory and Surgical Technologies University of Arkansas for Medical Sciences College of Health Related Professions, UAMS #704 (14-B/NLR) 4301 West Markham Street, Little Rock, Arkansas 72205 Telephone: (501) 257-2348 E-mail: castleberrygennier@uams.edu Web site: http://www.uams.edu/chrp/surgicaltechnology/

Faculty: G. Castleberry

**Erna L. Boone, M.Ed., R.R.T.,** Chairman and Assistant Professor, Department of Respiratory and Surgical Technologies (See page 95 for information about the Respiratory Care Program)

## THE PROFESSION

Surgical Technology involves technical procedures in settings requiring aseptic (sterile) techniques and the use of surgical equipment and instrumentation. The program, jointly sponsored by the University of Arkansas for Medical Sciences and the Department of Veterans Affairs, Central Arkansas Veterans Healthcare System (CAVHS) (North Little Rock Division), emphasizes this technical competence. The surgical technologist works with skill and understanding in surgical processing, materials management, labor and delivery areas, as well as in the operating room.

The primary responsibility of the Surgical Technologist is maintaining the sterile field and being constantly vigilant that all members of the team adhere to proper aseptic techniques that prevent contamination or infection. He/she must anticipate the needs of the surgeon, passing instruments and providing sterile items in an efficient manner.

## THE PROGRAMS

Little Rock (Certificate): The pre-professional curriculum consists of a minimum of 4 SC of specified course work completed at a regionally accredited college or university. The professional curriculum consists of 33 SC including course work in basic sciences, surgical procedures and associated theory, medical terminology, basic patient care, and other related areas. Technique laboratories and clinical practicum are also provided. Students accepted into the professional program begin their course of study in August and complete requirements in June. The Surgical Technology Certificate is awarded the following August.

**Note:** It is anticipated that the certificate program will no longer accept students after the 2006-2007 school year.

Little Rock (Associate of Science Degree): Those students desiring the Associate of Science degree must complete prior to, during, or after the 33 SC of professional curriculum a minimum of an additional 28 credits of general education course work as well as 4 SC of specified preprofessional

course work at a regionally accredited college or university. This academic preparation is intended not only to provide a sound basis for expanding requirements of the health care field, but also to act as a bridge to other health professions.

## CERTIFICATION AND LICENSURE

**C.S.T.:** Completion of professional course work in the Surgical Technology program does not itself insure certification. It does satisfy the strict eligibility requirement to apply for the national certification examination awarded by the Liaison Council on Certification for the Surgical Technologist. Successful candidates become Certified Surgical Technologists (CST), having demonstrated a commitment to maximum performance and quality patient care.

## PREPROFESSIONAL CURRICULA

**Certificate:** A four (4) SC course in human anatomy and physiology is required from an accredited college or university, and must fulfill all College requirements regarding acceptance of transfer credit. The course must cover all body systems and include a laboratory. In some institutions, a 4 SC course in biology is pre-requisite to human anatomy and physiology and two courses (Anatomy and Physiology I and II) may be necessary to cover all body systems. Contact the department for information about acceptable courses.

Associate of Science Degree: Students electing to pursue the Associate of Science degree must fulfill an additional 28 SC of general education and elective requirements listed below. These courses may be taken prior to, during or after completion of the professional course work and must fulfill all college requirements regarding acceptance of transfer credit.

| Title                                 | Semester Credit |
|---------------------------------------|-----------------|
| Speech                                | 2               |
| English Composition                   | 6               |
| American History/National Government  | 3               |
| Sociology                             | 3               |
| Psychology                            | 3               |
| Computer Fundamental/Applications     | 3               |
| College Algebra or higher mathematics | 3               |
| Electives                             | _5              |
| TOTAL                                 | 28              |

**Note:** Associate of Science degree program applicants who plan to begin classes in fall of 2007-2008 must successfully complete all program prerequisite requirements, including 4 SC of Microbiology, prior to beginning the professional program. Prospective students are encouraged to contact the program for information on the status of this change.

## **PROFESSIONAL CURRICULA**

**Certificate and Associate of Science Degree Program:** The following 33 SC are required in the professional portion of the curriculum:

| Course     | Title  | Semester Credit |
|------------|--|-----------------|
| Fall (1)   |  |                 |
| SUT 2410   | Basic Operating Room Techniques  | ; 4             |
| SUT 2211   | Basic Operating Room Techniques  | I Laboratory 2  |
| SUT 2312   | Medical Terminology  | 3               |
| SUT 2313   | Surgical Pathophysiology   | 3               |
| SUT 2314   | Surgical Sciences  | 3               |
| SUT 2215   | Clinical Practicum I   | $\frac{2}{17}$  |
|            |  | 17              |
| Spring (2) |  |                 |
| SUT 2520   | Advanced Operating Room Tee  | chniques 5      |
| SUT 2221   | Pharmacology for the Surgical  | Technologist 2  |
| SUT 2222   | Perioperative Practice   | 2               |
| SUT 2123   | Professional Certifications Semi   | nar 1           |
| SUT 2425   | Clinical Practicum II  | 4               |
|            |  | 14              |
| Summer (3  | 3)   |                 |
| SUT 2231   | Clinical Assistantship   | _2              |
| TOTAL      |  | 33              |
| course i   | of "D" or "F" or a mark of "U" or "NC" i<br>is not acceptable for progression to the<br>it acceptable for graduation if it occ | next semester,  |

nor is it acceptable for graduation if it occurs in the last semester of the program.

Part-time students will follow an individualized degree plan to complete the curriculum.

## APPLICATION PROCEDURES AND DEADLINES

**Certificate and Associate of Science Degree Program:** Consideration will be given to those who have submitted applications (items #1–3 below) by **March 31.** In the event the class is not filled from those applicants, the application deadline may be extended to as late as the first working day in July. Applicants must provide:

- 1. **Application for Admission:** The College of Health Related Professions Application for Admission is required. Please contact the department office or the CHRP Office of Student Affairs for information.
- 2. **Application Fee:** A non-refundable application fee of \$10.00 is required and must accompany the application.
- 3. Official Transcripts: Arrange for each college and university you have attended to mail an official transcript directly to the CHRP Admissions Officer. If you have completed no college/university level course work at the time of application, arrange for each high school you have attended to forward an official transcript. GED scores may be submitted for high school transcript, if appropriate. A CGPA of at least 2.0 is required to be considered for admission.
- 4. **Interview:** Qualified applicants are contacted after receipt of transcripts, references and the CHRP application form to arrange interviews.
- 5. **Testing Results:** Writing, reading, and mathematical skills are evaluated at the time of interview.

Conditional admission may be granted to individuals who are enrolled in the required prerequisite course during the application semester. These individuals must, however, document their enrollment. An official transcript, grade report, or letter from each course instructor indicating the final grade (which must be a "C" or better) is required prior to registration.

Transcripts "issued to the student" will not substitute for official transcripts forwarded directly to the College of Health Related Professions by the institution issuing the transcripts.

Arkansas residency will be considered during selection for admission.

Applicants are considered without regard to race, color, creed, age, marital status, national origin, or sex. Otherwise qualified individuals with disabilities receive equal consideration.

All documents should be submitted to: University of Arkansas for Medical Sciences, College of Health Related Professions, Office of Student Affairs, UAMS, #619, 4301 West Markham Street, Little Rock, Arkansas 72205. Telephone: (501) 686-5730.

Upon acceptance into either the Certificate or Associate of Science professional program, students must complete the following admission requirements:

1. **CPR Certification:** Students must be certified in Basic Cardiac Life Support (BCLS, Health Care Providers) according to American Heart Association (AHA) standards prior to the first clinical course. The course must be administered or approved by the Department. The AHA "Heartsaver" and the Red Cross CPR course do not fulfill this requirement. All current CPR certifications which expire prior to the program graduation date will require recertification as a prerequisite to the first clinical course. 2. **Physical Examination:** Physical examination forms must be completed and signed by a physician and are due no later than three (3) weeks before the date of registration for the first semester.

## **PROFESSIONAL COURSE WORK**

#### Certificate and Associate of Science Degree Program:

#### SUT 2123—Professional Certifications Seminar

Introduction to the various opportunities for certifications and credentials within the surgical technology profession.

**SUT 2211—Basic Operating Room Techniques I Laboratory** Fundamental procedures of perioperative patient care. Guided practice prior to clinical experiences. Must be taken concurrently with SUT 2410: Basic Operating Room Techniques and successful completion is pre-requisite to SUT 2215: Clinical Practicum I.

#### SUT 2215—Clinical Practicum I

Supervised clinical experience in the application of basic patient care procedures, safe practice, and beginning skills of sterilization/disinfection and aseptic technique. Prerequisite: Successful completion of competency evaluation in SUT 2211.

#### SUT 2221—Pharmacology for the Surgical Technologist

Introduction to the classification, actions, and uses of drugs. Emphasis on drugs associated with various surgical, obstetrical, and emergency care procedures. Includes calculation of dosages and drug preparation.

#### **SUT 2222—Perioperative Practice**

An overview of surgical technology as a health care profession. Explores standards of care, criteria for professional growth, psychological aspects of the patient including social and cultural dimensions, and the ethical and legal issues surrounding the profession.

#### SUT 2231-Clinical Assistantship

Four (4) week clinical course work in all subspecialty areas of the operating room at the advanced level. Prerequisites: SUT 2217, SUT 2523.

#### SUT 2312—Medical Terminology

Introduction to commonly used medical abbreviations and terminology used in the health care setting. Includes prefixes, suffixes, and root words.

#### SUT 2313—Surgical Pathophysiology

Emphasis on the anatomical structures of those body regions in which surgery is most commonly performed and the diseases related to the surgical patient.

#### SUT 2314—Surgical Sciences

Integration of science related to the operative environment.

#### SUT 2410—Basic Operating Room Techniques

Orientation to surgical technology with emphasis on the fundamental principles of basic patient care concepts, asepsis and the surgical environment, and basic case preparation and procedures before, during and after a surgical procedure. Classroom.

#### SUT 2425—Clinical Practicum II

Supervised clinical experience in the application of basic, intermediate, and advanced surgical procedures, and a continuation of aseptic technique and sterilization/disinfection skills.

#### SUT 2520—Advanced Operating Room Techniques

Emphasis placed on specialty surgical procedures and instrumentation.

## CHRP INTERDISCIPLINARY COURSES

In addition to the discipline-specific courses described on the preceding pages, the College offers courses open to more than one discipline. The health related professions, though different in many ways, share areas of common content and interest. The CHRP interdisciplinary courses were developed on the premise that sharing learning experiences promotes mutual understanding and respect among various disciplines and promotes collaboration in health care delivery; develops a common language among health professionals; and develops a common philosophical framework for sharing of values.

#### CHRP 3101—CHRP Seminar I

Problems related to management and ethics commonly seen in the professional work place.

#### CHRP 3102—CHRP Seminar II

Problems related to ethical dilemmas in health care commonly seen in the professional work place.

CHRP 3200-Management in the Allied Health Professions

Organizational theory, basic concepts, principles, and practices in human resources management. Includes formal and informal structure, planning, decision process, motivation, and leadership.

#### CHRP 3201—Ethics for Allied Health Professionals

Introduction to the ethical and legal issues encountered by allied health professionals.

#### CHRP 4203—Health and Contemporary Affairs

This course will explore current developments in world health and their economics, sociological, political, and environmental implications.

#### CHRP 4300—Teaching in the Health Related Professions

An examination of various educational principles and methods appropriate for instruction in the health related professions. Particular emphasis will be placed on the competency based approach to instruction.

#### CHRP 4V01—Topics in the Health Related Professions

An examination of selected problems or issues affecting the health related professions. (1-3 SC).

# CHRP 4V02—Independent Study in the Health Related Professions

Guided investigation of a topic selected in consultation with the instructor. Open to students of superior ability who seek special research in the field (1-3 SC).

## UAMS INTERDISCIPLINARY COURSES

#### PHSC 5102—Death and Dying

In an interdisciplinary format, the course prepares the student to manage end-of-life care, particularly through (1) exploring personal issued related to mortality; (2) learning roles of participants in such care; (3) developing communication skills needed for caregiving; (4) examining ethical issued related to death; and (5) examining economic and social aspects of funeral practices.

#### ASP 5352—Communicating with Older Adults

An interdisciplinary course that will focus on the theory, art, and science of successful communication with older adults and provide students an opportunity to learn skills that will optimize their communications with peers, older adults, and caregivers through classroom exercises and clinical skills lab participation.

# **STUDENT INFORMATION**

# **GRIEVANCE PROCEDURES**

# UAMS GRIEVANCE PROCEDURE RELATED TO DISCRIMINATION COMPLAINTS

#### A. Purpose and Scope

- 1. **Policy Statement:** UAMS prohibits discrimination on the basis of race, color, national origin, disability, sex, or age.
- 2. **Purpose:** The purpose of this procedure is to provide the process for addressing student grievances alleging discrimination based on race, color, national origin, disability, sex, or age.
- B. Definitions
  - 1. **Grievance:** Grievance means a complaint of a student alleging any policy, procedure, or practice prohibited by Title VI of the Civil Rights Act of 1964 (Title VI), Title IX of the Education Amendments of 1972 (Title IX), the Age Discrimination Act of 1975, Section 504 of the Rehabilitation Act of 1973 (Section 504), and Title II of the Americans with Disabilities Act of 1990 (Title II), and their implementing regulations.
  - 2. **Procedure:** The steps set out in this procedure shall constitute the grievance procedure for discrimination complaints brought by students based on race, color, national origin, disability, sex, or age.
  - 3. **Grievant:** Grievant means a student who submits a grievance alleging violation of Titles VI of the Civil Rights Act of 1964, Title IX of the Education Amendments of 1972, the Age Discrimination Act of 1975, Section 504 of the Rehabilitation Act of 1973, and Title II of the Americans with Disabilities Act of 1990, and their implementing regulations.
  - 4. UAMS: UAMS means any college, department, subunit, or program operated by the University of Arkansas for Medical Sciences. When used in this Agreement, the term "college" shall be deemed to include the Graduate School.
  - 5. **Coordinator:** The person serving as the designated Title IX and/or Section 504/Title II Coordinator.
  - 6. **Respondent:** Respondent means a person alleged to be responsible for the violation alleged in a grievance. The term may be used to designate persons with direct responsibility for a particular action or those persons with supervisory responsibility for procedures and policies in those areas covered in the grievance.

- 7. Associate Dean Responsible for Student and Academic Affairs: Refers to the Associate Dean in the college where the grievant is enrolled as a student. Since there is no Associate Dean for the Graduate School, reference to Associate Dean shall be deemed to include the Assistant Dean for Graduate Studies and Institutional Reporting, where applicable.
- 8. **Dean:** Refers to the Dean of the college where the grievant is enrolled as a student.
- C. Filing of Grievance
  - 1. **Eligibility for Filing:** Any UAMS student may file a grievance alleging discrimination on the basis of race, color, national origin, disability, sex, or age.
  - 2. **Pre-Grievance Meeting:** Prior to the filing of a written grievance, the grievant(s) should first consult with the appropriate Associate Dean responsible for student and academic affairs, who shall attempt to resolve the grievance informally by agreement between the grievant and the respondent alleged to be directly responsible for the possible violation, and/or persons with immediate supervisory authority related to the grievance.

If the matter cannot be resolved at this level, a written grievance should be submitted to the appropriate Associate Dean responsible for student and academic affairs for subsequent processing in accordance with the procedures for formal grievances outlined below.

3. **Filing a Grievance:** Grievances filed with the appropriate Associate Dean shall be in writing and shall provide the following information:

--name and address of the grievant(s);

-nature, date and description of alleged violation;

--name(s) of persons responsible for the alleged violation;

--requested relief for corrective action; and

--any background information that the grievant believes to be relevant.

4. **Time Limit for Grievance Filing:** A grievance must be filed within twenty (20) calendar days of the occurrence of the alleged violation or within twenty (20) calendar days of the date the grievant became aware of the alleged violation. If the last day for filing a grievance

falls on a Saturday, Sunday, or a day on which the University is closed for business, then the grievance may be filed on the first day following the Saturday, Sunday, or date when the University is closed.

- Notification of Respondent(s): Immediately 5. upon receipt of a formal grievance, the appropriate Associate Dean will give the respondent a copy of the grievance, and will direct the respondent to submit a written response to the charges within ten (10) calendar days. If the last day for filing a response falls on a Saturday, Sunday, or a day on which the University is closed for business, then the response may be filed on the first day following the Saturday, Sunday, or date when the University is closed. The respondent will be specifically warned not to retaliate against the grievant in any way. Retaliation will subject the respondent to appropriate disciplinary action.
- 6. **Response:** The response should include any denial, in whole or in part, of the charges. Failure to respond may subject the respondent to disciplinary action by the Dean of the appropriate college or other appropriate UAMS official.
- 7. Notification of Appropriate Administrative Officers: The appropriate Associate Dean will notify the appropriate administrative officers to whom the respondent reports of the existence of the complaint. However, all administrative officers will attempt to maintain the confidentiality of the information during the grievance process.
- 8. Role of the Associate Dean Responsible for Student and Academic Affairs in Discrimination Grievances Filed by Students: The appropriate Associate Dean responsible for student and academic affairs must conduct a preliminary investigation of the complaint, and take one of the following steps, within thirty (30) calendar days after its receipt:
  - a. dismiss the grievance on the grounds that the evidence submitted in support of the complaint or developed in the preliminary investigation does not warrant a detailed investigation or a formal hearing (for example: grievant failed to articulate the factual basis for his or her belief that discrimination occurred; the grievance is so weak, attenuated, or insubstantial that it is without merit, or so replete with incoherent statements that the grievance, as a whole, cannot be

considered to be grounded in fact; the grievance anticipates discrimination that has not yet occurred);

- b. refer the grievance to a hearing before the Grievance Panel; or
- c. allow the parties to sign a written statement resolving the grievance. It should be understood that without the approval in writing by the appropriate Associate Dean, any agreement between the parties does not preclude further action by the University against either party.

It is the responsibility of the Associate Dean responsible for student and academic affairs of each College to insure the effective record keeping, and notifications required by the grievance procedures.

If an appeal of a dismissal of a grievance is filed, the Associate Dean will forward a copy of the investigative report and determination to the Dean. If the Associate Dean refers a grievance to a hearing before the Grievance Panel, the Associate Dean will forward a copy of the investigative report to the Panel.

- 9. Appeal of Grievance Dismissal: A student may appeal the dismissal of his/her grievance by submitting a written request for review with his/her Dean. The request for review must be submitted within five (5) calendar days of receipt of the decision to dismiss. Upon receipt of an appeal of the dismissal of a grievance, the Dean shall carefully consider the relevant information contained in the appeal as well as the investigative report and determination of the Associate Dean, to ascertain that the evidence either submitted in support of the complaint or developed in the preliminary investigation did not warrant a detailed investigation or a formal hearing. The Dean will notify the student of his/her decision in writing within ten (10) calendar days of receipt of the request for review. The decision of the Dean will be final.
- 10. Notification of Dean: Upon receipt of a formal grievance from a student, the appropriate Associate Dean shall send a copy of the grievance to the Dean of the appropriate College. The Associate Dean or his/her designated representative shall be notified of any hearing and shall be required to attend all student grievance hearings pertaining to alleged discrimination on the basis of race, color, national origin, disability, sex, or age to

serve as a University resource person. This individual shall not have a vote at the hearing, nor be present during deliberations of the Grievance Panel.

- D. Prehearing Procedures
  - Selection of Grievance Panel: When a 1 grievance is referred to the Grievance Panel, the appropriate Associate Dean shall forward a copy of his/her investigative report to a six member Grievance Panel. The Grievance Panel shall be selected as follows: A Grievance Committee will be appointed by each College Dean, consisting of nine (9) faculty and nine (9) students. For every hearing held under this procedure, the person filing the grievance and the appropriate Associate Dean or designee jointly will meet within ten (10) calendar days after the decision to refer the grievance to the Grievance Panel, and review the members of the Grievance Committee, removing from consideration any member who may with reason be considered inappropriate for the hearing (e.g., a faculty member directly involved in the issue being grieved should not sit on the Panel for that grievance). The names of the remaining members will then be written on tabs of paper, folded, placed into separate containers for faculty and students, and randomized by mixing. The grievant will draw three names from each container. The first six names will constitute the Grievance Panel, which shall be composed of three faculty and three students. The remaining names shall be drawn alternatively from each container until all names are drawn in order to develop a list of alternate members. Should a Panel member be removed for any reason during the process, that member shall be replaced by an alternate having the same status (faculty or student).
  - 2. Scheduling of Hearing of Grievance: Hearings before the Grievance Panel will be conducted no sooner than ten (10) calendar days and not later than twenty (20) calendar days after the selection of the Grievance Panel. The date of the hearing must be adhered to except for unusual circumstances which must be reported in writing as soon as possible to the appropriate Associate Dean. The hearing shall be conducted in accordance with the procedure set forth in Section E, 1 through 7 of this procedure.
  - 3. **Representation:** The grievant and the respondent have the right to be assisted by no more than two representatives, including attorneys, at any point during the initiation, filing processing, or hearing of the formal grievance; however, no representative may examine witnesses or

otherwise actively participate in a hearing. The Panel may also be assisted and advised by an attorney or other representative at its discretion.

- 4. **Evidence:** The grievant and respondent shall provide the appropriate Associate Dean with all documents to be used and relied on at the hearing, and with the name, address and telephone number of their representative(s) and witnesses no later than seven (7) calendar days prior to the date of the hearing. There will be a simultaneous exchange of this information between the parties, which will be facilitated by the Associate Dean five (5) calendar days before the date of the hearing.
- E. Hearing Procedures
  - 1. **Record of Hearing:** The hearing will be recorded by recording devices supplied by UAMS. These recordings shall be maintained for a period of three years after resolution of the grievance. The grievant or respondent may obtain a copy of the tapes from any recorded hearing, at the requesting party's expense. The deliberations of the Grievance Panel will not be recorded.
  - 2. **Counsel:** The grievant and respondent shall have the right to advice of counsel of his/her choice; however, counsel may not examine witnesses or otherwise actively participate in any hearing.
  - 3. **Private Hearing:** The hearing shall be conducted in private. Witnesses shall not be present during the testimony of any party or other witness. Witnesses shall be admitted for testimony only and then asked to leave. The parties may hear and question all witnesses testifying before the Grievance Panel.
  - 4. **Presentation of Case:** The grievant and respondent shall be afforded reasonable opportunity for oral opening statements and closing arguments and/or presentation of witnesses and pertinent documentary evidence, including sworn, written statements.
  - 5. **Grievance Panel Rights:** The Grievance Panel shall have the right to question any and all witnesses, to examine documentary evidence presented, and to summon other witnesses to review other documentation as the Panel deems necessary.
  - 6. **Grievance Panel Deliberation:** After the hearing is concluded, the Grievance Panel shall convene to deliberate in closed session and arrive at a majority recommendation.
  - 7. **Transmittal of the Recommendation:** Within five (5) calendar days after the hearing is concluded, the Grievance Panel shall transmit a

written copy of its recommendation to the appropriate Associate Dean responsible for student and academic affairs, who will then mail, by certified mail, return receipt requested, a copy of the written document to the grievant and respondent at addresses previously provided by the grievant and the respondent.

Appeal of Recommendation of the Grievance 8. Panel: If no appeal is received by the appropriate Associate Dean within seven (7) calendar days of receipt of the recommendation by the grievant and the respondent, any recommendations by the Grievance Panel shall be forwarded to the appropriate Dean for consideration. The Dean may accept the Grievance Panel recommendation, reverse it, or refer the grievance back to the Panel for reconsideration. If the last day for filing an appeal falls on a Saturday, Sunday, or a day on which the University is closed for business, then the appeal may be filed on the first day following the Saturday, Sunday, or date when the University is closed.

If the grievant or respondent wishes to appeal the recommendation of the Grievance Panel, the respondent and/or grievant shall, within seven (7) calendar days of the receipt of the recommendation, appeal the grievance recommendation to the Dean through the Associate Dean. The appeal shall be in writing.

If an appeal is submitted, it will be transmitted to the appropriate Dean. The Dean shall review the appeal and notify the parties of his/her determination within ten (10) calendar days from the date of his/her receipt of the appeal. The decision of the Dean is final and may not be appealed further.

The Dean's review is the final institutional step in matters of discrimination grievances. However, nothing precludes the grievant or respondent from filing a complaint with any external agency that handles discrimination complaints.

- F. Other
  - 1. Grievances Involving a Grievant and Respondent from Different Units of UAMS: Whenever a grievance is instituted by a student grievant in one college against a respondent in another college or unit, the grievance shall proceed through the Associate Dean, Dean, and Grievance Committee from the college in which the student is enrolled.
  - 2. Maintenance of Written Grievance Records: Records shall be kept of each grievance process. These records shall be confidential to the extent allowed by law, and shall include, at minimum: the written grievant complaint filed

by the grievant, the written response filed by the respondent, the investigative report of the Associate Dean, the recording and documents of the hearing, the written recommendation of the Grievance Panel, the results of any appeal, the decision of the Dean, and any other material designated by the Associate Dean responsible for Student and Academic Affairs. A file of these records shall be maintained in the Office of the Associate Dean responsible for Student and Academic Affairs for each college.

For purposes of the dissemination of grievance precedents, separate records may be created and kept which indicate only the subject matter of each grievance, the resolution of each grievance, and the date of the resolution. These records shall not refer to any specific individuals and they may be open to the public in accordance with the Arkansas Freedom of Information Act or pertinent Federal laws.

3. **Retaliation**: No person shall be subjected to retaliation for having utilized or having assisted others in the utilization of the grievance process.

### CHRP GENERAL STUDENT GRIEVANCE PROCEDURE

A grievance based upon a complaint of discrimination should follow the UAMS Grievance Procedure found on page 104 of this catalog.

A. Prologue

The Student Grievance Procedure represents a mechanism whereby any student may obtain a review of a complaint of unfair treatment. The Grievance Procedure shall not be used to question a rule, procedure or policy established by an authorized faculty or administrative body. Rather it shall be used for a hearing and due process for those who believe that a rule, procedure or policy has been applied in an unfair or inequitable manner, or that there has been unfair or improper treatment by a person or persons.

B. Informal Procedure

In the academic community, the responsibility for course development, course delivery, and the assessment of student achievement rests primarily with each course instructor. Any student who has a complaint of unfair treatment related to a course should first seek to resolve it informally with the course instructor. A student with such a complaint must request reconsideration of the application of a rule, procedure, or policy or unfair or improper treatment within three (3) working days following the incident which forms the basis for the complaint (e.g., three days after grades are posted). If resolution is not achieved at this level, the student should seek resolution with the chairman of the department in which the course is offered (if the course instructor is the Department Chairman, the student should seek resolution with him/her at the outset). If, after the informal attempt to resolve the complaint, the chairman concludes that the complaint cannot be resolved, the student will be so notified by the chairman. Accordingly, if the student concludes after the informal attempt that the complaint cannot be resolved, the student will so notify the chairman. In either case, then and only then should the formal grievance procedure be initiated by the student. For issues or complaints that are not course-specific, the student should seek resolution with his/her Department Chairman first, before considering initiating the grievance procedure.

C. Formal Procedure

A student with a grievance (the grievant) must submit a written statement to the Dean of the College of Health Related Professions or his/her designee outlining specifics within three (3) working days following notification of the failure to resolve the complaint. The student may request that the Dean convene a Grievance Panel for the purpose of conducting a hearing to determine the facts; the panel may then recommend a resolution to the Dean (or his/her designee). In the absence of such a request from the grievant, the Dean (or his/her designee) may choose to convene a Grievance Panel, or the Dean (or his/her designee) may render a decision without participation by a Grievance Panel.

In the College of Health Related Professions, the Grievance Panel shall be selected as follows: A Grievance Committee consisting of nine (9) faculty and nine (9) students, will be appointed annually by the Dean. For every hearing held under this procedure, the grievant and the appropriate Associate Dean or designee jointly will meet within eight (8) working days after the decision to refer the grievance to the Grievance Panel and review the members of the Grievance Committee, removing from consideration any member who may with reason be considered inappropriate for the hearing (e.g., a faculty member directly involved in the issue being grieved should not sit on the Panel for that grievance). The names of the remaining members will then be written on tabs of paper which will be folded and placed into separate containers for faculty and students and randomized by mixing. The grievant will draw three names from each container. The first six names will constitute the Grievance Panel, which shall be composed of three faculty and three students. The remaining names shall be drawn alternatively from each container until all names are drawn in order to develop a list of alternate members. Should a Panel member be

removed for any reason during the process, that member shall be replaced by an alternate having the same status (faculty or student).

The Dean will schedule the hearing to take place no sooner than three (3) working days and not later than ten (10) working days after the Panel is notified, unless there is a specific reason why another time must be selected (e.g., availability of participants).

### 1. The Pre-Hearing

At a prearranged time prior to the hearing, the members of the Panel, the grievant, and faculty members directly named in the grievance will meet briefly with the Dean, or his/her designee, to be given the charge (*i.e.*, to determine whether the grievant has been treated fairly and equitably), plus all relevant background data. The grievant and faculty members named in the grievance should identify documents which they intend to submit to the hearing as well as a list of witnesses whom they believe have information relevant to the grievance. The Panel may restrict the number of documents and witnesses if it considers their proposed testimony to be cumulative, repetitive or not relevant to the grievance. The grievant may have one (1) person from the UAMS campus community (i.e., faculty, student, or staff) present during the pre-hearing to advise him/her. This person may not address the Panel, speak on behalf of the grievant, or otherwise actively participate in the prehearing. Faculty members named in the grievance may be present during the prehearing but may not speak. The Panel will then meet in closed session to elect a chairman who will preside at the subsequent hearing. The Panel may require copies of relevant documents be presented prior to the hearing as well as any written statements by the grievant or the faculty members named in the grievance in support or defense of the grievance.

### 2. The Hearing

The hearing will be conducted in private. Witnesses will be admitted for testimony only and then asked to leave. The testimony will be tape-recorded, but deliberations of the Panel will not be recorded. The grievant may have one (1) person from the UAMS campus community (*i.e.*, faculty, student, or staff) present during the hearing to advise him/her. This person may not address the Panel, speak on behalf of the grievant, question witnesses, or otherwise actively participate in the hearing. The grievant must appear in person, make an oral statement of the grievance and answer questions from the faculty directly named in the grievance and from members of the Panel. The grievant may submit sworn written statements, other exhibits, and witnesses in his/her behalf. The grievant, Panel, and faculty directly named in the grievance may hear and guestion all witnesses testifying before the Panel. The faculty directly named in the grievance must appear in person, make an oral statement in response to the grievance, and answer questions from the grievant and from members of the Panel. The faculty directly named in the grievance may submit sworn written statements and other exhibits and witnesses. The Panel shall make its determination of whether the grievant was treated fairly or unfairly based upon the evidence presented at the hearing which is relevant to the issue or issues before the Panel. The grievant, the grievant's advisor, witnesses, and faculty directly named in the grievance may not be present during the Panel's deliberations. The determination will be presented by the Grievance Panel to the Dean, or his/her designee, in writing by the end of the third working day following the conclusion of the The deliberations. Panel may make recommendations for resolution of the dispute. The grievant and faculty directly named in the grievance shall be notified in writing by the Dean or his/her designee of the Panel's determination within three (3) working days following his/her receipt of the Panel's determination. The notification may be hand-delivered to the grievant and faculty directly named in the grievance or sent by registered mail with return receipt (and with a copy by regular mail) to their last known addresses. In the event a registered letter is returned undelivered after a notice has been left for the addressee, it shall be presumed that the copy sent by regular mail was received three (3) days following the date of mailing unless it is returned undelivered. Within seven (7) working days of the receipt of the Dean's or his/her designee's notification to the grievant or the faculty directly named in the grievance of the Panel's determination, either party by a request for reconsideration may contest in writing to the Dean or his/her designee that a substantial mistake of fact occurred, a fundamental misinterpretation of official policies is evident, or a significant procedural defect took place. These are the only bases for contesting the determination of the Panel. After receipt of a determination from the Panel, and if the seven day period has elapsed without the filing of a request for reconsideration, the determination of the Panel shall be a recommendation which the Dean or his/her designee may accept or reject, in whole or in part.

If the determination of the Panel is contested by a grievant or by the faculty directly named in the grievance, the Panel will reconvene within ten (10) working days of the Dean's or his/her designee's receipt of the request for reconsideration to review the bases of the contest. If the Panel concurs with the contestant, it will correct the procedural defect, reinterpret the policy as appropriate, or review the factual error, and then review its determination and revise it if the Panel deems appropriate. The Panel will present its determination in writing to the Dean or his/her designee within three (3) working days following the conclusion of its deliberations. A second determination from the panel, if submitted to the Dean or his/her designee by the Panel subsequent to a second hearing resulting from a request for reconsideration, shall be a recommendation which the Dean or his/her designee may accept or reject, in whole or in part. The decision of the Dean or his/her designee shall be sent in writing to the grievant and faculty directly named in the grievance within five (5) working days thereafter. The notification may be hand-delivered to the grievant and faculty directly named in the grievance or sent by registered mail with return receipt (and a copy by regular mail) to their last known addresses. The decision of the Dean or his/her designee shall be final.

#### NONCOGNITIVE PERFORMANCE STANDARDS

Students are accountable for conducting themselves as responsible adults. A Student Handbook, available from the Department Chairman, has been developed to aid in this process.

**Student Conduct:** A College of Health Related Professions student is considered to be a mature adult whose attitude, conduct, and morals are compatible with the functions and missions of the University of Arkansas for Medical Sciences as an educational institution, and with the ethical standards of his/her chosen profession. Each student is expected to comply with requests of University officials in the performance of his/her duties; to obey the laws of the city, state, and nation; and to refrain from conduct which would demean the ethics and integrity of his/her chosen profession.

**CHRP Student Responsibilities Code:** Failure to comply with the requirements of any code item could result in a conference with the Department Chairman or his/her designee to discuss the difficulty. Should a conference be held and the problem continue after the conference, the chairman will place the student on disciplinary probation or dismiss him/her from the department and the College. In very serious cases, the chairman may dismiss the student immediately after the conference. The following is a description of the principal noncognitive responsibilities of students in the College:

- 1. Come adequately prepared for class.
- 2. Attend all classes, laboratories, and clinical/field experiences, as scheduled, unless previous arrangements have been made with the instructor or department chairman.
- 3. Request instructor/student conferences when needed.
- 4. Treat patients and co-workers justly and impartially, regardless of their sex or their physical, mental, emotional, political, economic, racial, or religious characteristics.
- 5. Maintain a non-biased, open point-of-view during class sessions.
- 6. Request and take makeup examinations, if permitted by the instructor, within the specified period of time for the given course.
- 7. Act as a favorable role model for your chosen health profession at all times.
- 8. Be responsible for the condition of the instructional area during and at the completion of a class session.
- 9. Refrain from smoking, eating, or drinking in classrooms and in specifically designated areas during class or clinic sessions.
- 10. Maintain and arrange class materials in a form which will be usable in the future as a professional reference.
- 11. Attempt to resolve concerns and questions in a courteous and informal manner, utilizing only when necessary the Grievance Procedure according to the published rules.
- 12. Adhere to the student responsibilities required by the program in which enrolled.
- 13. Maintain academic integrity (see Academic Integrity Statement in the Student Handbook) by doing one's own work.

The University of Arkansas for Medical Sciences, College of Health Related Professions reserves the right to dismiss a student at any time on the grounds the University and College judge to be appropriate. Each student by his own admission to the College recognizes this right of the University and College.

The continuance of any student on the roster of the College, the receipt of academic credit, graduation, and the granting of a degree or certificate rest solely within the powers of the University and College.

## SERVICES FOR STUDENTS

The following is an alphabetical listing of some of the services available to students of the College. It is intended as a brief introduction of what is available and where to go for further information. Consult the CHRP Student Handbook for details.

**ATHLETIC TICKETS:** Check with the Student Activities and Housing Office, ground floor of the Jeff Banks Student Union, for applications and current policies. Call (501) 686-5850 for further information.

**AUTOMATIC BANKING TELLERS:** Banking services are available via automatic tellers located in the lobby of the University Hospital of Arkansas near the Information desk and in the lower level of the University Hospital of Arkansas near the cafeteria entrance and across the hallway from the College of Medicine offices.

**DENTAL HYGIENE SERVICES:** Dental hygiene care is available at the Dental Hygiene Clinic, Room S1/23 of the Shorey Building. Services include teeth cleaning, diagnostic radiographs, and fluoride applications. For appointments call (501) 686-5733.

**EDUCATIONAL DEVELOPMENT SERVICES:** Assistance in such areas as study habits and test taking skills are available. For appointments, call the UAMS Office of Educational Development at (501) 686-5720.

**HEALTH SERVICES:** The Student and Employee Health Service, located in the Family Medical Center at 521 S. Elm Street, provides required TB skin tests and recommended Hepatitis B shots at no cost to students. All other services are billed to the student and his/her insurance company. Students and their families are invited to take advantage of the comprehensive range of health services available in the Family Medical Center including episodic care, continuity medical care, and preventive services. Telephone (501) 686-6560 for further information.

**LIBRARY SERVICES:** Call (501) 686-5980 for further information.

**Computer Searches**—The library has a full array of electronic services both internally and through the INTERNET, including an online catalog, MEDLINE, CINAHL, PsychInfo, Health Administration, CancerLit, IPA, several CD-ROM stand-alone packages and an INTERNET workstation. Mediated searching and document delivery are offered for a fee.

**Interlibrary Loan**—Many materials not available in the UAMS Library collection may be borrowed through interlibrary loan. Details and request forms are available from the Interlibrary Loan Office.

**Learning Resources Center**—Both audiovisual and computer-based instruction are available.

**Microforms**—Reader/Printers for both microfilm and microfiche formats are available for student use.

**MENTAL HEALTH SERVICES:** Preventative service created to provide short term, confidential, assistance for students who are actively enrolled at UAMS (Little Rock Campus). Students may seek help for depression, anxiety, grief, relationship conflicts, academic difficulties, and numerous other issues interfering with their maximal functioning. For further information, call (501) 686-8408.

**MINORITY STUDENT ASSISTANCE:** The Associate Director of the CHRP Office of Student Affairs may be able to assist in responding to minority student needs or problems. For further information, call (501) 686-5730.

**PHARMACY SERVICES:** Students receive discounts on prescriptions filled at the UAMS Ambulatory Care Center Pharmacy. For details, call (501) 686-5530.

**RECREATIONAL SERVICES:** The Student Activities and Housing Office, located in the Jeff Banks Student Union, is a good source of information as to what is currently available. Volleyball, basketball, table tennis, ping-pong equipment may be checked out upon presentation of a UAMS ID. A weight room is also available for student use. For further information, call (501) 686-5850.

**SPEECH, LANGUAGE, HEARING CLINIC:** The College cooperatively sponsors a clinic for clients with communicative disorders. Speech, language and hearing evaluations and therapy are available to students at reduced rates. This clinic is located at the University of Arkansas at Little Rock. For further information, call (501)569-3155.

**TRANSCRIPT SERVICES:** All undergraduate transcripts are available from the CHRP Office of Student Affairs, Room S1/01 in the Shorey Building. Call (501) 686-5730 for further information.

## **USEFUL ADDRESSES**

For general career information, general program information, Speaker's Bureau requests, consumer information, academic standing appeals.

Dean's Office College of Health Related Professions University of Arkansas for Medical Sciences Shorey Bldg. 1S/01 4301 West Markham, UAMS #619 Little Rock, Arkansas 72205

For application requests, catalog requests, transcript requests, transfer credit inquiries, student records inquiries, applicant letters of recommendation, applicant transcripts for undergraduate programs and CHRP graduate degree programs (Au.D., Dietetics Internship, M.I.S.)\*, applicant examination scores.

Office of Student Affairs College of Health Related Professions University of Arkansas for Medical Sciences Shorey Building 1S/01 4301 West Markham, UAMS #619 Little Rock, Arkansas 72205 \*Applications and transcript requests for the Master of Science Degree programs in Clinical Nutrition, Communicative Disorders, and Genetic Counseling should be directed to the Graduate School Office, 4301 West Markham, UAMS #609, Little Rock, Arkansas 72205. Application and inquires for the Dietetic Internship should be directed to the Dietetics and Nutrition Department.

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Wallenmeyer, Mark, B.A., C.N.M.T. Instructor of Nuclear Medicine Imaging Sciences (2003). B.A., Southwest Baptist University, 1990; Certificate of Nuclear Medicine, Baylor College of Medicine, 1992.

Warner, Mary Catherine, B.S., C.N.M.T. Clinical Instructor of Nuclear Medicine Imaging Sciences, Our Lady of the Lake Regional Medical Center (2002). B.S., University of Arkansas for Medical Sciences, 2001.

Warren, Catherine G., M.Ed., R.D.H. Associate Professor of Dental Hygiene (1972). B.S., University of Arkansas, 1967; M.Ed., University of Arkansas, 1981; Post-Baccalaureate Certificate of Public Health, University of Arkansas for Medical Sciences, 2005.

Warren, Robert H., M.D. Co-Medical Director and Professor of Respiratory Care, ACH (1979). B.S., Baylor University, 1963; M.D., University of Arkansas for Medical Sciences, 1967.

Weatherton, Maurice A., Ph.D., C.C.C.-A. Emeritus Professor of Audiology and Speech Pathology (1974). B.A., Henderson State Teachers College, 1961; M.A., University of Alabama, 1965; Ph.D., University of Kansas, 1970.

Westfall, Christopher T., M.D., F.A.C.S Professor and Medical Director of Ophthalmic Technologies (2000), B.S., U.S. Military Academy at West Point, New York; M.D., Ohio State University, 1976.

White, Eric, B.S., C.N.M.T. Clinical Instructor of Nuclear Medicine Imaging Sciences, Willis Knighton Medical Center (2002). B.S., University of Arkansas for Medical Sciences, 2000. White, William, M.D. Associate Dean for Veterans Affairs (1997). Associate Chief for Staff for Education/Operation, CAVHS. B.S., University of Arkansas, 1959; M.D., University of Chicago, 1963.

**Wiggins, Michael N., M.D.** Assistant Professor of Ophthalmic Technologies (2005). B.S., University of Central Arkansas, 1993; M.D., University of Arkansas for Medical Sciences, 1997.

Wingfield, Linda S., M.Ed., R.T.(R)(T)(ARRT). Assistant Professor of Radiation Therapy, CARTI (1999) and Clinical Instructor of Radiologic Technology, CARTI (1979). B.S., University of Central Arkansas, 1975; M.Ed., University of Arkansas at Fayetteville, 1982.

Winters, Ronald H., Ph.D. Professor and Dean of College of Health Related Professions (1982). B.A., California State University, Northridge, 1963; Ph.D., Oregon State University, 1969.

Woods, Cathryn, B.S., R.D. Instructor of Dietetics and Nutrition, CAVHS (1992). B.S., Mississippi State University, 1992.

Woods, Lugene A., M.Ed., M.T.(ASCP), C.L.S.(NCA). Assistant Professor of Medical Technology (2005). B.S., University of Arkansas for Medical Sciences, 1976; M.Ed., University of Arkansas at Little Rock, 1996.

**Yakoubian, Scott, M.S.** Assistant Professor of Radiation Therapy, CARTI (1997). B.S., University of Arkansas at Little Rock, 1991; M.S., Georgia Institute of Technology, 1993.

Yan, Yulong, Ph.D., D.A.B.R. Assistant Professor and Division Director of Medical Dosimetry (2002). B.S., Nanjing University of Aeronautics & Astronautics, 1985; M.S., Nanjing University of Aeronautics & Astronautics, 1988; Ph.D., Southeast University, China, 1997.

Young, Quinnie J., M.A., M.Ed., R.T.(R)(ARRT). Associate Professor of Radiologic Imaging Sciences and Diagnostic Medical Sonography (1966). B.S., University of Arkansas for Medical Sciences, 1979. M.Ed., University of Arkansas at Fayetteville, 1987; M.A., University of Arkansas at Little Rock, 1996.

**Younger, Frank, Jr., D.D.S.** Instructor of Dental Hygiene, CAVHS (1987). B.S., University of Tennessee, 1973; D.D.S., University of Tennessee at Memphis, 1977.

**Youssef, Emad F., M.D.** Assistant Professor of Radiation Oncology (2003). B.S., Cairo University, 1990; M.D., Cairo University, 1995.

**Zoeller, Mark, D.D.S.** Associate Professor of Dental Hygiene (1995). B.S., Southwest Texas State University, 1977; D.D.S., University of Tennessee, 1983.

Zraick, Richard., Ph.D., C.C.C.-S.L.P. Associate Professor of Audiology and Speech Pathology (1997). B.A., University of Arizona, 1984; M.S., University of Arizona, 1987; Ph.D., Arizona State University, 1998.

## **GENERAL CALENDAR**

Unless otherwise noted, the terms "College" and "University" refer to the College of Health Related Professions and the University of Arkansas for Medical Sciences respectively. The terms "you" or "the student" refer to duly-registered students in the College. "Program" refers to the appropriate CHRP Program previously mentioned in that section.

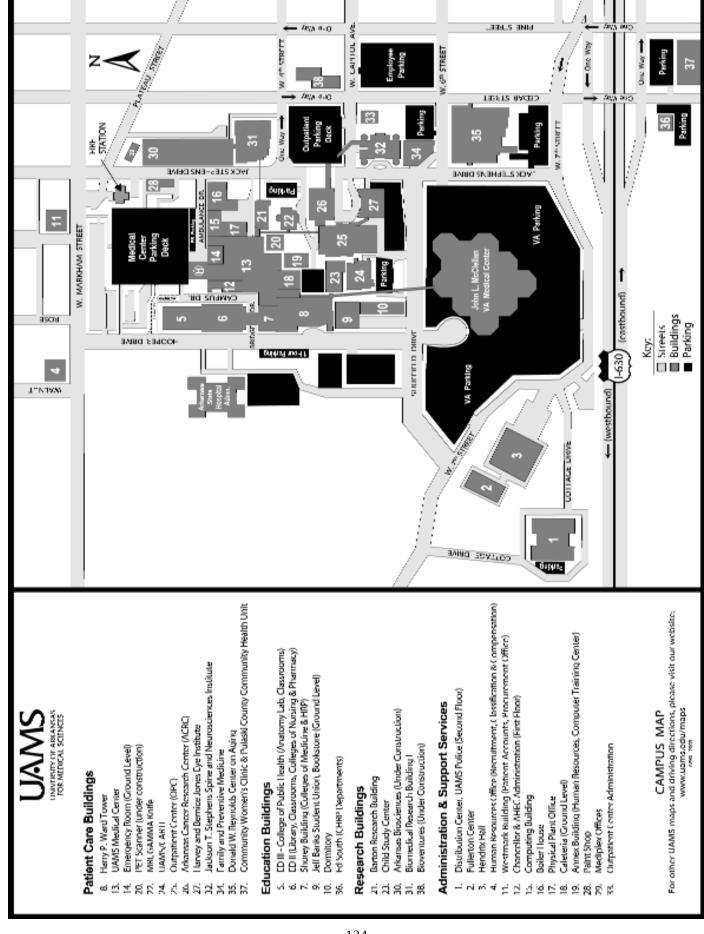
The following are dates for registration and beginning of classes for the College for the 2006–2007 academic year. Please note that special courses and cooperative programs with other institutions do not always conform to this calendar. Contact the appropriate department office to determine if any non-standard dates apply.

|   | , ,                                   |
|---|---------------------------------------|
| FALL SEMESTER 2006                              |                                       |
| August 23, Wednesday                            | Registration                          |
| August 24, Thursday                             | Registration                          |
| August 25, Friday                               | Classes begin                         |
| SPRING SEMESTER 2007                            |                                       |
| January 10, Wednesday                           | Registration                          |
| January 11, Thursday                            | Classes begin                         |
| COMMENCEMENT 2007                               |                                       |
| May 19, Saturday                                |                                       |
| SUMMER SESSION 2007                             |                                       |
| May 29, Tuesday                                 | Registration                          |
| May 30, Wednesday                               | Classes begin                         |
| STUDENT HOLIDAYS                                |                                       |
| Labor Day                                       | (first Monday in September)           |
| Presidents' Day                                 | (third Monday in February)            |
| Veterans' Day*                                  | (November 11)                         |
| Spring Semester Break                           |                                       |
| Thanksgiving and following Friday               |                                       |
| Memorial Day                                    | (last Monday in May)                  |
| Christmas Vacation and New Year's Day*          |                                       |
| Independence Day*                               |                                       |
| Martin Luther King, Jr. Day                     | (third Monday in January)             |
| *M/hop those halidays fall on Saturday, the pro | coding Eriday is observed as the holi |

\*When these holidays fall on Saturday, the preceding Friday is observed as the holiday. When the holiday falls on Sunday, the following Monday is observed. When Christmas Day falls on Saturday, the following Monday is observed. In addition to the above, unscheduled holidays as declared by the Governor of Arkansas are observed.

Class schedules for individual programs in the College should be consulted to determine the availability of specific courses to be offered during a given semester. There is no assurance that a given course or program will be offered every year.

The College of Health Related Professions reserves the right to withdraw courses at any time, change fees, policies, procedures, rules, calendar, curricula, degree programs, degree requirements, graduation procedures, and any other requirement affecting students. The provisions of this catalog do not constitute a contract, expressed or implied, between any applicant or student and the College of Health Related Professions.



### CHRP UNDERGRADUATE APPLICATION FOR ADMISSION COLLEGE OF HEALTH RELATED PROFESSIONS UNIVERSITY OF ARKANSAS FOR MEDICAL SCIENCES

Return this form and \$10.00 (non-refundable) application fee to: CHRP Admissions Office, 4301 West Markham, #619, Little Rock, AR 72205.

#### All sections must be completed to process the application.

#### PERSONAL INFORMATION

| PLEASE PRINT  | Date of Birth: Month/Day/Year                |
|---|--|
| Social Security Number  | / /  |
| Legal Name: Last/First/Middle   |  |
| Other Names Under Which Transcripts Might Appear:   |  |
| CURRENT MAILING ADDRESS: Street/City/State/Zip  |  |
|   | County/Parish                                |
| Home Phone ( ) Work Phone (   | )  |
| If less than six (6) months, indicate previous address:                                       |  |
| PERMANENT MAILING ADDRESS: Street/City/State/Zip  |  |
|   | County/Parish                                |
| Home Phone ( ) E-mail Address   |  |
| FEDERAL AND STATE REPORTS REQUIRE THE FOLLOWING INFORMATION                                   | N:   |
| MALEWHITE, NON-HISPANICBLACK, NON-HISPANICBLACK, NON-HISPANICAMERICAN INDIAN OR ALASKA NATIVE | HISPANIC<br>ASIAN OR PACIFIC<br>ISLANDER     |
| CITIZENSHIP: U.S. Citizen Yes Mo If NO, Indicate Country of                                   | Origin                                       |
| Place of Birth Native La  | nguage                                       |
| Non-Resident AlienYesNo Visa Type   |  |
| Permanent Resident Alien or ImmigrantYesNo  |  |
| Have you ever been convicted of a felony?YesNo If Yes, please a                               | attach a separate sheet with an explanation. |

## ACADEMIC INFORMATION

#### CHRP PROGRAM FOR WHICH YOU ARE APPLYING (CHECK ALL THAT ARE APPLICABLE):

| <ul> <li>Cytotechnology</li> <li>Dental Hygiene</li> <li>Diagnostic Medical Sonography</li> <li>Little RockFayette</li> <li>Texarkana</li> <li>Degree Completion (Already ARD</li> <li>Emergency Medical Sciences</li> <li>Paramedic</li> <li>Basic</li> <li>Medical Dosimetry</li> <li>Medical Technology</li> <li>Traditional Degree Program</li> <li>MLT-MT</li> </ul> | Rad<br>evilleRad<br>MS Certified)<br>Res<br><br><br>Not | — Full-Time<br>iation Therapy <sup>(St</sup><br>iologic Imaging S<br>— Fayetteville<br>Little Rock<br>piratory Care (India<br>Little Rock<br>— Texarkana<br>e: Check one of t | anagement (Medical Record Tech)<br>———Part-Time<br>udents must have earned 39 hours of Radiologic<br>aging Sciences course work to apply for this program)<br>ciences (Indicate 1st, 2nd, 3rd preference)<br>————Texarkana<br>cate 1st and 2nd preference)<br>he following for Respiratory Care:<br>onal Degree Program<br>year Program Option<br>• RRT |
|---|---|---|---|
| Nuclear Medicine Imaging Science  | s   | RRT to  | BS  |
| Ophthalmic Technologies   |   | gical Technology  | 20  |
| Year you wish to enroll:<br>DEGREE/CERTIFICATE SOUGHT (CHECK<br>CertificateAssociate of<br>ARE YOU ATTENDING COLLEGE NOW:   | ONE):<br>Science  | Bachelor of Scien   | ceAdvanced Certificate  |
|   |   |   |   |
| <b>EDUCATIONAL INSTITUTIONS ATTEND</b><br>Colleges, Universities, or Other Education  |   |   | Institution First) All High Schools,  |
| Name of Institution<br>(Do Not Abbreviate)  | Dates Attended  | Hours Earned  | Degrees/Certificate Earned (if any)   |
|   |   |   |   |
|   |   |   |   |
|   |   |   |   |
|   |   |   |   |
|   |   |   |   |
|   |   |   |   |
|   |   |   |   |

Return completed application and have each educational institution you attended send one official transcript to the address listed on the opposite side of this application. Transcripts issued to students are NOT acceptable. **NOTE:** Some departments/programs do not require high school transcripts (refer to latest CHRP catalog).

I hereby affirm that all information supplied on this form is complete and accurate. It is my understanding that I shall not be considered for admission to the University of Arkansas for Medical Sciences until I have submitted all credentials specified by the College and Department or Program. I understand that withholding information requested or giving false information will make me ineligible for participation in the program.

SIGNED\_\_\_\_\_

### CHRP GRADUATE APPLICATION FOR ADMISSION COLLEGE OF HEALTH RELATED PROFESSIONS UNIVERSITY OF ARKANSAS FOR MEDICAL SCIENCES

Return this form and \$10.00 (non-refundable) application fee to: CHRP Admissions Office, 4301 West Markham, #619, Little Rock, AR 72205.

#### All sections must be completed to process the application.

#### PERSONAL INFORMATION

| PLEASE PRINT  | Date of Birth: Month/Day/Year                |
|---|--|
| Social Security Number  | / /  |
| Legal Name: Last/First/Middle   |  |
| Other Names Under Which Transcripts Might Appear:   |  |
| CURRENT MAILING ADDRESS: Street/City/State/Zip  |  |
|   | County/Parish                                |
| Home Phone ( ) Work Phone (   | )  |
| If less than six (6) months, indicate previous address:                                       |  |
| PERMANENT MAILING ADDRESS: Street/City/State/Zip  |  |
|   | County/Parish                                |
| Home Phone ( ) E-mail Address   |  |
| FEDERAL AND STATE REPORTS REQUIRE THE FOLLOWING INFORMATIO                                    | N:   |
| MALEWHITE, NON-HISPANICBLACK, NON-HISPANICBLACK, NON-HISPANICAMERICAN INDIAN OR ALASKA NATIVE | HISPANIC<br>ASIAN OR PACIFIC<br>ISLANDER     |
| CITIZENSHIP: U.S. CitizenYesNo If No, Indicate Country of                                     | Origin                                       |
| Place of Birth Native La  | nguage                                       |
| Non-Resident AlienYes*No Visa Type  |  |
| Permanent Resident Alien or ImmigrantYes*No   |  |
| Have you ever been convicted of a felony? YesNo If Yes, please a                              | attach a separate sheet with an explanation. |

## ACADEMIC INFORMATION

#### CHRP GRADUATE PROGRAM FOR WHICH YOU ARE APPLYING (CHECK ALL THAT ARE APPLICABLE):

| Audiology (Au.D.) ——Radiologist Assistant (M.I.S.)   |
|--|
| Semester you wish to enroll:FallSpringSummer<br>(Audiology only allows for admission in the fall semester) |
| Year you wish to enroll: Have you ever applied to CHRP before?YesNo  |
| DEGREE/CERTIFICATE SOUGHT (CHECK ONE):   |
| Doctor of Audiology (Au.D.)Master of Imaging Sciences (M.I.S.)   |
| ARE YOU ATTENDING COLLEGE NOW:YesNo If Yes, where?   |

#### **GRADUATE RECORD EXAMINATION (APTITUDE SECTIONS)**

| Date T | Taken | Verbal Score | Quantitative | Writing |
|--------|-------|--------------|--------------|---------|
| Mo.    | Yr.   | Score        | Score        | Score   |
|        |       |              |              |         |
|        |       |              |              |         |
|        |       |              |              |         |
|        | TO    | ÊFL          |              |         |
| Date T | Taken | Score        |              |         |
| Mo.    | Yr.   |              |              |         |
|        |       |              |              |         |
| 1      |       |              |              |         |

| Name of Institution<br>(Do Not Abbreviate) | Dates Attended | Hours Earned | Degrees/Certificates Earned (if |
|--|----------------|--------------|---------------------------------|
|  |                |              |                                 |
|  |                |              |                                 |
|  |                |              |                                 |
|  |                |              |                                 |
|  |                |              |                                 |

Return completed application and have each educational institution you attended send one official transcript to the address listed on the opposite side of this application. Transcripts issued to students are NOT acceptable.

I hereby affirm that all information supplied on this form is complete and accurate. It is my understanding that I shall not be considered for admission to the University of Arkansas for Medical Sciences until I have submitted all credentials specified by the College and Department or Program. I understand that withholding information requested or giving false information will make me ineligible for participation in the program.

SIGNED\_\_\_\_\_

DATE \_\_\_\_\_

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