Kettering College of Medical Arts

KETTERING HEALTH NETWORK℠

Academic Bulletin
2010-11

Undergraduate and Graduate Issues

3737 Southern Blvd.
Kettering, OH 45429
937-395-8601
800-433-KCMA
www.kcma.edu

The information in this *Academic Bulletin* is designed to be as accurate as possible. Please see the Kettering College of Medical Arts Web site (www.kcma.edu) for the most up-to-date admission and curricular requirements for each major. Students are admitted under and are subject to the provisions of the *Bulletin*. The College reserves the right to make any changes as circumstances require.

A Message from the President

You are the future of health care.

When you finish a degree and enter the health-care work force, you will meet deeply felt human need every day. You will bring comfort — and sometimes joy — to vulnerable people. What is more, you'll gain professional satisfaction from doing so.

I am delighted by your involvement with Kettering College of Medical Arts. And I am proud of the teachers and staff members who together educate our students. They make this a progressive place, and they will help you become a graduate everyone is proud of and wants to hire.

In your partnership with these teachers and staff members, you will grow into a career where both competence and character matter. You will become a person who is at once generous and highly valued. And it's in that light that I am especially pleased to welcome you to Kettering College of Medical Arts.

Sincerely,

Charles Scriven
President

Contents

Academic Calendar

FALL SEMESTER 2010

Monday-Wednesday, Aug. 23-25	Faculty and staff pre-week
Thursday, Aug. 26	New student orientation
Friday, Aug. 27	Returning student and new student orientation
Monday, Aug. 30	Classes begin
Friday, Sept. 3	Convocation
	Last day to add a class*
Monday, Sept. 6	Labor Day; no classes
Monday, Sept. 13	Last day to drop with 100 percent refund*
Thursday and Friday, Oct. 14-15	Fall break
Monday, Oct. 18	Classes resume
Friday, Oct. 22	Semester midpoint
Monday, Nov. 22	Last day to drop with WP/WF*
Wednesday-Friday, Nov. 24- 26	Thanksgiving; no classes
Monday, Nov. 29	Classes resume
Friday, Dec. 17	Last day of the semester
Saturday, Dec. 18-Sunday, Jan. 9	Winter break

WINTER SEMESTER 2011

Friday, Jan. 7	Orientation for new students
Monday, Jan. 10	Classes begin
Friday, Jan. 14	Convocation
	Last day to add a class*
Monday, Jan. 17	Martin Luther King Jr. Day; no classes
Monday, Jan. 24	Last day to drop with 100 percent refund*
Friday, Feb. 25	Semester midpoint
Monday-Friday, March 7-11	Spring break
Monday, March 14	Classes resume
Friday, March 25	Last day to drop with WP/WF*
Friday, April 22	Good Friday; no classes
Thursday, April 28	Last day of the semester
Friday, April 29	Graduation practice
Saturday, April 30	Graduation
Sunday, May 1-Sunday, May 8	Break

SUMMER SEMESTER 2011

Friday, May 6	Orientation for new students
Monday, May 9	Classes begin
Friday, May 13	Last day to add a class*
Friday, May 20	Last day to drop a class for 100 percent refund*
Monday, May 30	Memorial Day; no classes
Wednesday, June 22	Last day to drop with WP/WF*
Monday, July 4	Independence Day; no classes
Friday, July 15	Last day of the semester
Saturday, July 16-Sunday, Aug. 21	Break

*For non-traditional courses (five-week and seven-week), drop/add days may vary.

The College

Kettering College of Medical Arts, occupying a suburban campus near Dayton in southwest Ohio, is a coeducational college owned by the Kettering Medical Center and chartered by the Seventh-day Adventist Church. When the College first opened its doors in 1967, more than 100 freshmen were enrolled, many of whom became the first graduates in 1969. The state charter granted in 1968 empowered the College, as the educational component of Kettering Medical Center, to conduct instruction in the arts, sciences, and allied health professions.

"It must be an educational center as well as a medical service center, involved in preparing young people for satisfying lives of service here and in other institutions of the world." These were some of the words with which Eugene W. Kettering set aside 35 acres of the family estate as the campus for a proposed medical center to commemorate the name and ideas of his father, Charles F. Kettering, soon after the great inventor's death in 1958.

The historic pattern of education in medical institutions has been one of apprenticeship, in-service training, and service-oriented lectures. Over the years, however, the strength of academic methods, organization, and presentation of instruction in allied health and nursing curricula has been effectively demonstrated. Thus it was determined by the founders that the educational purpose of the medical center should be served by the establishment of an academic institution offering curricula in a variety of health careers, as well as arts and sciences.

Physical facilities for the College were constructed on the campus adjacent to the Charles F. Kettering Memorial Hospital, the clinical component of the Kettering Medical Center, which was opened to patients in 1964. As qualified leaders were acquired for administrative and faculty positions in the College, the counsel of many authorities in education and in the professions was retained to ensure that its concept and programs would, from the outset, be both academically sound and in keeping with the Kettering tradition of innovation.

COLLEGE MISSION

Kettering College of Medical Arts, born out of Adventist faith, offers graduate and undergraduate degrees in health science. Upholding Christ, the college educates students to make service a life calling and to view health as harmony with God in body, mind, and spirit.

COLLEGE VISION

Kettering College of Medical Arts excels in achieving mission-based institutional and professional outcomes. Passion for excellence drives our work and builds our reputation.

KCMA PURPOSES

Kettering College of Medical Arts, chartered by the Seventh-day Adventist Church and a division of Kettering Medical Center, is an institution of higher education that provides its students with quality health care education integrated with Christian principles and values in a caring environment. The board of directors, administrators, faculty, and staff of Kettering College of Medical Arts seek to provide opportunities for students to develop intellectually, spiritually, and physically.

KCMA offers educational curricula for health profession degrees, certificates, and continuing education. We prepare qualified, highly competent health care professionals committed to whole-person care and compassionate service, graduates who continue to grow as contributing members of their profession and community. Toward that end, we provide curricula designed to develop character and integrity, strive for continual improvement of the educational process, and nurture an academic community where all are treated with integrity, dignity, and respect.

KCMA VALUES

As educators, we especially value trustworthiness, innovation, caring, competence, and collaboration.

TRUSTWORTHY

- We value personal and professional integrity and accountability in all relationships.

INNOVATIVE

- We value an approach to health science education that promotes advances in the effective practice and delivery of health care.
- We value creative, future-oriented preparation of health care professionals to meet the challenges of providing comprehensive and compassionate health care.

CARING

- We value spiritual wholeness and nurture personal spiritual growth.
- We value and respect the dignity of all people as being made in the image of God.
- We value being called to Christian service through the ministry of health care as a reflection of Christ's unconditional love.

COMPETENT

- We value excellence in teaching and clinical competence evidenced in personal and professional growth.
- We value promptness and effectiveness in responding to the needs of others.
- We value lifelong learning as an integral part of our professional calling and personal growth.

COLLABORATIVE

- We value social responsibility and service to others.
- We value partnerships that foster enhanced service to our community.

DIVERSITY STATEMENT

As an institution of Christian higher education, Kettering College of Medical Arts actively seeks and values individuals from diverse backgrounds and beliefs. Diversity among students,

faculty, and staff greatly enriches the educational experience and produces graduates who are able to provide high quality, whole-person care to the communities they serve.

DEGREES/CERTIFICATES OFFERED

Courses of study offered at the College lead to five different degrees: the Associate of Science, the Bachelor of Science, the Bachelor of Science in Health Professions, the Bachelor of Science in Nursing, and the Master of Physician Assistant Studies. In addition, some departments offer courses leading to certificates of completion. Refer to specific departments for details.

DIVISIONS OF INSTRUCTION

The curricula are classified into four major divisions of instruction:

- Division of Arts and Sciences
- Division of Nursing
- Division of Allied Health
  - Health care professional studies
  - Diagnostic medical sonography
  - Physician assistant studies
  - Radiologic sciences and imaging
  - Respiratory care

GOOD CITIZENSHIP

Kettering College of Medical Arts will knowingly admit and retain only those students who are in accord with its objectives and standards as summarized in the *Student Handbook*. The *Student Handbook* is available online at www.kcma.edu and is distributed to every admitted student. All students are expected to know, understand, and abide by these standards. Kettering College of Medical Arts respects and values student individuality; however, as a private, church-affiliated institution, the College seeks to attract those students whose personal standards are in agreement with those outlined in the policies and regulations. Thus, when students apply for admission, they choose to accept the standards of this Christian college and agree to abide by them.

CAMPUS

The wooded campus is set amid rolling hills in Kettering, Ohio, a suburb of Dayton, Ohio. The campus is shared by Kettering College of Medical Arts, Charles F. Kettering Memorial Hospital, and Cox Institute, which is a research facility of the Wright State University School of Medicine. The campus is accessible from Interstate 75 and the Dayton International Airport. Shopping centers and other services are close to the College.

Campus buildings house classrooms, laboratories, libraries, the Residence Hall, lounges, gymnasium, auditoriums, cafeteria, laundry, computer facilities, and other offices and services related to academic and professional life.

ACCREDITATION

Kettering College of Medical Arts is accredited by the Higher Learning Commission of the North Central Association of Colleges and Schools. Its offerings are approved by the Seventh-day Adventist Board of Regents. Its degrees are authorized by the Ohio Board of Regents, and

its academic credits are acceptable for transfer to other colleges and universities. Details and information on accreditation and approval of the professional programs by the respective national organizations appear in this *Bulletin* in the respective programs' sections and in the section on administration.

EQUAL OPPORTUNITY COMMITMENT

Kettering College of Medical Arts maintains a policy of equal educational opportunity for all applicants without regard to gender, race, color, age, disability or national and/or ethnic origin. Administration of its educational and admissions policies, financial affairs, employment programs, student life and services, and other College-administered programs is conducted accordingly.

CLINICAL FACILITIES

The clinical facilities used by the College are accredited by appropriate agencies as applicable.

LEARNING COMMONS

The Learning Commons (395-8053) provides students with library services, learning support services, and computer support services.

Library services: The KCMA Learning Commons provides library resources, instruction, and services to support all academic programs offered by the College. The collection of books, periodicals, and audiovisual materials in both the health sciences and liberal arts is complemented by a wide array of electronic resources. Internet access is available on all public terminals. KCMA participates in the OhioLINK system, a computer network of college and university libraries throughout the state of Ohio. OhioLINK enables students to enhance their research through access to many different library collections and databases beyond the walls of KCMA. Students may also take advantage of a small collection of recreational reading (books and magazines) and videos.

Academic support services: The academic support coordinator is available to assist students in their learning and their adjustment to college and campus life. Peer tutoring, workshops, and self-help resources are among the options available in the Academic Support Center.

Computer support services: Computer support services provides access to an open computer lab and a wireless network. Computer services include student e-mail accounts and Angel, the college's Web-enhanced course management system.

ALUMNI ASSOCIATION

The Alumni Association of Kettering College of Medical Arts was organized by the first graduates of the College in 1969. Active members are those who have completed a course of study and hold degrees or certificates from the College. Associate membership is extended to the College faculty, and affiliate membership is extended to former students who have successfully completed one or more terms of study. Honorary membership is conferred, on a limited basis, upon persons recognized for special service to the College.

In the association, alumni demonstrate their concern for the advancement of the College. Through the association, conversely, the College demonstrates its interest in the continuing educational and professional development of its alumni, whom it regards as the ultimate and true

expression of its mission. The principal purposes of the association are to maintain friendships and communication among alumni, solicit support from alumni, develop programs for alumni participation, promote alumni participation in student recruitment and graduate placement, and foster a spirit of loyalty to the College. Such activities will promote the College and aid faculty, students, and alumni in attaining the highest ethical and scientific standards in the practice of their professions.

Important activities and interests of the association include maintaining communication among alumni; sponsoring social and professional activities; and developing resources that support the teaching and environments of the College.

The director of alumni relations provides leadership and direction for all alumni programs and services.

TELEPHONE NUMBERS

KCMA's main telephone number is 937-395-8601. To use Kettering Medical Center and KCMA's automatic access by extension line, call 937-298-3399.

OFFICE	PHONE
Academic Affairs	
William Nelson, Dean	395-8837
Academic Support Center	
Jennilou Grotevant, Coordinator	298-3399 Ext. 55646
Academic Information Systems	
Jim Nesbit, Senior Information Officer	298-3399 Ext. 55685
Admissions	
Becky Mcdonald, Director of Admissions	298-3399 Ext. 55684
Kathy Myers, Admissions Counselor	298-3399 Ext. 55614
Tammy Erickson, Admissions Counselor	395-8628
Advancement	
Kathryn Keyes, Director	298-3399 Ext. 57179
Alumni Relations	
Cheryl Kennison, Director	395-8490
Arts and Sciences	
Paul Delange, Chair	298-3399 Ext. 57016
Assessment and Learning Support	
Beverly Cobb, Dean	298-3399 Ext. 55683
Bookstore	
Stella Freeman, Manager	395-8006
College Diversity Officer	
Susan Price	298-3399 Ext. 55662
College Relations	
Mindy Claggett, Public Relations Officer	298-3399 Ext. 55611
Computer Resources	
Eric Gayheart	298-3399 Ext. 58295
Diagnostic Medical Sonography	
Joyce Grube, Chair	298-3399 Ext. 55656
Enrollment Management and Recruitment	
Victor Brown, Dean	298-3399 Ext. 57653
Brandon Kennison, Recruiter	298-3399 Ext. 57024
Mike Unterseher, Recruiter	298-3399 Ext. 57628
Financial Aid	
See "Student Finance."	
Health Care Professional Studies	
Paula Reams, Chair	298-3399 Ext. 55624
Human Biology	
Dan Schoun, Advisor	298-3399 Ext. 55658

Learning Commons

Beverly Ervin, Director 395-8053

Nursing

Beverly Cobb, Director of Nursing 395-8619

Cherie Rebar, Associate Director 395-8619

Sharon Millard, Chair of Bachelor's Completion Program 395-8642

Physician Assistant Studies

Sue Wulff, Chair 395-8638

President's Office

Charles Scriven, President 395-8618

Radiologic Sciences and Imaging

Larry Beneke, Chair . . . . . 298-3399 Ext. 55696

Records Office (Registrar's Office)

Robin Vanderbilt, Registrar . . . . . 298-3399 Ext. 55612

Robert Reeder, Associate Registrar . . . . . 298-3399 Ext. 52030

Sarah Bayer, Associate Registrar 395-8689

Barb Satterfield, Office Assistant . . . . . 298-3399 Ext. 55615

Residence Hall

Amy Ortiz-Moretta, Director of Student Life and the Residence Hall . . . . . 298-3399 Ext. 55665

Jerry Mahn, Associate Director of Student Life and the Residence Hall . . . . 298-3399 Ext. 55601

Respiratory Care

Nancy Colletti, Chair . . . . . 298-3399 Ext. 55644

Spiritual Life

Clive Wilson, Chaplain . . . . . .298-3399 Ext. 57015

Student Finance

Kim Snell, Director . . . . . 298-3399 Ext. 55617

Shannon Hammons, Financial Aid . . . . . 298-3399 Ext. 55682

Robin Clinefelter, Associate Director of Financial Aid . . . . . 298-3399 Ext. 57037

Melissa Reynolds, Student Financial Aid Counselor . . . . . 298-3399 Ext. 57022

Sarah Shultz, Student Accounts and Student Employment 395-8610

Admissions

Kettering College of Medical Arts does not discriminate on the basis of age, gender, race, color, national or ethnic origin, or disability.

ADMISSION OPTIONS

- Regular admission
- Probationary admission
- Permission to take classes (PTC)
- Post-secondary enrollment option (PSEO)

REGULAR ADMISSION

Applicants granted regular admission status are classified as degree-seeking and may be eligible for financial aid. Applicants must meet the following requirements to be considered for admission. **Refer to the program of interest for additional specific admission criteria.**

1. Minimum cumulative high school GPA of 2.00 or GED score of 45/450 or above.
2. Minimum cumulative college GPA of 2.00 if applicable.
3. ACT composite score of 19 or above or SAT combined score of 1350 or above (910 or above if SAT was taken before March 2005). Test score is required of all applicants who have graduated from high school or have earned a GED within the past five years. The written portion of the ACT is not required. Applicants with college credit acquired after graduation from high school are not required to take the ACT or SAT for admission. Applicants applying from outside of the United States are exempt. (Refer to the international students section of this chapter.)
4. Student personal statement form, supplied in the application packet, must be completed and returned with the application; essays will be graded for content and used to assess writing abilities.

Please refer to the program of interest for specific application deadlines.

PROBATIONARY ADMISSION

Applicants who do not meet the minimum criteria for regular admission may be offered probationary admission status at the discretion of the admissions committee. Probationary students are considered non-degree-seeking students until they have earned regular admission status. Students are not eligible to use financial aid while under this status.

Students granted this status may register for a maximum of 12 credits their first semester of enrollment. Individuals granted this status must meet regular admission requirements before completing more than 18 credits. A student qualifies for regular admission after achieving a minimum grade of C- in a math and a science course while maintaining a minimum cumulative KCMA grade point average of 2.00.

PERMISSION TO TAKE CLASSES (PTC)

Permission to take classes is a temporary enrollment status. Applicants granted PTC status are classified as non-degree-seeking students and are not eligible to use financial aid funds. PTC status may include but is not limited to the following:

- Guest students who are registered at another college or university but wish to take courses at KCMA without intending to matriculate.
- Persons who need certain courses to qualify for certification.
- Persons who desire to take a course for enrichment purposes.
- Persons desiring entry into KCMA but have insufficient records. (The PTC option provides an opportunity to prove ability where past academic history is not clear or is unavailable for review.)
- Students registered at another college or university who wish to take courses at KCMA through existing articulation agreements.

PTC status is granted on a space-available basis. A maximum of 18 credits may be taken while a student has PTC classification. Admission materials needed are:

1. Completed application.
2. Application fee (unless a previous KCMA student).
3. Transcripts from the highest level of educational experience (may use unofficial copies).

Written permission from the chair of the professional program (where applicable) is required before the student may register for requested course(s).

POST-SECONDARY ENROLLMENT OPTION (PSEO)

Kettering College of Medical Arts is pleased to offer the state-sponsored post-secondary enrollment option to those high school students who qualify. This program is designed for students capable of doing college work while completing high school. For current admission criteria, PSEO application, and course availability, please contact the KCMA admissions office.

CONDITIONAL ADMISSION

Conditional admission may be available for KCMA associate degree students who wish to pursue a bachelor's completion degree. Students admitted to conditional status may enroll in specific bachelor's-level courses.

NOTE: Financial aid for those enrolled in associate degree programs is only available at the associate degree level. When a student is transitioned to regular admission to the bachelor's degree upon successful completion of the associate degree, bachelor's-level aid may then be available.

COMPUTER REQUIREMENTS

Students are assumed to have computer skills. Students will be expected to use the Internet for coursework. Computers with Internet access and software are available in the computer lab and in

the Learning Commons. A help desk also is accessible during normal business hours to assist with computer questions. Many students find it helpful to have their own personal computers.

SPECIAL ADMISSION REQUIREMENTS

Advanced placement: Admission with advanced placement is possible in some programs at KCMA. Requests for advanced standing should be accompanied by written evidence of training or knowledge and submitted to the admissions office. Refer to the sections of the *Academic Bulletin* on divisions of instruction for specific requirements.

Associate degree students continuing into bachelor's completion programs: Students wishing to continue in one of the bachelor's completion programs upon graduation from an Associate of Science degree program must file an application for admission to baccalaureate completion programs within one semester of graduation. This form can be obtained in the admissions office.

Background check: Students must request and pay to have a criminal background check performed by a College-approved service no more than six months prior to beginning the clinical experience. Please contact the admissions office for approved service contact information. Commencement of the clinical portion of the program is contingent upon successful clearance of the background check. Certain offenses revealed on background checks constitute automatic bars to acceptance into programs at Kettering College of Medical Arts. These offenses involve conviction of or pleading guilty to crimes based upon the Ohio Revised Code 2151.86, reflecting Senate Bill 38 Disqualifiers. Refer to the specific program of study for further details.

Health care experience documentation: Evidence of prior health care experience is recommended for individuals applying to certain programs. Refer to the sections of the *Academic Bulletin* on divisions of instruction for specific requirements.

Interviews: The applicant may be requested to come to the College campus for an interview before final action is taken by the College admissions committee.

Technical standards (physical and mental abilities) for professional programs: Completion of the degree programs offered by KCMA signifies that the graduate is prepared for practice in the respective profession. Therefore, the graduate must have both the knowledge and skills to function in a broad variety of situations and to render a wide spectrum of health-related services.

In addition, certain skills and abilities are needed to assure safe participation in KCMA's professional programs. The skills and abilities listed in the *KCMA Student Handbook* are not used by the College in admissions decisions. The College is committed to providing reasonable accommodation to individuals with disabling conditions, according to ADA regulations. Students with disabilities who are requesting accommodations should give the college at least two weeks advance notice to ensure accommodations.

Professional curricula: Preference may be given to equally qualified applicants completing a minimum of 12 credits of arts and sciences prerequisites at KCMA or who transfer from other educational institutions that have established articulation agreements with KCMA.

Admission to the professional curricula is based on:

- Departmental admission requirements
- Previous academic performance, particularly in the areas of math and science
- Competition with other applicants
- Space availability
- Recommendations of clinical performance (where applicable)

APPLICANT FILE

A potential student's file must be complete before an application can be considered for admission. The following must be included in a complete applicant file.

1. **Completed application** with $25 application fee.
2. **ACT or SAT scores:** Test scores are required of all applicants who have graduated from high school or earned the GED within the past five years. Applicants with college credit acquired after graduation from high school are not required to take the ACT or SAT for admission. Applicants applying from outside of the United States are exempt.
3. **Official high school transcript or GED certificate:** The high school transcript or GED certificate must be mailed directly to the KCMA admissions office from the educational institution, testing site or state agency. No hand-delivered transcripts will be accepted. High school transcripts must show completion/date of graduation and cumulative GPA; GED certificate must show the scores achieved. An applicant graduating from a home-based high school program must provide an official transcript from an accredited institution. A transcript issued by an applicant's parents cannot be accepted as an official transcript.
4. **Official college and/or university transcripts:** Official transcripts are required from all colleges attended. These transcripts **must** be mailed directly from each college or university attended to the admissions office.
5. **Student personal statement form:** This form, supplied in the application packet, must be completed and returned with the application; essays will be reviewed for content.
6. **Math placement:** All applicants to KCMA's undergraduate programs of study who do not have transfer credit to meet the math core requirement are required to take the college's math placement test. (The exceptions to this policy are applicants for the baccalaureate completion degrees.) Applicants must take the math placement test before the file can be reviewed by the department and the college admission committee. Contact the admissions office for information about how to take the math placement test. Students entering certain programs must meet the prerequisite for MATH 165 before being considered for admission. Refer to the program of study for specific math requirements.
7. **Homeschooled students:** A student who presents a transcript issued by their parent(s) and/or an unaccredited source may be admitted upon presentation of an acceptable ACT and/or SAT score.

Note: An applicant who withholds information or gives false information in any part of the application may be ineligible for admission or may be later subject to dismissal.

ADMISSIONS PROCEDURE

Once an applicant's file is complete, the following steps occur:

1. **College admission, PTC or PSEO:** The applicant file is reviewed by a subcommittee of the admissions committee on a regular basis through the year. Applicants will be notified of committee action within approximately two weeks of the file being completed.

2. **Program admission:** Applicants desiring admission to a professional program will have the request evaluated by the program admissions committee. All program admission decisions are communicated through the college admissions office.
3. **Letter mailed to applicant:** The applicant will be notified by mail of any admissions action taken by the College.

APPLICANT RESPONSE TO ACCEPTANCE

Applicants accepted to KCMA must notify the admissions office of their intent to attend or not to attend. Within 10 business days of receipt of the acceptance notice, the applicant must:

1. Return the completed **acceptance reply letter** that is included with the acceptance notice.
2. Remit the **acceptance deposit**. This helps to assure the College that the applicant will attend and guarantees the applicant that a place is reserved in the curriculum to which acceptance was granted. (If the deposit is not received by KCMA, the applicant's reservation in that particular curriculum may be jeopardized.) Refer to the financial information section of the *Academic Bulletin* for specific details.

At the time of acceptance to the College, applicants will also receive information about the health and immunization requirements necessary for enrollment at KCMA. These forms must be completed by the applicant's personal physician and returned to the College by the start of courses. Students will not be permitted to complete the registration process until all immunization requirements have been satisfied.

REGISTRATION FOR CLASSES

Registration deadlines are published on the College Web site, www.kcma.edu. If applicants to professional clinical programs do not register by the required date, the space reserved may be given to another applicant.

At registration, new students will receive a copy of the *KCMA Student Handbook* and will need to have the following records on file:

1. Credit account agreement and disclosure statement
2. College and health insurance compliance forms

INTERNATIONAL STUDENTS

Kettering College of Medical Arts endeavors to make the process of enrolling international students as easy as possible. Because of the numerous steps involved in the issuance of the I-20, please refer to the following guidelines to expedite the application process. International students must enter directly into a program of study.

1. The following should be submitted to the admissions office three to six months prior to the semester the applicant chooses to enroll in classes:
   - Application accompanied by the $25 application fee
   - Student personal statement form, supplied in the application packet, must be completed and returned with the application; essays, which must be written in English, will be reviewed for content.
   - Official secondary school transcripts and college transcripts from each school the applicant has attended. Transcripts must be evaluated for United States equivalency

(course-by-course level) and must show a calculated cumulative GPA. Two agencies that provide this type of evaluation include:

Josef Silny and Associates International Education Consultants
7101 SW 102 Ave., Miami, FL 33173
E-mail: info@jsilny.com; Telephone: 305-273-1616

World Education Services
Main Office, Bowling Green Station, P.O. Box 5087, New York, NY 10274
E-mail: info@wes.org; Telephone: 212-966-6311

Other services may be used only with the written preapproval of the admissions office.

- TOEFL exam scores: A minimum total score of 79 is required for all Internet-based tests; a minimum total score of 550 is required for all written tests. The TOEFL exam must be taken within the past two years, and the official test scores must be mailed directly from the testing site to the admissions office.
- International student financial certification form: This must be returned to the admissions office before the I-20 will be issued. Legal documentation of financial support for tuition, fees, books, and living expenses must accompany this deposit in the amount estimated by the foreign student advisor. A student receiving financial assistance through a sponsoring agency or individual must provide legal documentation in support of the sponsorship.
- Any additional items required for admission by the program from which the applicant plans to graduate. See your chosen program's section on admission requirements.

2. Once the applicant has received a letter of acceptance:
   - Submit a deposit of $1,500 in U.S. currency to the admissions office. This is required before an I-20 can be issued to the applicant.
   - After the $1,500 deposit, acceptance deposit, and room deposit are received, the international student advisor will complete the I-20 and send it to the student.
   - The student then brings the I-20 and acceptance letter to enter the country. The student will retain the I-20 for personal records.
   - All students on F-1 student visa status must maintain a minimum course load of at least 12 credits for each term of enrollment unless a reduced course load can be certified by the designated school official.

All steps mentioned above should be completed no less than one month prior to the start of the first semester the student plans to attend classes.

READMISSION

Refer to the programs of study for any specific readmission criteria.

Applicants readmitted to the College will be readmitted under the policies and curricula of the current *Academic Bulletin.* No additional application fee is needed; however, the program acceptance deposit will still be required.

Individuals in good standing who have voluntarily interrupted their programs of study from the College for a period of at least one semester and have not completed the KCMA continuation/readmission notification form may seek readmission by contacting the admissions office in

writing to request that their files be reactivated. The admissions office will notify the applicants of what is needed, if anything, to complete their files.

The application of an individual dismissed from the College shall not be considered for readmission until the period of dismissal (at least one semester or term) has elapsed. Refer to the section of the *Academic Bulletin* under the appropriate division of instruction for specific guidelines concerning progression and readmission. Dismissed or suspended students seeking readmission must reactivate their files by contacting the admissions office. Each must submit an updated application form, student personal statement form (unless submitted within 5 years), transcripts for any college work completed since leaving KCMA, and a letter stating his or her intent and commitment to better use the opportunities offered by KCMA. This information will be reviewed by the Dean for Academic Affairs prior to action by the admissions committee.

ADMISSIONS/PROGRESSION EXAMINATION

As part of the admissions or registration process, an applicant may achieve credit by one of the following alternative methods:

- Advanced placement: Students may request transfer of credit through advanced placement credit for commensurate college credit for courses completed in secondary schools.
- College-Level Examination Program (CLEP): Students may request transfer of credit through the College Level Examination Program, which administers proficiency exams in certain subjects.
- Competency by examination: Competency by examination is defined as demonstrating specific skills, knowledge, and abilities that are required by each class at KCMA. This type of examination does not involve receiving college credit on an individual's transcript. However, it may be used to waive a specific class that is necessary to fulfill a core, program, or graduation requirement. In some cases, one examination may be used to determine both placement and competency. Please refer to the individual prerequisites listed under the course descriptions to determine the placement requirements for each mathematics class.
- Credit by examination: Limited availability for current students to demonstrate competency in specific courses to earn KCMA college credit.
- Placement by examination: The purpose of a placement examination is to determine whether a student's skills are adequate for success in a given class. Currently KCMA offers a math placement examination that aids in placing the student in a mathematics class that is most suited to his or her level of skills or education. Please refer to the individual prerequisites listed under the course descriptions to determine the placement requirements for each mathematics class.
- Transfer credit: Academic credit accepted by KCMA from another regionally accredited academic institution.
- Validation by examination: Validation of coursework taken more than 10 years ago for natural sciences and mathematics.

For more information, refer to the appropriate Academic Policies section.

CREDIT BY EXAMINATION

Credit by examination (CBE) is an alternate way for students to receive college credit by demonstrating competency over subject areas mastered. Individual departments determine the courses for which CBE testing is offered. CBE testing will not be available for courses for which there is a national standardized examination. Students must receive various approvals prior to taking the CBE examination. They also must pay exam and recording fees directly to the records office. Financial aid is not available for CBE credit. Students may contact the records office for more details.

COLLEGE RESERVATIONS ON ADMISSION

The admissions committee reserves the right to place an entering student on probation or to refuse admittance to an applicant who is unlikely to conform to the standards and ideals the College seeks to maintain. This denial of acceptance may be based in part upon previous academic performance and/or on the content of the student personal statement.

Individuals who have not first received formal notification of acceptance should not come to the College expecting to begin classes.

Academic Policies

THE COLLEGE PROGRAM

The academic year consists of one fall and one winter semester; however, most programs require an accelerated summer semester. A semester is generally 16 weeks in length.

In a semester system, one academic credit typically means the course meets for one 50-minute period of instruction per week. This is considered to be one hour of instruction with ten minutes of that hour used for passing time between classes. Therefore, a traditional three-credit course with no laboratory or clinical component will meet for three 50-minute periods or its equivalent. It is generally expected that for every credit a student takes, an additional two to three hours of work may be expected outside the regularly scheduled class time. Courses involving laboratory studies or clinical experiences have slightly modified credit values. A laboratory credit within the Division of Arts and Sciences may range from two to four hours of contact time. For example, a four-credit science course will typically meet for three 50-minute lectures and two to four hours of laboratory time each week throughout the semester. Clinical credits within the professional programs usually exceed this ratio.

REGISTRATION

The registration process takes place prior to the beginning of each semester. Please see KCMA's Web site (www.kcma.edu) for specific dates. To enhance and streamline the registration experience for students, the college has established these policies and processes:

- Prior to designated registration dates, a students must meet with his or her academic advisor for approval of the term schedule. The student's academic advisor is responsible for updating the online registration status for current students.
- Students may not register for courses that are in direct conflict with other courses or clinical assignments.
- A student and his or her advisor can access an individual computerized degree audit to assist them in tracking the student's graduation requirements. Students are strongly encouraged to take their courses in the sequence outlined in the *Bulletin.* Taking courses later than the sequence outlined in the *Bulletin* may result in program completion delays. Students must submit out-of-sequence requests to the records office prior to registration.
- The records office reserves the right to remove a student who has registered online for a course for which he or she is not eligible.

- Students may audit courses with the permission of the department chairperson. Students are expected to attend courses regularly and meet the conditions for audit as stipulated by the instructor. Tuition is charged at one-half of the regular rate, and no academic credit is awarded.
- Business office clearance: Current students must have a student account balance below $100 in order to have business office clearance for registration. Payments can be made online. Allow two business days for processing. New students are required to pay the minimum of one-fourth of the semester tuition and fees at registration.

TRANSFER CREDIT

Kettering College of Medical Arts will accept transfer credit, which is defined as academic credit accepted by KCMA from another academic institution, under the following policies:

- To be acceptable, transfer credit must be from an institution with regional accreditation such as from the North Central Association of Colleges and Schools.
- Credit by examination, such as CLEP and AP, will be treated as transfer credit.
- Only courses with grades of C- or higher will be accepted unless the major has higher grade requirements.
- For transfer credit to fulfill a specific KCMA course requirement, the candidate course must be closely equivalent in content and approximately equivalent in credits to the required course. If content equivalency is not met, the student may be required to take additional coursework to achieve close content equivalency.
- To be considered for transfer credit toward KCMA's religion core requirement, religion courses must be from faith-based institutions.
- Transfer credit approval is valid for admission to a program for a period of one year from the approval date. If entry into a program is delayed for more than a year, transfer credit will be re-evaluated for applicability.
- Certain courses have time limits to be suitable for transfer credit. To be eligible for transfer, math and science courses must have been taken in the 10 years before the student enters the College. Students admitted to the Bachelor of Science in Health Professions or Bachelor of Science in Nursing completion programs are exempt from the time limits.
- Foreign transcripts must be accompanied by official translations and course-by-course evaluations done by a reputable international evaluation service. See the section on international students for a list of reputable agencies.
- KCMA reviews all official transcripts received for individuals admitted to the College and notifies the student about all approved transfer credit. Individuals may appeal to the committee to have the transcript re-evaluated. To do this, they must complete a transfer credit review form, available online.
- The transfer evaluation committee has final authority over determining all transfer credit.
- For each degree, there is a limit on how many credits a student may transfer.
    - Associate degree-seeking students are permitted up to 30 transfer credits.
    - Bachelor of Science completion-seeking students are permitted up to 30 transfer credits.

- Bachelor of Science-seeking students are permitted up to 60 transfer credits.

Note: Students with excessive transfer credit may experience difficulty in registering for full-time status once enrolled in KCMA.

VALIDATION BY EXAMINATION

Science and mathematics credits earned more than 10 years ago will not be accepted for transfer credit. Those admitted to the Bachelor of Science in Health Professions or Bachelor of Science in Nursing completion degree programs are exempt from the time limits. Comprehensive exams may be taken to validate old credit. For information about validation exams, contact the admissions office.

ALTERNATIVE CREDIT

CLEP: Credit for specific arts and sciences courses may be granted to students who satisfactorily complete proficiency examinations administered by the College Level Examination Program (CLEP).

Students seeking to gain credit by examination should first discuss their intent and the procedure with the records office. It is the student's responsibility to contact a College Entrance Examination Board (CEEB) Testing Center and request the CLEP subject examination which corresponds to the course being challenged. The test scores and a request for credit by examination must be presented to the records office prior to the semester in which the student is scheduled to complete the course. The transfer credit review committee will assign the grade to be given by using the letter grade equivalents suggested by CLEP.

Advanced Placement: Students who present Advanced Placement credit from courses completed in secondary schools may receive commensurate college credit if the courses have been validated by the CEEB with scores of 3, 4, or 5. These credits will apply to the KCMA degree but may not be accepted by professional schools.

CREDIT BY EXAMINATION

Credit by examination (CBE) is an alternate way for students to receive college credit by demonstrating competency over subject areas mastered. Individual departments determine the courses for which CBE testing is offered. CBE testing will not be available for courses for which there is a national/standardized examination. Students must receive various approvals prior to taking the CBE examination. They also must pay exam and recording fees directly to the records office. Financial aid is not available for CBE credit. Students may contact the records office for more details.

SIMULTANEOUS ENROLLMENT

It is expected that students will take courses as outlined in the program of study. For occasions when extenuating circumstances make it difficult for a student to follow the program of study, the option for simultaneous enrollment at another college does exist.

Two options for simultaneous enrollment are available at KCMA.

- **Cross-registration through SOCHE:** The Southwestern Ohio Council for Higher Education, of which KCMA is a member, permits students at any member college to register for and take courses at another SOCHE college on a space-available basis. Students must

register through KCMA when taking a course through a SOCHE member college. The cross-registration program allows students who are degree-seeking or participating in certification programs to access academic opportunities not available at their own institutions. Students attending colleges and universities within SOCHE may register at other SOCHE institutions for courses that are applicable to their degrees or certification programs.

This option is only available for students in good standing who are enrolled in a degree-seeking major. The courses taken through this program should be courses that are not offered at KCMA. If KCMA offers the course, then it is expected that the student will take the course at KCMA. Once a course is closed or canceled, then cross-registration may be an option. Students wanting to take a course for personal enrichment or qualification for financial aid may also use cross-registration, provided the course is not offered at KCMA during the semester of the desired cross-registration.

Approval is needed form the student's advisor, from the KCMA records office, and from the SOCHE member college at which the student plans to enroll. A student should obtain a written statement of equivalency from the records office before registering if the course is to be used to fulfill specific KCMA or program requirements.

Students are not permitted to take more course credits per semester through a SOCHE institution than through the home institution. KCMA requires students to use the SOCHE program whenever enrolling at SOCHE institutions. See the Web site www.soche.org for a listing of SOCHE institutions and additional information.

Course credit is posted on the student's home school (KCMA) transcript. Credits for courses taken at schools using quarters rather than semesters are adjusted to reflect semester-credit conversion. Tuition is paid by the student to the SOCHE home school (KCMA) according to the home school policy, rather than to the SOCHE member host school, except for lab fees, which are the responsibility of the student to pay the host school. Several schools have special requirements for eligibility to take courses at that host school. Specific conditions of enrollment through SOCHE can be obtained through the records office.

- **Dual enrollment:** In situations where cross-registration policies do not apply, a student may petition to take courses at another school while simultaneously enrolled at KCMA. A student must obtain a written statement of course transferability through the records office prior to the petition. This option is typically only given to students who need to complete a sequence at another college in order for previous coursework to transfer.

CLASS ATTENDANCE

The academic, laboratory, and clinical demands of the professional programs make class attendance — whether in traditional, online, or Web-enhanced courses — essential for a student's success. Therefore, specific attendance requirements are established by each department or instructor for every course. When a student is absent from class, for whatever reason, that student has lost the learning experience that class period would have provided. In such cases, it is the student's responsibility to make sure the expected learning still occurs.

In addition, because a student's absence may affect others in the learning group, individual faculty members or departments may add penalties or establish further attendance policies for

classroom or clinical appointments. Students should carefully refer to the course or departmental policies.

For Web-enhanced courses, each date a submission is due is considered a date when the course meets. Students are required to attend at least one class meeting or make at least one submission within the first 10 business days of the regular semester, or they will be subject to administrative withdrawal from the course. Drop and add dates may vary for courses scheduled to meet in nontraditional term lengths (five weeks or seven weeks). A student will be considered absent from the course any date he or she fails to attend a scheduled meeting time or any time he or she fails to make a scheduled submission.

CLASS STANDING

Class standing is determined by the number of credits earned toward the declared certificate or degree:

- Freshman: 0-31 credits earned
- Sophomore: 32-64 credits earned
- Junior: 65-96 credits earned
- Senior: more than 96 credits earned

COURSE LOAD

Students are classified as full time if they carry at least 12 credits per semester. Anything less than 12 credits per semester is classified as part time. Students may not carry more than 18 credits in a fall or winter semester or 13 credits in an accelerated summer semester (unless required by their programs of study) without permission of the Dean for Academic Affairs. The academic load of students on probation may be limited.

DISABILITY ASSISTANCE

In accordance with the Americans with Disabilities Act (ADA), the College is committed to providing reasonable accommodations to individuals with disabling conditions. Those with physically disabling conditions must submit appropriate documentation of the disabilities to the office of the director of the Learning Commons. Those students with diagnosed and documented learning problems must submit official documentation to the office of the academic support coordinator. In either case, to receive assistance, students must validate the identified conditions and submit the documentation to the appropriate offices.

INDEPENDENT STUDY

Registration for independent study may be appropriate when a student wishes either to learn about a subject not in the *Academic Bulletin* or to expand practical clinical experience. An independent study form, obtained from the records office, must be signed by the instructor and the department chair before a student may register for independent study. A learning contract signed by the student, the supervising instructor, and the department chair is necessary before students begin the independent study.

DIRECTED STUDY

Directed study is available primarily for transfer students whose previous coursework does not meet content or credit equivalency. Directed study typically involves participation in an existing course as outlined in the *Academic Bulletin.*

POLICY FOR DROPPING/ADDING COURSES

With the approval of the academic advisor, a student may elect to add or drop courses in accordance with the time frames established by the College, as listed below. Any variance from the standard time frames is handled in the appeals process.

Course length	Last day to add a course	Last day to withdraw from course and receive a 100 percent refund	Last day to drop a course and receive a grade of WP or WF
5 weeks	2nd business day of semester	5th business day of a course	End of 3rd week of semester
7 weeks	2nd business day of semester	5th business day of a course	End of 5th week of semester
10 weeks	5th business day of semester	10th business day of a course	End of 8th week of semester
15 weeks	5th business day of semester	10th business day of a course	End of 12th week of semester

- Disbursement of financial aid funds will occur each semester after the 10th business day. Students should be aware that dropping a course they have not attended may result in a reduction or removal of financial aid for that particular semester. For this reason, students are required to consult with the financial aid office before submitting the drop/add form to determine the impact to financial aid.
- A course grade of Z is given if a student never attends the College and does not withdraw after registration has become official (after the 10th business day of the 15-week semester).
- A course grade of W may be awarded if the student officially withdraws from a five-week or seven-week course that begins after the 10th business day.
- Any student who has registered but has not attended any course(s) by the eighth business day of the semester will be administratively withdrawn.
- After the 10th business day and before the last day to drop a course, an administrative withdrawal with a grade of WP or WF may occur if a student is absent for a period of two consecutive weeks and does not contact the instructor or complete the appropriate paperwork.
- Upon dismissal from a program, a student will be administratively withdrawn from all program courses. Subsequent failure to attend non-program courses will result in withdrawal from those as well.
- It is the student's responsibility to arrange with the records office to drop or add courses. The procedure for dropping or adding a course is as follows:
    1. Secure a drop/add form from the records office.

2. Secure signatures from the financial aid counselor, the designated academic advisor, and the instructor for the course.
3. Ensure that each course listed on the drop/add form has:
   a. A grade of WP for WF (if dropped after the withdrawal period)
   b. The last day of the student's course attendance or participation (if dropping the course).
4. Submit the drop/add form to the records office for final processing.

Financial aid refunds are based on the last day the student attends or participates in the course. See the section of the *Bulletin* on financial information for the tuition refund policy.

Grades are based on the day the drop procedure is properly completed. The grade of WP is used to indicate that the student is passing, and the grade of WF is used to indicate that the student is failing when a course is dropped following the second week of a term. Students may not enroll in a course more than twice. Grades of WP and WF both count as enrolled in a course.

Students are advised that dropping a program course, prerequisite course, or corequisite course may put them out of sequence with the curriculum outlined in the *Bulletin* and delay their completion of the desired degree. In this case, the student must submit an out-of-sequence form to the records office. Dropping a course also may jeopardize financial aid eligibility.

LIABILITY INSURANCE

Students enrolled in clinical training programs offered by Kettering College of Medical Arts are covered under Kettering Health Network Risk Management. This coverage is specifically limited to legal liability arising from the performance of, or failure to perform, duties relating to the training program in which students are enrolled. Any injuries or damages caused by unauthorized activities or activities outside the scope of the clinical training program are not covered by the above. Students must be officially registered at KCMA for this liability insurance to be in effect.

GRADES AND QUALITY POINTS

The grading system described below is used in recording the progress and achievement of students. The authority to determine grades is given to the instructor of a given course. Final grades are recorded officially at the close of each semester. When a course is repeated, all previous grades remain on the transcript; however, only the last grade received will be used in computing the grade point average (GPA). Students and their advisors receive copies of official grades at the end of each semester. In addition, students receive a progress report at the midpoint of the fall and winter semesters. These reports are also sent to academic advisors but will not appear on the student's transcript.

Grades	Quality Points	Definition
A	4.00	Superior
A-	3.70	
B+	3.30	
B	3.00	Above average
B-	2.70	
C+	2.30	
C	2.00	Average
C-	1.70	
D	1.00	Below average
F	0.00	Failure
SA	0.00	Satisfactory audit
UA	0.00	Unsatisfactory audit
P	0.00	Passing (does not affect GPA; applies only to courses as indicated in course description)
NP	0.00	Not passing (does not affect GPA; applies only to courses as indicated in course description)
I	0.00	Incomplete work
IP	0.00	Course in progress
W	0.00	Withdrawal
WP	0.00	Withdrawal, passing (see academic calendar for deadlines)
WF	0.00	Withdrawal, failing (see academic calendar for deadlines)
X	0.00	Competency exam - no credit
Y	0.00	Competency exam - credit
Z	0.00	Enrolled but did not attend course; did not officially withdraw
R		Indicates the course was repeated
NG		No grade submitted
NC		Non-credit
WV		Waived

CALCULATING GRADE POINT AVERAGE

The following is an example of how a grade point average is calculated:

Subject	Credits	Grade	Quality Points
Psychology	3	B	9.00
English	3	C+	6.90
Math	3	D	3.00
Chemistry	4	C	8.00
Religion	2	B-	5.40
Physical education	1	B+	3.30
Totals	16		35.60

To calculate quality points for each course, multiply the number of credits in the course by the number of quality points listed for the course grade in the chart above. To calculate the term grade point average, add up the number of credits; also, add up the number of quality points. Then divide the total number of quality points (35.60) by the total number of credits (16). In the above example, the grade point average is 2.23.

Grade point averages are rounded to two decimal places. Only credits taken at KCMA are used in the calculation of the cumulative GPA.

ACADEMIC RECOGNITION

Following the fall and winter semesters, the Dean for Academic Affairs recognizes students who have shown outstanding academic achievement. A student who completes a minimum of 12 credits during a semester at a grade point average (GPA) of 3.50 or greater, with no grade below a B-, will be named to the Dean's List for that semester. After completing 12 credits at KCMA, a student will receive a letter of commendation for each subsequent semester in which 6 to 11 credits are completed with a GPA of 3.50 or greater with no grade less than a B-.

INCOMPLETE

To be considered for a grade of incomplete (I), the student must be passing the course and have completed two-thirds of the term. An incomplete should not be given merely because a student fails to complete all the course requirements on time, but only if the work was not completed because of extenuating circumstances that the instructor considers to be unavoidable.

The student submits to the instructor a petition to receive an incomplete grade, stating the reason for the request. If approved, the instructor reports the incomplete grade as well as the grade the student will receive if the deficiency is not removed within the time limit. The instructor has the discretion to determine when the incomplete must be removed, but it must be removed at least by the end of the following semester. Under extenuating circumstances and with the approval of the department chairperson, the instructor may extend the period another semester by notifying the records office. It is the responsibility of the student to meet prearranged deadlines for timely completion of any incomplete grades. If a grade of I is not removed within one year, it automatically converts to a grade of F unless special permission has been granted due to military deployment.

COURSE SUBSTITUTION

The Dean for Academic Affairs may allow substitutions for a course required in a program or curriculum if the department chairperson verifies that the requested substitution is a comparable academic experience that meets the educational needs of the curriculum. The student's academic advisor must recommend the substitution, and it must be approved and documented in writing by the chairperson of the department in which the student is enrolled or anticipates enrollment before the request goes to the Dean for Academic Affairs for final approval.

HONOR CODE

An atmosphere of academic integrity can be successfully preserved only when students and faculty unite in mutually supportive acts of trust and assistance. They share equally the obligation to create and promote ethical standards. It is the faculty's duty to uphold academic standards in both the classroom and the clinical settings and to ensure that students receive credit only for their own work; instructors will take any reasonable precautions necessary to achieve these goals.

Students are expected to join faculty members in maintaining an honorable academic environment. They are expected to refrain from unethical and dishonest activities such as lying, plagiarism, cheating, and stealing and are expected to report others who engage in such activities. Failure to report the occurrence of academic dishonesty is also classified as dishonest behavior. Allegations that cannot be resolved by faculty members and students on an informal basis will be handled under disciplinary procedures.

ACADEMIC PRIVACY

The Family Educational Rights and Privacy Act of 1974, as amended, is a federal law that provides that colleges and universities will maintain the confidentiality of student records. The law basically says that no one outside the institution shall have access to students' records, nor will the institution disclose any information from those records without the written consent of students.

An education record is defined as any record maintained by the College that is directly related to a student. It includes records, files, and documents — handwritten, printed, or stored and/or displayed electronically. KCMA can disclose information from a student's education record only with the student's written consent. There are exceptions so that certain personnel within the institution may see the records, including persons in an emergency, in order to protect the health and safety of students or other persons. According to this act, the following information can be disclosed without the student's written consent:

1. Directory or public information, consisting of the student's name, address, telephone number, date of birth, major, minor, year in college, dates of attendance, date of graduation, and degrees and awards received.
2. Information to faculty, administrators, and employees of the College with a legitimate educational need to know.
3. Information to other universities, colleges, or schools in which the student seeks to enroll.
4. Information required in an emergency to protect the student's health and safety or that of others.

A student has the right to refuse the disclosure of directory information except for information about his/her degree status. To exercise this right, the student must provide written notification to the registrar while he/she is enrolled.

All personally identifiable information not included as directory information is confidential and can only be disclosed with the student's written consent or if the information is needed to help resolve an emergency. That confidential information includes, but is not limited to, the following:

1. Names of the student's parents or other family members
2. Address of the student's family
3. A personal identifier, such as a Social Security number or student number
4. A list of personal characteristics
5. Academic evaluations and grades
6. Counseling and advising records
7. Disciplinary records
8. Financial aid records
9. Letters of recommendation
10. Medical and psychological records
11. Police records
12. Transcripts and other academic records
13. Scores on tests required for admission
14. Billing and fee payment records
15. Student's class schedule

The public posting of grades by the student's name, student identification number, or Social Security number, without the student's written permission, is prohibited. The returning of papers via an open distribution system (student mailboxes) is a violation of the student's privacy unless the student submits a signed waiver to the instructor for such purpose.

DISCLOSURE TO PARENTS

When a student turns 18 years old or enters a post-secondary institution at any age, all rights afforded to parents under FERPA transfer to the student. Students may elect to provide written consent to the College, giving permission for parents to view their educational records. However, in certain circumstances, FERPA also allows schools to share information with parents without student consent. For example:

- Schools may disclose education records to parents if a student is dependent for income tax purposes. Parents must produce a copy of the most recent federal income tax form showing that the student was claimed as a dependent.
- Schools may disclose education records to parents if a health or safety emergency involves their son or daughter.
- Schools may inform parents if the student who is younger than 21 has violated any law or school policy concerning the use or possession of alcohol or a controlled substance.
- A school official may share information or a concern with a student's parents that is based on the official's personal knowledge or observation of a student and that is not based on information contained in an education record.

For further information regarding FERPA, see www.ed.gov.

ACADEMIC PROBATION/DISMISSAL

A student may be placed on academic probation if he/she fails to maintain a grade point average (GPA) of 2.00 or greater for the semester. Students who are placed on academic probation will receive a letter indicating their status from the registrar. Students on academic probation may jeopardize their financial aid eligibility. (Refer to information on satisfactory progress for financial aid in the section of the *Bulletin* on financial aid.) Students are subject to dismissal after being on academic probation two consecutive semesters.

ACADEMIC APPEALS AND GRIEVANCES

If a student feels that a judgment, policy, or process is mistaken or unfair, the student has several ways to request that the College modify its decision.

The simplest way is to approach the professor or official most directly involved with making the decision. Often, issues can be resolved on that level. If the nature of the issue gives a student reason to be afraid to approach that person, the student may go to that person's program chair or director, and so on all the way up to the dean or the president. Kettering College is committed to supporting students' learning experiences and growth, and even when the person the student approaches is obliged to send him or her to someone else, the student should find that the faculty, staff, and administration all want to be supportive and to help students with their issues. Students may contact the College diversity office in situations involving perceived discrimination.

For some issues, however, more formal channels are useful. The appeals process can be used to request adjustments to or exceptions from school policies and their applications. The grievance process can be used to request relief from what a student considers an unjust or inappropriate action.

For a complete description of the appeals and grievance processes, please refer to the College Web site at www.kcma.edu.

GRADUATION REQUIREMENTS

1. Meet degree credit and residency requirements.
2. A minimum cumulative grate point average of 2.00 (C).
3. Satisfactory completion of the core requirements as outlined in the degree requirements section of the *Bulletin.*
4. A minimum cumulative grade point average of 2.00 in professional courses with no grade below a C- in professional courses and selected arts and sciences courses specified by the program.
5. Refer to the degree requirements section of this *Bulletin* for any additional graduation requirements for the course of study from which graduation is planned.

RESIDENCY REQUIREMENT

Students are required to take a minimum number of credits at Kettering College of Medical Arts to earn a degree:

- Associate degree-seeking students are required to take a minimum of 34 credits at KCMA.
- Bachelor of Science completion-seeking students are required to take a minimum of 34 credits at KCMA.
- Bachelor of Science-seeking students are required to take a minimum of 68 credits at KCMA.

GRADUATION WITH HONORS

Upon recommendation of the faculty, the following honors are granted to undergraduate students whose academic performance merits special recognition:

- Summa cum laude 3.90 - 4.00
- Magna cum laude 3.75 - 3.89
- Cum laude 3.50 - 3.74

In determining graduation with honors, all KCMA credit will be used in the computation. Transfer credit will not be included.

GRADUATION WITH ANNA MAY VAUGHAN-WINTON BEAVEN SERVICE LEARNING HONORS

Upon the recommendation of the faculty, graduates whose collegiate performance merits special recognition in areas central to KCMA's mission will be honored as Vaughan-Beaven Honors Scholars. Vaughan-Beaven Honors Scholars are students who complete the honors service learning program (see index for page numbers) with a minimum GPA of 3.50 in honors program credits and a minimum overall GPA of 3.00.

For the purpose of computing grade point averages for graduation with Vaughan-Beaven Honors, only KCMA credits taken while pursuing the degree being awarded are used. Credit transferred from other institutions or credits previously applied to a different KCMA degree are not included.

GRADUATION IN ABSENTIA

Students receiving diplomas are expected to be present for their graduation exercises and pay a graduation fee. A graduation-in-absentia fee will be charged to graduates who do not attend. The Dean for Academic Affairs must approve exceptions.

TRANSCRIPTS

The student, upon written request to the records office, may obtain official transcripts of his or her academic record. The request must include the student's signature and Social Security number. Telephone requests from students or written requests from other members of a student's family cannot be honored. Official transcripts given directly to students will be stamped "Student Copy." Transcripts will be issued only for students whose accounts are paid in full. The first transcript is provided at no cost; subsequent transcripts are provided for a fee (see the financial information section in the *Bulletin* for a listing of fees).

BANKRUPTCY, DEFAULT, AND TRANSCRIPTS

In cases where a student has filed for bankruptcy, requests for transcripts will be addressed on a case-by-case basis. It is, however, the policy of the College that insofar as student loan defaults are involved, the College will pursue collection of such loans to the full extent to which it is legally entitled.

Financial Information

APPLICATION FEE

A $25 fee must accompany each application for admission. The fee is nonrefundable, even if an applicant is not accepted or does not enroll.

ACCEPTANCE DEPOSIT

When the applicant receives notice of acceptance, he or she has 10 days in which to send in the acceptance deposit. This is a guarantee to the College that the applicant will attend. In turn, it also guarantees the applicant a place in the curriculum to which acceptance was granted, provided the applicant registers for classes by the required date. If, for any reason, the applicant is unable to attend the College and the admissions office receives written notification on or before the date specified in the applicant's acceptance letter, the deposit will be refunded. Applicants who do not withdraw by the aforementioned deadline and who do not enroll in the semester for which they have been accepted will forfeit their acceptance deposit. The acceptance deposit for a matriculated student will appear as a credit on the first month's financial statement.

DEPOSIT FOR INTERNATIONAL STUDENTS

In addition to program and Residence Hall deposits, a deposit of $1,500 (U.S. dollars) is required from an international student before an I-20 will be issued. This deposit will be held until the student completes an academic program, withdraws from the program, graduates, or transfers to another college. The $1,500 will be credited to the student's account at that time.

ROOM DEPOSITS AND CHARGES

Residence Hall space may be requested by remitting a $75 deposit, along with the Residence Hall information card, as directed by the letter from the admissions office. Early remittance of the deposit and the information card will help ensure Residence Hall lodging. Students who reserve Residence Hall space and then elect not to move into the Residence Hall must submit written notification to the admissions office by the date specified in the letter of acceptance to be eligible for a deposit refund.

Lease agreements must be signed in order for students to reside in the Residence Hall. At the beginning of each semester, a room charge is applied to the student account. Room rate information is available from the Residence Hall dean.

UNDERGRADUATE TUITION

Tuition is charged per credit. Please refer to the tuition and fee schedule on the KCMA Web site (www.kcma.edu) for details. Tuition is payable by the deadline shown in the online academic calendar. See the KCMA Web site. Courses taken for audit are charged at a reduced rate. Students taking only courses for audit must remit payment for the entire semester at the time of registration.

TUITION REFUND

Tuition and fees will be refunded based on the length of each individual course in which the student is enrolled. See the chart below to determine the length of the refund periods. After the time frames listed below, the only refund given will be based on the federal refund calculation for Title IV recipients (see the financial aid office for details).

Course length	Last day to withdraw from course and receive 100 percent refund
5 weeks	5th business day of course
7 weeks	5th business day of course
10 weeks	10th business day of semester
15 weeks	10th business day of semester

A student who does not officially complete withdrawal procedures through the records office will be responsible for the full amount of the applicable tuition and fees. Non-attendance at classes, notification to the instructor, or notification to the academic department does not constitute official withdrawal.

PAYMENT OPTIONS

Kettering College of Medical Arts offers students two payment options.

Students may elect to pay their entire tuition, fee, and Residence Hall (if applicable) bill before the semester begins.

The College also offers a payment plan option that allows students to make four (three during the summer semester) equal monthly payments on their tuition, fee, and Residence Hall bill. The first payment for each semester is due before the semester begins, with a payment due each month thereafter. The due date for each payment is printed on the student's monthly statement. The student must sign a payment plan agreement each semester.

Currently, Kettering College of Medical Arts does not charge a fee or interest to those utilizing the payment plan option, although late fees may be applied to a student's account if payments are not received by the due date. The College reserves the right to decline a student's payment plan request based on the account history of the individual. It is important to remember that should a student choose to withdraw from classes after the 100 percent refund period (see tuition refund section), he or she is still responsible for remitting all payments as scheduled.

METHODS OF PAYMENT

Kettering College of Medical Arts accepts cash, money orders, checks made payable to KCMA, or credit cards (Visa, MasterCard, Discover, and American Express). Credit card payments must be made online through the CAMS student portal at https://camsweb.kcma.edu/estudent/login.asp. Please allow two business days for payments made online to be applied to a student's account. If paying by check, please indicate the student's name and student ID number on the check to ensure that the proper account is credited.

Checks coming from outside the United States must have indicated on the check that the amount is in U.S. dollars.

BUSINESS OFFICE CLEARANCE

Each semester of attendance, a student must receive business office clearance before registering online or submitting the registration form to the records office. Business office clearance consists of:

- For returning students, having the current semester's balance paid in full and a signed payment plan agreement for the upcoming semester on file with the student finance office.
- For new students, remitting at least the first payment of the payment plan along with a signed payment plan agreement or having adequate financial assistance in place for the new semester. Students unable to make initial payment or not having adequate financial aid in place must have an approved student finance appeal on file in the student finance office (see the director of student finance for more details) before receiving financial approval.

For additional information, see the registration portion of the Academic Policies section of this *Bulletin.*

SATISFACTORY PROGRESS FOR FINANCIAL AID

To be eligible to receive financial aid, a student must maintain satisfactory progress toward completion of a program. The satisfactory progress of each student is reviewed at the end of each term. Failure to maintain satisfactory progress may jeopardize the financial aid a student receives.

A student who fails to maintain satisfactory progress will receive a letter from the student finance office indicating that the student will be placed on financial aid probation the next term, as well as outlining the specific violation(s) of the policy on satisfactory progress for financial aid. Students not meeting the minimum requirements (as outlined below) will be given one semester to achieve satisfactory progress while still receiving financial aid. A student not meeting the minimum requirements by the end of the probation semester will not be eligible to receive financial aid until the minimum requirements are met. The minimum requirements are as follows:

1. **Grade point average (GPA):** Must be equal to or greater than 2.00 for the semester and cumulative. Transfer credit is not included in the GPA calculation.
2. **Course completion:** Student must complete at least 65 percent of the credits attempted during the current term. Successfully completed credits include grades of A, A-, B+, B, B-, C+, C, C-, D, P, and Y. Non-completed credits include grades of WP, WF, NP, F, and Z.

Non-credit grades which are not included in the course completion calculation include grades of SA, UA, W, I, IP, X, and N.

3. **Credits:** The credits attempted for completion of an academic program cannot exceed 150 percent of the average program credits required for a degree. Students who desire to change their programs of study must notify the associate registrar because an extension or appeal of this policy may be necessary.
   - **Associate of Science degree:** A maximum of 125 credits may be attempted.
   - **Bachelor of Science degree:** A maximum of 196 credits may be attempted.
   - **Certificate programs:** a maximum of 150 percent of the credits needed for that particular certificate program may be attempted.
5. **Satisfactory progress appeal process:** At times there are extenuating circumstances that may prevent a student from achieving satisfactory progress. A student who loses financial aid due to not meeting the minimum requirements may make a written request for continuance to the director of student finance prior to the beginning of the succeeding term. The director of student finance will present the appeal request to the KCMA appeals committee. The student will receive a written response as to the action of the Committee within approximately 10 business days.

FINANCIAL AID INFORMATION

Applicants and current students may request a financial aid packet by contacting the student services office. A new financial aid packet must be completed each year. The following checklist will guide individuals through the financial aid application process:

1. Complete and submit the Free Application for Federal Student Aid (FAFSA) or Renewal Application to the Federal Student Aid Programs.
2. Complete and submit the KCMA financial aid application to the KCMA student finance office.
3. Submit any additional paperwork as instructed by the KCMA student finance office.

A student must be enrolled at least half time (six credits) in order to receive most types of financial aid. However, some types (Ohio Instructional Grant, for example) require full-time (12 credits) attendance. Please contact the student finance office for more specific information.

Financial aid resources are first applied to charges on the student's account. Any remaining credit balance may then be issued to the student for living expenses.

TYPES OF FINANCIAL AID

To apply for any type of federal or state financial aid, a student must complete a Free Application for Federal Student Aid (FAFSA). Notification of federal and state eligibility will be directly forwarded to the KCMA student finance office. Contact the associate director of financial aid for additional information regarding the following:

Federal Pell Grant: A federally sponsored grant program. Undergraduate students who are citizens of the United States are eligible to apply for Federal Pell Grants. The amount of the Federal Pell Grant is determined by financial need, the cost of attending KCMA, and the number of credits for which the student is registered. Students registered less than full time will have their grants reduced accordingly. Students may apply for the Federal Pell Grant online (www.fafsa.ed.gov) or through the paper version of the application.

Applications are available from any financial aid office or from a high school counselor beginning in January for the following academic year.

Academic Competitiveness Grant: A federal grant that may be available to Federal Pell Grant recipients who are determined to have met rigorous high school standards as established by the government.

Federal Perkins Loan: A federal loan with 5 percent interest. These loans are made to students through the student finance office of KCMA. No interest is charged while the student is attending school. Repayment begins nine (9) months after withdrawal or graduation, whichever comes first. Eligibility is based on exceptional need. Priority is given to allied health students who meet priority deadlines, as published.

Nursing Student Loan (NSL): Similar to Perkins Loan but for undergraduate nursing students only. The NSL program enables eligible students to borrow funds and repay them following graduation or semesters of less than half-time enrollment. The interest rate is 5 percent with a nine-month grace period. Eligibility is based on exceptional need. Priority is given to nursing students who meet published priority deadlines.

Federal Work Study (FWS): This program provides jobs for students who demonstrate financial need. FWS gives students the opportunity to earn money to help pay their educational expenses. The student should indicate interest in the FWS program on the KCMA financial aid application.

William D. Ford Federal Direct Loan program: Includes the Federal Direct Stafford Loan (Direct Subsidized Loan), Federal Direct Unsubsidized Stafford Loan (Direct Unsubsidized Loan), and Federal Direct PLUS Loan programs.

- **Federal Direct Subsidized Loans** are made available through the U.S. Department of Education, through the school, to the student. Eligibility for the Direct Subsidized Loan is based on the institution's cost of attendance minus financial aid and expected family contribution (as determined by the federal government). The federal government pays all of the interest on subsidized loans while the student is in school at least half time. The interest rate is fixed for loans disbursed after July 1, 2006, at 6.8 percent. Repayment begins six months after the student leaves school, graduates, or drops below half-time enrollment. Students with prior bachelor's degrees are eligible to borrow under the Federal Direct Subsidized Loan program provided they have not borrowed in excess of the limits listed (see chart for annual and aggregate loan limits).
- **Federal Direct Unsubsidized Loans** have the same guidelines as the Federal Subsidized Loan program with the exception that the federal government does not pay the interest on the loan while the student is in school. The student can either pay the interest each month or allow the interest to accrue until repayment begins.
- **Direct Subsidized and Unsubsidized Combined Annual and Aggregate Loan Limits:** See chart.

Dependent undergraduates		
Student year	**Annual limit**	**Aggregate limit**
First year	$3,500	
Second year	$4,500	
Third, fourth, and fifth years	$5,500	$23,000
Independent undergraduates		
Student year	**Annual limit**	**Aggregate limit**
First year	$7,500 [1]	
Second year	$8,500 [2]	
Third, fourth, and fifth years	$10,500 [3]	$46,000 [4]

[1] No more than $2,625 of this may be in subsidized loans.
[2] No more than $3,500 of this may be in subsidized loans.
[3] No more than $5,500 of this may be in subsidized loans.
[4] No more than $23,000 of this may be in subsidized loans.

- **Direct PLUS Loans** do not have annual or aggregate limits. Direct PLUS Loans are for the parents of dependent students. A parent may borrow up to the institution's cost of attendance minus any other estimated financial assistance for that student. Repayment begins 60 days after the final loan disbursement.

Ohio College Opportunity Grant (OCOG): Undergraduate Ohio residents with an expected family contribution (EFC) of $2,190 or less with a maximum household income of $75,000 may be eligible. Grant is available to full- and part-time students and is adjusted based on credits and is restricted to tuition. The FAFSA must be completed by the Oct. 1 deadline.

Ohio War Orphans Scholarship: Scholarship awarded to children of disabled or deceased war veterans. Eligible students may receive $4,400 annually. For additional information, contact the Ohio War Orphans Board at the Ohio Board of Regents.

KCMA institutional scholarships and loans: Funds from individuals and local and national organizations. Loans and scholarships are available to students who meet specific criteria. Contact the financial aid office for more information.

Veterans' benefits: Benefits for veterans of the armed forces. Monthly allowances vary according to marital status and dependents. Information and forms can be obtained through the KCMA student finance office for those qualifying for educational benefits.

Nurse Education Assistance Loan Program (NEALP): Loans to Ohio residents enrolled in nursing who plan to practice nursing in Ohio following graduation. Students may borrow up to $3,000 per academic year to a limit of $12,000. Following graduation, a borrower may be eligible for debt cancellation if employed full time as a registered nurse or a licensed practical nurse in the state of Ohio for a minimum of five years. A separate application must be filed with the Ohio Board of Regents between Jan. 1 and July 15 of each year. A new application is not required for loan renewal.

Student employment: Employment opportunities exist on the Kettering Medical Center campus. Students with financial resources that are insufficient to meet total expenses may apply directly to the human resources employment office of Kettering Medical Center or to KCMA's student financial aid counselor. Enrollment in the College does not imply assurance of employment, nor is the College responsible for procuring employment for the student. Full-time students are strongly advised to limit work to three (3) shifts or 20 hours per week.

PART-TIME STUDENTS

A part time student is one enrolled for less than 12 credits of study. The part time student is subject to all fees charged to full time students.

CLASS ATTENDANCE

The College must pay special attention to the attendance records of certain students. Students receiving assistance from federal agencies are required by those agencies to attend class regularly. If a student's attendance is required by a government agency, it is that student's responsibility to notify the instructor that he or she will need verification of attendance. Instructors cannot certify attendance if the student has not followed the attendance requirements set up in the course syllabus. Attendance verification will require the student to:

- Obtain the attendance form from the records office;
- Have the form signed by all involved faculty on a weekly basis; and
- Return the completed form to the financial aid office as required by the financial aid office.

Student Life

ORIENTATION

Prior to each semester, orientation sessions are required to familiarize students with the College and to assist them in their transition to student life. Special residence hall orientation is provided each fall, as well as orientation to the academic expectations within individual programs of study.

STUDENT CONDUCT

The act of registration is an agreement on the part of the student to abide by the College's regulations. Students are expected to conduct themselves as responsible citizens of a Christian college. The College seeks to foster voluntary patterns of conduct which reduce the number of necessary regulations and expects students to observe carefully those rules deemed essential to the College mission.

Irresponsible activities and/or behavior are not in harmony with the ideals of the College. Students are expected to maintain honesty in all coursework (no cheating of any kind). They are expected to abstain from the use of alcoholic beverages, drugs, tobacco, vulgar or profane language, and participation in gambling while on clinicals or on the Kettering Medical Center property, including the KCMA campus. The *Student Handbook,* available on the College Web site, outlines standards of professional conduct and integrity with levels of violation and sanction. A student whose conduct exhibits disrespect for the aims and ideals of the College, including actions off campus that threaten or harm larger community welfare or that discredit the College, may be subject to disciplinary probation or dismissal.

ADVISING

Advising about career objectives, educational concerns, and personal adjustment is an important component of the College experience and helps students with their academic progress and preparation for life. Faculty members and administrative officers are assigned to provide assistance and guidance. Each student must go to his or her assigned academic advisor for schedule approval. Professional counseling is also available by referral for those seeking guidance with personal problems.

SPIRITUAL LIFE

The College offers varied Christian fellowship opportunities for students living on and off campus. The KCMA spiritual life team seeks to meet the spiritual, emotional, and social needs of students through religious assemblies, retreats, recreational activities, social mixers, community outreach and family activities, individual and family counseling, and individual spiritual guidance. The College's setting itself provides an opportunity for students of many faiths to interact together in a manner that strengthens individual spiritual development. Opportunities for local and international short-term mission trips are also an integral part of spiritual formation and community service outreach for KCMA students.

COUNSELING SERVICES

Through a contract arrangement with Kettering Medical Center's counseling care center, KCMA provides short-term, confidential counseling for students who would benefit from talking with a licensed counselor. There is no charge to the student. More information is available from the literature racks outside the records office.

STUDENT GOVERNANCE

Student governance opportunities are available within each program, where student officers are elected to serve as representatives to the College's Student Senate. The Student Senate exists to provide a structure for students to channel their concerns and viewpoints to College administration; to provide departmental student leadership; to provide a forum whereby the administration of the College can introduce proposed changes which affect students for the purposes of informing or establishing a dialogue; and to develop and sustain a caring community for students at the departmental and College level.

RESIDENCE HALL

Student housing is available for single students. Unmarried students under 21 years old and not living with parents or close relatives are encouraged to live on campus. The Residence Hall staff promotes opportunities for students to experience a satisfying and rewarding college life through social and spiritual opportunities.

Dormitory students sign a housing lease for the academic year. The lease agreement can be terminated by the College for the following reasons:

1. The student withdraws from the College.
2. The student is enrolled for fewer than seven (7) credits at the College.
3. Unresolved disciplinary problems persist.

For additional information about the campus life, including housing options, contact the director of student life and the Residence Hall.

FOOD SERVICE

The hospital cafeteria offers a selection of vegetarian and meat items. The Atrium Grille also provides service to students. Snack machines are located in the hospital and the College. Registered students are eligible to obtain a discount in the cafeteria and the Atrium Grille when using a valid student ID card.

STUDENT HEALTH

The health care profession, by its very definition, assists and aids those whose health is compromised by disease, trauma, and/or other physical and psychosocial illnesses and conditions. Although every effort is made to instruct students in appropriate procedures and standard precautions, there remains an inherent risk of exposure to infectious diseases and/or pathogens that could cause illness or injury to the student.

Kettering College of Medical Arts requires immunizations, vaccines, and a tuberculosis skin test as preventive strategies and to meet the requirements of the clinical agencies where the students' clinical experiences occur. (Refer to health requirements both for enrollment at KCMA and in specific programs. Information can also be obtained by contacting the admissions office.)

Even with preventive measures, such as immunizations, vaccines, and the use of universal/standard precautions, there is no guarantee that students will not acquire an infection or illness resulting from exposure in the care of clients. Health care risks inherent in health care professions are the responsibility of the student.

All students enrolled at KCMA must have personal health insurance coverage and must maintain coverage during the time they are enrolled students. Students who do not have health insurance coverage through their own, a spouse's, or a parent's policy may purchase coverage through the insurance plan selected by KCMA. Brochures describing this plan are available in the student services office. Failure to obtain and/or maintain personal health insurance coverage may result in dismissal from the College.

Health care resources: Kettering Workers' Care, with three locations, is equipped to provide necessary health immunizations and primary health consultation for KCMA students. Students are responsible for the cost of any immunization, consultation, or treatment at Kettering Workers' Care. Should emergency medical care be required, students may use 24-hour medical services available in the Kettering Medical Center emergency department. Payment for treatment in the emergency department is the student's responsibility.

Tobacco, alcohol, and drugs on campus: Kettering College of Medical Arts is committed to the health and well-being of its students. All College and Kettering Medical Center facilities and premises and the adjacent neighborhood areas are designated a smoke-free environment. The use or possession of alcoholic beverages and illicit drugs or the abuse of harmful substances is prohibited everywhere on the College or Kettering Medical Center campus. Violators will be prosecuted in accordance with applicable laws and ordinances and also will be subject to disciplinary action by the College. Because drugs or alcohol can adversely affect a student's health and clinical performance, KCMA reserves the right to test students suspected of using or being under the influence of alcohol or drugs. (Refer to the substance abuse policy in the *Student Handbook.)* Information on "Promoting Health, Not Drugs" can be obtained from the student services office.

Restrictive health conditions: The College desires to safeguard the health and well-being of KCMA students in clinical and residence hall settings as well as the health of those patients with whom they have contact. For this reason, the student is responsible for reporting to the instructor and/or Residence Hall dean (if a Residence Hall student) any restrictive health condition* as soon as the condition is known.

Restrictive health conditions are any health condition lasting longer than one week which may temporarily limit full participation in required educational experiences or which may threaten a student's life.

Restrictive health conditions of physical origin may include but are not limited to back injuries, fractures, pregnancy, immunocompromised status, surgery, etc. Restrictive health conditions involving mental and emotional states are of particular concern because of their life-threatening potential. These conditions include, but are not limited to, suicide attempts, severe depression, chemical dependency, anorexia nervosa, bulimia nervosa, and psychotic behavior. If a staff or faculty member becomes aware of a life-threatening situation involving a student, the confidentiality privileges are suspended in order to obtain necessary assistance for the student. Life-threatening situations involving students under the age of 18 are cause for immediate notification of the students' parents/guardians by the College.

Once a restrictive health condition is reported, a written recommendation from a licensed health care provider may be requested. Continued participation in the clinical/laboratory experience or in Residence Hall life will be decided on a case-by-case basis.

Failure to report a restrictive health condition to the instructor (or to the Residence Hall dean if appropriate) and/or failure to comply with the restrictive health procedure may result in immediate suspension from course activities or dismissal from the Residence Hall.

**For the purpose of definition, individuals with restrictive health conditions are not necessarily considered to be "disabled," in that the impairments are not considered to cause substantial limitations in major life activities.*

TUTORING SERVICES

Tutoring is available to all students as a service of the Academic Support Center of the Learning Commons. Expert tutors are available for math and writing. Peer tutors are trained students who can help with specific courses. A tutoring schedule is published each semester, and students can drop in or make an appointment during tutoring hours. All tutoring is free.

Online tutoring with Houghton Mifflin's Smarthinking service is available 24 hours a day, seven days a week. Information is available in Angel or in the Academic Support Center.

Study groups can help students master the material for a course or prepare for quizzes and exams. Assistance in forming effective study groups is available in the Academic Support Center.

The learning specialist is available in the center for individual help with study skills, time management and test-taking strategies.

SECURITY

The Kettering Medical Center Protective Services Department provides security for students, faculty, staff, and visitors. Protective services personnel are on duty 24 hours a day, 7 days a week to assist in student concerns. All students and employees can assist in continuing to make the college a safe place by reporting any suspicious activity.

AUTOMOBILE REGULATIONS

All students driving vehicles are required to register them with the College and secure a current KCMA parking sticker. On-campus parking is a privilege, not a right, and students are expected to abide by Kettering Medical Center regulations. Please refer to the *Student Handbook*

for parking policies and procedures. Students are encouraged to allow sufficient time to park their vehicles before class.

BOOKS AND SUPPLIES

The College Bookstore is located on the lower level of Polen Plaza. It stocks text and reference books used in KCMA classes as well as a variety of other books, supplies, insignia clothing, gifts, and uniforms and equipment for each curriculum. Students may special-order books through the Bookstore. Cash, check and major credit cards are accepted for payment. Student ID cards may also be used when there is a sufficient account balance available. Recipients of government (state/federal) grants, loans, and benefits are responsible for making purchases in accordance with government policies. Policies for payment options and ID card usage are available at the Bookstore. Book and merchandise return policies are posted in the Bookstore and on the KCMA Bookstore Web page.

PUBLICATIONS

KCMA's ***Academic Bulletin*** is a description of curricula at the College.

The ***Student Handbook,*** part of the ***Student Planner,*** informs students about the College's services and policies. The policies outlined in the *Handbook* apply to all College students.

The ***Residence Hall Handbook*** is given to dormitory students and outlines policies, procedures, and information regarding Residence Hall life.

Pacesetter is the College's magazine, published twice a year. It contains news, feature stories, and other articles showcasing Kettering College.

In addition, many brochures providing information about specific programs are available.

CULTURAL/RECREATIONAL OPPORTUNITIES

Many organizations and institutions contribute to the wide variety of cultural and recreational opportunities available. Among them are the Dayton Ballet, Dayton Philharmonic Orchestra, the Dayton Art Institute, the U.S. Air Force Museum, Carillon Historical Park, Cox Arboretum, the Boonshoft Museum of Discovery, SunWatch Prehistoric Indian Village, the Aullwood Audubon Center and Farm, the Dayton Opera, Victoria Theatre, the Schuster Center for Performing Arts, Polen Farm, the Fraze Pavilion, the Dayton and Montgomery County Public Libraries, and other college and university libraries in the area.

"Go," a Friday supplement in the *Dayton Daily News,* highlights a number of social and cultural activities available throughout the Dayton area.

More information about the area is available on the Kettering College Web site at www.kcma.edu/aboutDayton.html.

The College offers a variety of structured and unstructured physical activities to promote student health and well-being. Students may use the College gymnasium, fitness center, and fitness course.

Core Requirements

Kettering College of Medical Arts offers pre-professional and professional health care education leading to associate, bachelor's, and master's degrees. As a fully accredited institution of higher education, the College provides its students with learning experiences that prepare them not only to be highly qualified professionals, but also to be successful citizens of character, able to adapt in an ever changing world. To accomplish this, the College has identified five Institutional Outcomes that are woven throughout the College curricula of all the degrees.

KETTERING COLLEGE INSTITUTIONAL OUTCOMES

Kettering College's Institutional Outcomes are a set of skills, attitudes, and behaviors that reflect the college's commitment to competence and character. Achievement of these outcomes produces KCMA graduates who are superior citizens in professional health care environments and in the community. The institutional outcomes are defined as:

Christian service: Understand the Christian concepts of self-giving love and whole-person wellness and how they shape the ideal of service. Make a habit of service so that it informs personal and professional choices and builds commitment to others in the local and global community.

Social-cultural interaction: Interact with others in a friendly, patient, and open manner, building positive relationships and engaging in effective teamwork with colleagues and the community at large. Understand the various ethnic, socioeconomic, and religious groups encountered in personal and professional life and apply that understanding to the health care setting.

Ethical behavior: Understand ethical concerns, particularly of Christian health care, and make informed and principled choices in one's professional and personal life.

Communication: Assess audience and use appropriate current modes of communication effectively including speaking, reading, writing, and listening. Demonstrate quantitative literacy, computer literacy, information literacy, and effective use of media.

Critical thinking: Appropriately analyze, synthesize, and evaluate problems and perspectives. Provide recommendations and carry out plans to solve problems informed by careful analysis.

RATIONALE FOR CORE REQUIREMENTS

Composition and speech: The study of composition and speech develops the ability to read and write effectively and to interact with a variety of texts in an informed and meaningful way. It prepares individuals to use effective and cogent language; to find, evaluate, and use information in

a thoughtful and deliberate manner; and to produce documents that are appropriate to audience, purpose, and situation.

Humanities: The study of humanities addresses KCMA's mission to the whole person by developing in students an expanded worldview and awareness of human expression in history, language, literature, and fine arts.

Mathematics: The study of mathematics assists individuals in analyzing, synthesizing, and evaluating problems and perspectives in a scientific and technological society. The logical and sequential reasoning learned by using and communicating numeric and symbolic computation skills is essential for confronting complex problems in our world.

Natural sciences: The study of a science develops familiarity with scientific language, promotes critical thinking and logical thought processes, and develops an awareness of how information is communicated in the scientific community.

Physical education: Participation in physical education and the study of the seven dimensions of wellness (physical, mental, emotional, social, environmental, occupational, and spiritual) contribute to the development of whole-person wellness.

Religion: The study of religion contributes to students' abilities to understand their world and act creatively in it. The curriculum explicitly addresses possibilities for personal spiritual development that will lead to Christian service, ethics that will inform behaviors, critical thinking, and an opportunity to discover the good news of God.

Social sciences: The study of a social science develops the knowledge, skills, and behaviors necessary for establishing, maintaining, and promoting productive personal and professional relationships and contributes to the understanding of self, family, and community.

DEGREE REQUIREMENTS

The following section enumerates the core coursework, credits, and residency requirements for the associate and bachelor's degrees offered by the College. See the *Graduate Bulletin* for core requirements for the master's degree.

Degree requirements are in addition to core requirements and make the actual number of credits required higher than the core requirements alone. Degree requirements are described separately in the appropriate degree sections of this *Bulletin.*

ASSOCIATE OF SCIENCE DEGREE CORE

Statement of purpose: Kettering College's Associate of Science degree provides students with quality pre-licensure health care education integrated with Christian principles and values.

Degree description: Kettering College's pre-licensure curricula prepare qualified, highly competent health care professionals committed to whole-person care and compassionate service, graduates who continue to grow as contributing members of their profession and community.

Credits and residency requirements: The Associate of Science degree requires a minimum of 64 credits for graduation; 34 credits must be taken from Kettering College.

Core curriculum: The foundational courses in the core curriculum reflect the mission and objectives of the College and foster an interdisciplinary approach to inquiry and learning. The following courses are required of students pursuing an Associate of Science degree at Kettering College.

I. Composition and speech ..... 6 credits required

Required courses

A. Academic Discourse I

B. One of the following; refer to the individual major for specific requirements:

- Academic Discourse II
- Medical and Scientific Discourse and Research
- Speech Communication

II. Mathematics ..... 3 credits required

Requirement may be met by one of the following:

A. Fundamentals of Mathematics (MATH 105) or College Algebra and Trigonometry (MATH 165) with a grade of C- or above.

B. Transfer credit equivalent to MATH 105 or higher

III. Natural sciences ..... 8 credits required

All students must take two science courses that include a laboratory component.

IV. Physical education, health, and wellness ..... 2 credits required

Required courses:

A. Wellness

B. Activity course

V. Religion ..... 6 credits required

A. RELB 110, Biblical Resources for Understanding Health Care (2 credits)

B. At least one religion elective from Spiritual Foundations cluster (cluster A) (2 credits) is required; students interested in courses in cluster B are encouraged to take a course from cluster A before taking any cluster B course.

C. One additional course taken from cluster A or B

Spiritual Foundations cluster A

RELB 115	Introduction to Christianity
RELB 120	Basic Bible
RELB 121	Personal Encounters with Jesus
RELB 122	Stories of Salvation
RELB 123	Spiritual Formation
RELB 205	Reflections on the Psalms
RELB 210	The Parables of Jesus
RELB 211	Life and Teachings of Jesus
RELB 225	Gospel of John

Spiritual Explorations cluster B

RELB 335	Paul and his Epistles
RELP 215	Character and Ethics
RELP 253	Morality and Medicine
RELP 300	Desire, Happiness, and God
RELP 302	Body, Mind, and Soul
RELP 304	Radical Requirements of Christian Faith
RELP 305	Spiritual Dimensions of Death and Dying
RELT 310	Christian Beliefs
RELP 325	World Religions

(Note: Only religion courses from faith-based institutions may be considered for transfer credit to meet the religion core requirement.)

VI. Social sciences ..... 3 credits required
Coursework in psychology or sociology

BACHELOR OF SCIENCE DEGREE CORE

Statement of purpose: The Bachelor of Science degree provides students with the breadth of educational experiences needed for a variety of entry-level positions in the work force or for graduate and professional study.

Degree description: The Bachelor of Science degree offers a liberal arts curriculum designed to build character, integrity, and a strong academic foundation for health care-related professional studies.

Credits and residency requirements: The Bachelor of Science requires at least 128 credits, including general education, with at least 40 credits in the upper division. Required major courses and elective major courses must total at least 40 credits, with at least 20 credits in the upper division; 68 credits must be taken at KCMA.

Core curriculum: The foundational courses in the core curriculum reflect the mission and objectives of the College and foster an interdisciplinary approach to inquiry and learning. The following courses are required of students pursuing a bachelor of science degree at Kettering College.

I. **Composition and Speech** (9 credits required)
Must include:
- ENGL 105 Academic Discourse I ..... 3 credits
- One of the following (refer to the individual major) ..... 3 credits
  ENGL 106
  ENGL 118
  ENGL 218
- COMM 214 Speech and Communication ..... 3 credits

II. **Humanities** (24 credits required)
Group I: Religion Courses ..... 12 credits
Must include:
- RELB 110 Biblical Resources for Understanding Health Care, taken during the first year of residence; this course counts for 2 credits of religion.
- RELP 253 Morality and Medicine
- RELP 315 Spirituality in Healing and Health Care
- One course from Religion cluster A
- RELX electives to bring group total to 12 credits
  (Note: Only religion courses from faith-based institutions may be considered for transfer credit to meet the religion core requirement.)

Group II: History, Literature, and Art ..... 12 credits
Must include:
- A full year's sequence of history (6 credits)
- Non-history humanities such as art, literature, or music; one applied course may be included (6 credits)

III. **Mathematics** (3 credits required)

May be satisfied by one of the following:

- College Algebra and Trigonometry (MATH 165) with a grade of C- or above.
- Transfer credit equivalent to MATH 165 or higher

IV. **Natural Sciences** (12 credits required)

Including:

- One-year laboratory course sequence with BIOL, CHEM, or PHYS prefix ..... 8 credits
- Remaining 4 credits determined by the major

V. **Physical Education, Health, and Wellness** (2 credits required)

Required courses:

- PEAC 178 Wellness ..... 1 credit
- PEAC 000 Activity Course ..... 1 credit

VI. **Social Sciences** (9 credits required)

Required courses:

- PSYC 112 General Psychology..... 3 credits
- SOCI 115 Principles of Sociology ..... 3 credits
- Social sciences elective to bring total to 9 credits

BACHELOR OF SCIENCE IN NURSING DEGREE CORE (COMPLETION DEGREE)

Statement of purpose: The purpose of the BSN completion degree is to prepare registered nurses to provide professional nursing care to clients, families, and communities in the spirit of Christian caring and service. Graduates are prepared to be citizen leaders in the community.

Credits and residency requirements: The Bachelor of Science in Nursing degree requires 64 credits beyond the Associate of Science nursing degree (or its equivalent) for graduation and at least 42 upper-division credits; 34 credits of credit must be taken from Kettering College.

Core curriculum: The foundational courses in the core curriculum reflect the mission and objectives of the College and foster an interdisciplinary approach to inquiry and learning. The following courses are required of students pursuing a Bachelor of Science in Nursing completion degree.

I. Humanities ..... 6 credits

May include courses from literature, history, philosophy, music, art, theater, or foreign language.

II. Religion..... 6 credits

- RELP 315
- Religion courses (4 credits from upper division)

  Note: Only religion courses from faith-based institutions may be considered for transfer credit.

III. Social sciences..... 3 credits

Refer to the individual major for specific requirements.

IV. Mathematics ..... 3-4 credits

Requirements may be met by one of the following:

- MATH 215 Probability and Statistics
- Transfer credit equivalent to MATH 215
- Recommended prior coursework: a college-level mathematics course in the past five years

BACHELOR OF SCIENCE IN HEALTH PROFESSIONS DEGREE CORE (COMPLETION DEGREE)

Statement of purpose: The Bachelor of Science in Health Professions degree at Kettering College of Medical Arts provides high-quality, values-based baccalaureate education in health-related fields with the spirit of Christian caring and service.

Degree description: Kettering College of Medical Arts offers a Bachelor of Science in Health Professions completion degree designed for those who have obtained an associate degree or its equivalent in allied health or nursing and wish to pursue a Bachelor of Science degree. The course of study is the equivalent to the junior and senior years of a four-year baccalaureate degree. Students may choose a full-time or part-time pace of study, selecting coursework from modalities that include lecture, online, and Web-enhanced learning environments.

Attitudes and values fostered in this degree will enhance career mobility within health care settings and may serve as a foundation for graduate education.

Majors in advanced imaging, diagnostic medical sonography, and respiratory care are designed for those seeking greater emphasis within the scope of these disciplines. Students may also choose the health care professional studies degree with course options in health care management, education, or business.

Credits and residency requirements: The Bachelor of Science in Health Professions degree requires a minimum of 64 credits beyond the associate degree for graduation. This must include a minimum of 42 credits in upper-division courses; 34 credits must be taken from Kettering College.

Core curriculum:

I. Humanities ..... 6 credits

May include courses from literature, history, philosophy, music, art, theater, or foreign language

II. Religion ..... 6 credits

- RELP 315
- Religion courses (4 credits from upper division)

  Note: Only religion courses from faith-based institutions may be considered for transfer credit.

III. Social sciences ..... 3 credits

Required: SOCI 375, Cultural Diversity in Health Care, or transfer credit equivalent to SOCI 375

IV. Mathematics ..... 3-4 credits

Requirements may be met by one of the following:

- MATH 215 Probability and Statistics
- Transfer credit equivalent to MATH 215
- Recommended prior coursework: a college-level mathematics course in the past five years

Anna May Vaughan-Winton Beaven Service Learning Honors Program

Laura Willis, Coordinator

DESCRIPTION OF THE PROGRAM

The Vaughan-Beaven Service Learning Honors Program is available for students who choose to demonstrate their excellence and character beyond the high standards of the professional programs offered at Kettering College of Medical Arts. Students admitted to the Vaughan-Beaven Service Learning Honors Program participate in a course of study that critically analyzes the service needs of the local, regional, national, and/or global communities, and participates in meeting identified needs.

All students may apply to the program upon admission to the College. Students must maintain a GPA of 3.5 for all honors courses as well as all courses that have a service learning honors component. Students also must maintain an overall GPA of 3.00 in all courses taken for the degree. Students who complete all of the requirements for the program will graduate as Vaughan-Beaven Honors Scholars and will be so recognized at commencement.

MISSION STATEMENT

The service learning honors program is committed to improving communities through leadership in service learning.

OUTCOMES

1. Integrate leadership skills and professionalism in the application of service in the local, national, and/or world community.
2. Promote and communicate an understanding of cultural diversity/sensitivity and social/civic responsibility though commitment to lifelong service and learning.
3. Integrate the values of compassion, competence, citizenship, and character through personal and professional growth.
4. Incorporate effective communication multiprofessionally within the global village.

PROGRAM REQUIREMENTS

Applicants who have been admitted as candidates for the Vaughan-Beaven Honors Program must complete an orientation to the program.

ASSOCIATE DEGREE	BACHELOR'S DEGREE COMPLETION	BACHELOR'S DEGREE
60 clock hours of service learning	60 clock hours of service learning	110 clock hours of service learning
REQUIRED COURSES		
HEPR 375 Cultural Diversity in Health Care	HEPR 375 Cultural Diversity in Health Care	HEPR 375 Cultural Diversity in Health Care
SERVICE LEARNING HONORS PROGRAM COURSES		
Choose one: SLHP 301 International Health SLHP 331 Health Care Needs of Underserved Populations	**Choose one**: SLHP 301 International Health SLHP 331 Health Care Needs of Underserved Populations	**Two required**: SLHP 301 International Health SLHP 331 Health Care Needs of Underserved Populations
ELECTIVE COURSES		
None required	**Choose one:** HEPR 451 Interdisciplinary Team Practice in Community-Based Care HEPR 330 Community Health Perspectives	**Choose one:** HEPR 451 Interdisciplinary Team Practice in Community-Based Care HEPR 330 Community Health Perspectives

[1]Mission trips inside and outside the country may be planned periodically throughout the academic year, usually during breaks or right before or after the end of a semester.

Available program courses include:

SLHP 200	Health Care Needs of the Hispanic Population
SLHP 301	International Health
SLHP 331	Health Care Needs of Underserved Populations
HEPR 330	Community Health Perspectives
HEPR 375	Cultural Diversity in Health Care
HEPR 451	Interdisciplinary Team Practice in Community-Based Care

A student may choose to take any of the SLHP or HEPR courses listed in addition to the required courses listed for the program of study. Students in the program will be required to submit documentation of service learning hours each semester to the program coordinator.

RELIGION OPTION

Students in the service learning honors program have the option of taking an honors religion course, RELP 340, Christian Social Ethics, for four credits.

ADMISSION REQUIREMENTS

1. Meet all requirements for admission to KCMA.
2. Present transcripts reflecting a high school GPA of 3.25 or above (on a 4-point scale) or college GPA of 3.0 or above (on a 4-point scale).
3. Complete an interview process.
4. Present a minimum of 100 documented volunteer service hours.
5. Submit application by May 15 for fall semester admission, March 15 for summer semester admission, or Oct. 15 for winter semester admission, or through special permission of coordinator.
6. Write a short essay on personal goals related to the program outcomes and mission.

PROGRESSION AND COMPLETION

Students must maintain a GPA of 3.5 for all designated honors classes and all classes that have service learning honors components. They also must maintain an overall GPA of 3.00 in all courses taken for the degree. All requirements must be completed before commencement to qualify for graduation as a Vaughan-Beaven Honors Scholar unless prior arrangements have been made. Students who fall below an overall GPA of 3.00 during their college career at KCMA will be placed on probation in the honors program. An overall College GPA of 3.00 must be accomplished to graduate from the program. Periodic meetings with the coordinator are highly encouraged to assist with meeting service learning hour requirements.

Students also must not have any documented breach of the College Honor Code or documented lack of professionalism.

READMISSION

Students will be readmitted under the current program curriculum and *Academic Bulletin.* Requests for readmission to the honors program will be evaluated on an individual basis. The decision to readmit the student will be evaluated based upon the following criteria:

1. Overall College GPA of 3.00.
2. Available space in the honors program.
3. Evaluation of the student's standing, relative to any revisions that may have occurred in the curriculum, courses, or requirements.
4. Review and evaluation of student's academic performance at the time of withdrawal or dismissal from the program.
5. Submission of a written plan for academic success and honors program completion.
6. Interview process at the discretion of the service learning honors program committee.

Division of Arts and Sciences

Paul DeLange, Director; Laurie Bromagen; Kathy Cameron; Jill Evans; Frank Golich; James Londis; Vail McGuire; Benjamin Navia; Jane Nesbit; Pat Nicosia; David Price; Randa Quale; Robert Reeder; Bill Rodenburg; Margaret Rodenburg; Tom Rule; Daniel Schoun; David VanDenburgh; Daryll Ward; R. Timothy Willsey

MISSION STATEMENT

As an integral part of Kettering College of Medical Arts, the faculty of the Division of Arts and Sciences is dedicated to assisting students in constructing a strong spiritual, philosophical, and academic foundation based on Christian principles on which to build personal and professional study and growth.

GOALS AND OBJECTIVES

The courses in the Division of Arts and Sciences meet two distinct needs. One is to provide a liberal arts background on which to build technical information leading toward a degree in a health care field at Kettering College of Medical Arts. The other is to provide a Bachelor of Science degree that meets admissions requirements for the Master of Physician Assistant Studies or for medical, dental, or other professional schools.

The faculty strives to help students achieve the institutional outcomes of Christian service, social-cultural interaction, ethical behavior, communication, and critical thinking through a variety of courses and learning activities.

ADMISSION

Applicants must meet KCMA admission criteria.

MAJOR IN HUMAN BIOLOGY

Daniel Schoun, advisor

As an accredited college directly affiliated with Kettering Medical Center, Kettering College of Medical Arts offers a unique learning opportunity for persons interested in health-related careers. Students have numerous opportunities to evaluate their career choices through interaction with students and faculty in the allied health and nursing programs.

The Bachelor of Science with a major in human biology is a versatile degree that provides the student with extensive preparation for graduate or professional studies in any field that

works with the human organism. While the natural sciences are emphasized, students receive a thorough background in social sciences, cultural studies, and the humanities. In addition, graduates in human biology have an understanding of health care disciplines and the qualifications they demand.

There are two distinct curricular programs of study for the Bachelor of Science degree with a major in human biology. Students interested in medicine, dentistry, physician assistant, physical therapy, occupational therapy, speech therapy, and other health-related professions that require baccalaureate or graduate degrees will receive a thorough preparation for admission to professional school by completion of the four-year program of study. Upon completion of the four-year program of study at KCMA, the student may apply to a professional school or university to complete the required graduate study necessary for entry into the chosen profession. The second curricular program of study for the Bachelor of Science with a major in human biology is the "3+2"-year accelerated curriculum leading to the Master of Physician Assistant Studies. A student with an excellent academic record for the first three years as a human biology major desiring to prepare for the physician assistant profession may be given early admission to the two-year KCMA physician assistant graduate program. Appropriate physician assistant courses taken during the fourth year are applied to the human biology major to complete the bachelor's degree. It is essential that each student become familiar with the admission requirements of the Master of Physician Assistant Studies at KCMA or the professional schools to which he or she wishes to apply in order to select the appropriate courses within the major in human biology.

Admission to most professional schools in health-related fields is highly competitive. To increase the probability of acceptance into the professional school of choice, students should maintain high grades (B+ or A- average) while at Kettering College of Medical Arts. Because of the demanding program of study and the necessity of maintaining a high grade point average, there are specific criteria for admission into and progression in the major in human biology.

REQUIREMENTS FOR ADMISSION

Note: Degree program requirements change regularly; students should check www.kcma.edu for the most up-to-date information.

- Graduate from high school or passed the GED exam with a score of 50/500 or better.
- Have a high school grade point average of 2.50 or greater and an enhanced ACT composite minimum score of 19 or a minimum SAT combined score of 1350 (910 if SAT was taken before March 2005) OR have a minimum of 12 semester units of college credit with a grade point average of 2.5 or greater.
- Complete the KCMA mathematics placement exam with a minimum score of 70 percent OR provide transfer credit equivalent to MATH 105 or higher.
- Complete the student personal statement form provided in the application packet.

It is strongly recommended that applicants have completed one year each of high school biology, chemistry, and physics and at least two years of high school mathematics (excluding business mathematics courses).

REQUIREMENTS FOR GRADUATION

A grade of C- or above must be achieved in all required major courses, major elective courses, and required cognate courses, and the student must maintain a cumulative grade point average of at least 2.0 (C) in order to graduate with a major in human biology.

PROGRAM OF STUDY FOR BACHELOR OF SCIENCE: HUMAN BIOLOGY MAJOR (4-YEAR CURRICULUM)

The Bachelor of Science requires at least 128 credits, including general education, with at least 40 credits in the upper division. Required major courses and elective major courses must total at least 40 credits, with at least 20 semester credits in the upper division.

In addition to the core requirements for a Bachelor of Science degree (see degree core requirements section), the major in human biology requires the following:

I. Required cognate courses..... 34 credits

CHEM 125	General Chemistry I	4
CHEM 136	General Chemistry II	4
CHEM 211	Organic Chemistry I	4
CHEM 222	Organic Chemistry II	4
One course chosen from the following:		3
■ HEPR 330	Community Health Perspectives	
■ HEPR 345	History of Health Care in the United States	
■ HEPR 375	Cultural Diversity in Health Care	
■ HEPR 478	Principles of Leadership	
MATH 215	Probability and Statistics	4
PHYS 141	General Physics I	4
PHYS 152	General Physics II	4
SOCI 3XX	Upper division sociology	3

II. Required major courses..... 31-32 credits

BIOL 105	Foundations of Biology I	4
BIOL 110	Foundations of Biology II	4
BIOL 325	Environmental Science	3
BIOL 340	Biochemistry	4
BIOL 315	Molecular Biology	4
BIOL 330	Seminar in Human Biology	2
BIOL 410	Genetics	4
GSCI 410	History and Philosophy of Science	3
KCMA 350	Practicum	3-4

III. Major elective courses ..... 12 credits

BIOL 151	Microbiology	4
BIOL 210	Human Anatomy	4
BIOL 220	Human Physiology	4
BIOL 263	Sectional Anatomy	3
BIOL 310	Human Histology	4
BIOL 320	Topics in Biology	1-4
BIOL 350	Pathophysiology	3
MATH 220	Calculus I	3
NUTR 118	Basic Nutrition	2
PSYC 138	Human Growth and Development	3
PHYS 325	Biophysics	4

	PHYS 320	Topics in Physical Science	4
IV.	Elective courses ..... 6 credits		
	XXX	Upper division general electives	6
V.	BS core requirements ..... 45 credits		
	RELX 3XX	Upper division religion electives	4
	Core requirements not met by courses already listed for major (see degree core requirements section)		41
TOTAL ..... 128-129 credits			

SUGGESTED COURSE OF STUDY

	First year	Credits by term	
		Fall	Winter
BIOL 105	Foundations of Biology I with lab	4	
CHEM 125	General Chemistry I with lab	4	
HIST XXX	History Sequence I	3	
MATH 165	College Algebra and Trigonometry	3	
PEAC 178	Wellness	1	
RELB 110	Biblical Resources for Understanding Health Care	2	
BIOL 110	Foundations of Biology II with lab		4
CHEM 136	General Chemistry II with lab		4
ENGL 105	Academic discourse I		3
HIST XXX	History Sequence II		3
KCMA 120	Overview of Health Occupations		1
RELB XXX	Religion elective (cluster A)		2
	TOTAL	17	17

	Second year	Fall	Winter
XXX	Humanities Group II elective	3	
XXX	Major elective	2-3	
CHEM 211	Organic Chemistry I with lab	4	
KCMA 350	Practicum	1	
PHYS 141	General Physics I with lab	4	
SOCI 115	Sociology	3	
COMM 214	Speech		3
CHEM 222	Organic Chemistry II with lab		4
ENGL 218	Writing and Research in the Sciences		3
KCMA 350	Practicum		1
PHYS 152	General Physics II with lab		4
PSYC 112	General Psychology		3
	TOTAL	17-18	18

	Third year	Fall	Winter
XXX	Major elective	3-4	
BIOL 315	Molecular Biology with lab	4	
KCMA 350	Practicum	1	
MATH 215	Probability and Statistics	4	
PEAC XXX	Physical education elective	1	
RELX 3XX	Upper division religion elective	2	
XXX	Major elective		4
XXX	Major elective		4
BIOL 340	Biochemistry with lab		4
KCMA 350	Practicum		0-1
RELX 3XX	Upper division religion elective		2
	TOTAL	15-16	14-15

	Fourth year	Fall	Winter
XXX	Upper division general electives	3	
XXX	Humanities Group II elective	3	
BIOL 330	Seminar in Biology	1	
GSCI 410	History and Philosophy of Science	3	
HEPR XXX	Required HEPR cognate course	3	
RELP 253	Morality and Medicine	2	
XXX	Upper division general electives		3
BIOL 325	Environmental Science		3
BIOL 330	Seminar in Biology		1
BIOL 410	Genetics with lab		4
RELP 315	Spirituality in Healing and Health Care		2
SOCI 3XX	Upper division sociology course		3
	TOTAL	15	16

PROGRAM OF STUDY FOR BACHELOR OF SCIENCE: HUMAN BIOLOGY MAJOR ("3+2"-YEAR MPAS ACCELERATED CURRICULUM)

Highly qualified KCMA students enrolled in the human biology major who express a desire to accelerate their studies and meet admission requirements for the MPAS degree may be admitted to the "3+2"-year program of study. Those students accepted into the "3+2"-year program of study have the potential to complete both degrees in an accelerated fashion. This program of study is only for KCMA students who have not earned bachelor's degrees, are enrolled in the human biology major, and desire to accelerate their completion for the graduate program in physician assistant studies. Students who adhere to this program of study are not guaranteed admission to the PA program; pre-PA students must submit a letter of intent to the PA office by May 1 in the year prior to anticipated matriculation into the PA program. Example: May 1, 2010, is the deadline for students intending to be in the PA program, if accepted, in the summer of 2011. The form is available in the PA office and on the KCMA Web site.

The major in human biology with an accelerated program of study for pre-physician assistant students requires the following:

I. Required cognate courses ..... 28 credits

CHEM 125	General Chemistry I	4
CHEM 136	General Chemistry II	4
CHEM 211	Organic Chemistry I	4
CHEM 222	Organic Chemistry II	4
MATH 215	Probability and Statistics	4
PHYS 144	General Physics I	4
PHYS 152	General Physics II	4

II. Required major courses ..... 39-41 credits

BIOL 105	Foundations of Biology I	4
BIOL 110	Foundations of Biology II	4
BIOL 151	Microbiology	4
BIOL 210	Human Anatomy	4
BIOL 220	Human Physiology	4
BIOL 340	Biochemistry	4
BIOL 410	Genetics	4
GSCI 410	History and Philosophy of Science	3
KCMA 350	Practicum	3-4
PSYC 138	Human Growth and Development	3
XXX	Major elective	2-3

III. PA major courses applied to BS degree .....16 credits

PHAS 500	Introduction to the PA Profession	1
PHAS 505	Introduction to Medical Learning	1
PHAS 503	Applied Pathophysiology	3
PHAS 504	Applied Sectional Anatomy	4
PHAS 550	Behavioral Medicine	3
PHAS 543	Clinical Case Studies in Faith, Diversity, & Ethics	2
PHAS 505	Clinical Genetics	2

IV. BS core requirements..... 45 credits

RELX 3XX	Upper division religion electives	4
	Core requirements not met by courses already listed for major (see degree requirements section)	41

TOTAL ..... 128-130 credits

PROGRAM OF STUDY MAJOR IN HUMAN BIOLOGY, PRE-PHYSICIAN ASSISTANT

	First year	Credits by term	
		Fall	Winter
BIOL 105	Foundations of Biology I	4	
CHEM 125	General Chemistry I	4	
HIST XXX	History Sequence I	3	
MATH 165	College Algebra and Trigonometry	3	
PEAC 178	Wellness	1	
RELB 110	Biblical Resources for Understanding Health Care	2	
BIOL 110	Foundations of Biology II		4
CHEM 136	General Chemistry II		4
ENGL 105	Academic discourse I		3
HIST XXX	History Sequence II		3
KCMA 120	Overview of Health Occupations		1
RELB XXX	Religion elective (cluster A)		2
	TOTAL	17	17

	Second year	Credits by term		
		Fall	Winter	Summer
XXX	Humanities Group II elective	3		
NUTR 118	Basic Nutrition	2		
CHEM 211	Organic Chemistry I	4		
KCMA 350	Practicum	1		
PHYS 141	General Physics I with lab	4		
SOCI 115	Sociology	3		
COMM 214	Speech		3	
CHEM 222	Organic Chemistry II		4	
ENGL 218	Writing and Research in the Sciences		3	
KCMA 350	Practicum		1	
PHYS 152	General Physics II with lab		4	
PSYC 112	General Psychology		3	
BIOL 151	Microbiology			4
XXX	Humanities Group II elective			3
	TOTAL	17	18	7

	Third year	Credits by term		
		Fall	Winter	Summer
BIOL 210	Human Anatomy	4		
GSCI 410	History and Philosophy of Science	3		
KCMA 350	Practicum	1		
MATH 215	Probability and Statistics	4		
PSYC 138	Human Growth and Development	3		
RELX 3XX	Upper division religion elective	2		
BIOL 220	Human Physiology		4	
BIOL 340	Biochemistry with lab		4	
BIOL 410	Genetics		4	
KCMA 350	Practicum		0-1	
PEAC XXX	Physical education elective		1	
RELX 3XX	Upper division religion elective		2	
	Entry point to PA program			
PHAS 500	Introduction to the PA Profession*			1
PHAS 505	Introduction to Medical Learning*			1
PHAS 503	Applied Pathophysiology*			3
PHAS 504	Applied Sectional Anatomy*			4
RELP 315	Spirituality in Healing and Health Care*			2
	TOTAL	16	15-16	11

	Fourth year	Credits by term	
		Fall	Winter
RELP 253	Morality and Medicine*	2	
PHAS XXX	PA professional courses	18	
PHAS 550	Behavioral Medicine*		3
PHAS 543	Clinical Case Studies in Faith, Diversity, and Ethics*		2
PHAS 553	Clinical Genetics*		2
PHAS XXX	PA professional courses		14
	TOTAL	20	21

Items marked with the asterisk (*) are the courses required to meet the human biology major. Students are not eligible for graduate-level financial aid amounts until they have been awarded a bachelor's degree at the end of the fourth year.

Division of Nursing

- Beverly Cobb, PhD, RN — Director of Nursing
- Sharon Millard, PhD, RN — Chair, Bachelor of Science in Nursing completion program
- Cherie R. Rebar, MBA, MSN, RN — Associate Director, Division of Nursing; Chair, Associate of Science nursing program
- Faculty: Wendy Bowles; Stephanie Butkus; Adelaide Durkin; Carolyn Gersch; Nicole Heimgartner; Lisa Huber; Amy Jauch; Cynthia Parker; Marsha Purtee; Paula Reams; Denise Sekerak; Sarah Taulbee; Joan Ulloth; Kathleen Vorholt; Carol Warner; Laura Willis; Estella Wetzel

MISSION STATEMENT

The mission and purposes of the Division of Nursing are consistent with and supportive of the mission and purpose of Kettering College of Medical Arts. The Division of Nursing is dedicated to quality nursing education, provided within a distinctly Christian learning environment, which assists students in learning concepts and whole-person care, integrating the art and science of nursing, and developing professionalism for the benefit of the community.

STATEMENT OF BELIEFS

The nursing faculty of Kettering College of Medical Arts believes that humans receive life as a gift from God and are therefore in a dynamic relationship with their Creator in order to become whole. Through God's nurturing acceptance, God allows humans to exercise free will in making choices throughout the life span. The faculty in the Division of Nursing has identified the concepts of humans, environment, health, and nursing as central to the profession of nursing. Nursing practice is an art and a science that involves enabling individuals, families, and communities to attain mutually established health goals relative to their health status. Communication, critical reasoning, and decision-making through a problem-solving process are crucial to both the art and science of nursing. Christian caring enhances movement toward the maintenance, promotion, and restoration of health.

Nursing education draws on the theories of education and principles of learning to provide a learner-centered environment conducive to growth and change.

DEGREES OFFERED

- Associate of Science degree with a major in nursing (AS)
- Bachelor of Science in Nursing completion degree (BSN) for RNs

Associate of Science nursing program

For specific information, contact the Division of Nursing at 937-395-8619 or visit the Kettering College of Medical Arts campus. Current information about this program and others at Kettering College is also available online at www.kcma.edu.

The Associate of Science nursing program is approved by the Ohio Board of Nursing, 17 S. High St., Suite 400, Columbus, OH 43215-3413; 614-466-3947.

This program, accredited by the National League for Nursing Accrediting Commission — 61 Broadway, New York, NY 10006; 800-669-1656 or 212-363-5555; www.nlnac.org — is a five-semester curriculum that provides courses in liberal arts, sciences, and nursing. Classroom instructions are correlated with clinical experiences.

Graduates are qualified to take the National Council Licensure Examination for Registered Nurses (NCLEX-RN) in the states of their choice. For state-specific information on requirements to sit for the examination, contact the individual state board of nursing. The Ohio Board of Nursing may deny the privilege of sitting for the licensing examination to those who have been found guilty of, entered a plea of guilty to, or entered a plea of no contest to certain misdemeanors or felonies (including those resulting from or related to the use of drugs or alcohol). Refer to section 4723.28 of the Ohio Revised Code, the Law Regulating the Practice of Nursing.

Upon successful completion of the NCLEX-RN, the graduate may practice as a Registered Nurse and continue his or her education toward the Bachelor of Science in Nursing completion degree for RNs.

END-OF-PROGRAM STUDENT LEARNING OUTCOMES

The graduate of the Associate of Science nursing program:

1. Critically reasons and effectively uses the nursing process to resolve health care issues with clients from diverse groups/populations.
2. Is a compassionate and conscientious nurse who serves humanity and the nursing profession in the spirit of Christian ideals.
3. Engages in learning experiences that promote ongoing personal and professional growth.
4. Uses Christian principles, professional nursing standards, and the code of nursing practice in the provision of client care.
5. Uses communication that is effective and therapeutic, along with information technology, to implement problem-solving processes in the evidence-based management of client care.

6. Functions collaboratively with other providers in acute, long-term, and community-based settings where policies and procedures are specified and professional guidance is available.
7. Uses the human functioning patterns framework to provide whole-person nursing care for the promotion of client wellness.
8. Incorporates knowledge of the impact of physical surroundings; social, religious and cultural communities; and economic, political, and demographic influences in planning whole-person health care.
9. Competently provides evidence-based whole-person nursing care that recognizes the values and beliefs of the clients.

ADMISSION TO THE ASSOCIATE OF SCIENCE NURSING PROGRAM

Note: Degree program requirements change regularly; students should check www.kcma.edu for the most up-to-date information.

For students applying to or admitted to the College to take general education courses, a separate nursing application must be submitted to the Division of Nursing at the time they desire to be considered for admission to the nursing program. Applicants must meet the following minimum criteria to be considered for admission to the Division of Nursing:

- Official high school transcript showing completion/date of graduation or GED certificate (minimum score of 50 if taken before 2002; minimum score of 500 if taken in 2002 or later).
- Minimum cumulative high school GPA of 2.75 (on a 4.00 point scale) or minimum cumulative college GPA of 2.50 (on a 4.00 point scale).
- ACT composite score of at least 20 (SAT equivalent score of 1410 if taken in March 2005 or later; 950 if taken before March 2005) is required for individuals who have graduated from high school within the past five years. Individuals who have attended college are exempt from this requirement, but the score, if available, may be beneficial in academic counseling and support.
- Coursework in biology, chemistry, and algebra with a minimum grade of C in high school and/or college.
- See the Division of Nursing office for more information on specific admission criteria.

ADVANCED PLACEMENT FOR LICENSED PRACTICAL NURSES (LPNs): Full-time students who meet requirements for advanced placement may complete the Associate of Science program in four semesters. LPNs wishing to become RNs must meet the same requirements as other College applicants. Additionally, the LPN applicant must meet the following minimum criteria to be considered for admission to the Division of Nursing:

- Present official transcript from practical nurse program showing date of graduation.
- Complete the student personal statement form provided with application materials.
- Provide two satisfactory reference letters attesting to clinical competence.
- Provide documentation of recent experience (in past 6 months) as an LPN. LPNs who have not practiced within the past 6 months will be evaluated on a case-by-case basis.
- Possess and maintain a valid, unencumbered Ohio LPN license.

Upon acceptance into the program, LPN students will be awarded credit for NRSA 110, NRSA 120, and NRSA 118. Arts and Sciences courses, as listed below, must be completed with a grade of C or better as prerequisites prior to enrolling in NRSA 130/131:

- PSYC 112
- MATH 105
- BIOL 120

LPNs admitted to the Advanced Placement for LPN nursing program must possess an unencumbered license prior to admission into the program and throughout the duration of the program. Any Ohio Board of Nursing action pending, existing, or enacted against the student's license at any time prior to admission or during the nursing program will be evaluated on a case-by-case basis and may result in the inability to begin or continue in a program of study in the KCMA Division of Nursing.

An articulation agreement with the Miami Valley Career Technology Center (MVCTC) may make LPN students of MVCTC eligible for an opportunity to pursue their associate degree nursing education at KCMA while attending MVCTC. MVCTC LPN students accepted to the Advanced Placement for LPN program at KCMA will need to work closely with the LPN-to-RN fast-track coordinator for specific guidelines and eligibility for this opportunity.

Recent LPN graduates of MVCTC applying to the Advanced Placement for LPN nursing program must pass the NCLEX-PN before being fully admitted to the KCMA Division of Nursing. Fast-track students who overlap between an LPN program and the KCMA nursing curriculum must pass the NCLEX-PN by the end of the first nursing semester. Any Ohio Board of Nursing action pending, existing, or enacted against the student's license at any time during the nursing program will be evaluated on a case-by-case basis and may result in the inability to continue in a program of study in the KCMA Division of Nursing.

For more information on specific admission criteria, see the Division of Nursing office.

ADVANCED PLACEMENT FOR MILITARY MEDICAL TECHNICIANS: Military medical technicians who have previous coursework from an approved U.S. military education and training center may qualify for advanced placement. Military medical technicians wishing to become RNs must follow the same requirements as other College applicants. The military medical technician also must meet the following minimum criteria to be considered for admission to the Division of Nursing:

- Have a cumulative college GPA greater than 2.50
- Have passed at least a Level 3 Air Force (journeyman) military medical technician training program, Army Health Care Specialist training, or Navy Hospital Corpsman.
- Have prerequisite courses completed prior to starting NRSA 118 and NRSA 120.
- BIOL 119, PSYC 112, math core requirement
- Pass advanced placement testing to receive credit for NRSA 110 once admitted to KCMA. This must be accomplished no later than midterm of the semester immediately prior to entering the Advanced Placement for Military Medical Technicians program of study.
    1. Prove competency by skills checkoff in all of the following:
        - Hand washing and isolation precautions
        - Bed bath
        - Hygiene and bed making

- Vital signs
- Application of restraints
- Head-to-toe physical assessment including apical heart rate
- Pulse pressure points, pulse deficit, and pulse pressure
- Feeding a client
- Application of TED hose, foot pumps, and SCDs
- Enema administration
- Stoma care
- Oxygen therapy
- Transfers, ambulation, ROM, and bed positioning

2. All skills checkoffs are to be completed in the KCMA Nursing Skills Lab after acceptance into KCMA.
3. Students must pass all NRSA 110 skills to be granted advanced placement and be eligible to enter the program.
4. Pharmacology: Only Air Force Level 5 or above are permitted to take the written examination to test out of NRSA 118. A score of 77 percent or higher is required to receive credit for NRSA 118. All others must take NRSA 118.

- Submit official transcripts from high school, military medical technician training program, and any college attended.
- Documentation from military supervisor of at least one year of recent experience as a military medical technician providing direct patient care. Recent experience must be within the past six months.

For all applicants, the nursing admissions committee reserves the right to specify individual requirements or make special recommendations, if indicated. Applicants will be notified of acceptance into the Associate of Science nursing program by April 1 for fall semester admission and by August 1 for winter semester admission. To be considered for fall admission to the nursing program, all application materials must be received no later than March 1 for the August class. To be considered for winter admission to the nursing program, all application materials must be received no later than July 1 for the January class.

SELECTION PROCESS

Selection for the nursing program is competitive. The following list of items is intended to inform applicants of the selection process.

- Only those fully completing the application process prior to the specified deadline for the desired semester of entry will be considered.
- Preference may be given to those applicants with the highest GPA.
- Students accepted into the program must maintain a minimum 2.5 GPA from the time of acceptance until their program start date.
- Preference will be given to equally qualified applicants completing prior courses at KCMA.

- Selection is based on:
  a. Evaluation of academic and, where applicable, health care experience
  b. Completion of prerequisites and subsequent plans for completion
  c. Evaluation of written skills as determined in the admission essay
- Once the application process is completed, the nursing faculty members evaluate applicants on the above-mentioned criteria.

TRANSFER APPLICANTS

Transfer students will be evaluated individually for admission and placement and may be accepted on a space-available basis.

ENROLLMENT

Students accepted into the nursing program must:

- Have current CPR certification from the American Red Cross Professional Rescuer course or the American Heart Association's CPR for the Health Care Provider course prior to the first day of the semester of entry.
- Provide proof of required health information and immunizations prior to the first day of the semester of entry.
- Meet the technical standards for the college and for nursing, as defined in the *Student Handbook* and on the KCMA Web site. If a student has known disabilities in any area, he or she will be required to inform the College of these limitations, and a determination will be made regarding his or her eligibility.
- Request and pay online to have a criminal background check performed by the provider of the College's choice no more than six months before starting clinical experiences, and no later than the first day of the semester of entry. The ability to begin the clinical portion of the program is contingent upon clearance through the background check. Students should be aware that the Ohio Board of Nursing may deny licensure to individuals based on results of their background check.

PROGRESSION

In order to progress to the second semester of the Associate of Science nursing curriculum, students must meet mathematics competency. To remain in the program, students must achieve a minimum grade of C in:

- Human Anatomy and Physiology I (BIOL 119)
- Human Anatomy and Physiology II (BIOL 129)
- Microbiology (BIOL 151)
- General Psychology (PSYC 112)
- Life Span Development (PSYC 138)
- All courses with NRSA prefix

LPNs admitted to the Advanced Placement for LPN nursing program must possess an unencumbered license prior to admission into the program and throughout the duration of the program. Any Ohio Board of Nursing action pending, existing, or enacted against the student's license at any time prior to admission or during the nursing program will be evaluated on a

case-by-case basis and may result in the inability to begin or continue in a program of study in the KCMA Division of Nursing.

Students who are recent LPN graduates of Miami Valley Career Technology Center (MVCTC) applying to the Advanced Placement for LPN nursing program must pass the NCLEX-PN before being fully admitted. Any Ohio Board of Nursing action pending, existing, or enacted against the student's license at any time during the nursing program will be evaluated on a case-by-case basis and may result in the inability to continue in a program of study in the KCMA Division of Nursing.

GRADUATION

To graduate with an Associate of Science degree with a major in nursing, the student must have a minimum cumulative GPA of 2.00 on a 4.00 scale as well as a minimum GPA of 2.00 on a 4.00 scale in nursing courses.

READMISSION

Students who do not meet progression requirements are removed from the nursing program and must apply for readmission. Selection for readmission is competitive. For specific readmission criteria, see the Division of Nursing office.

- The student must complete and submit the readmission form to the director of admissions and records.
- Students who are readmitted come in under the current curriculum, program policies, and *Academic Bulletin.*
- Requests for readmission will be evaluated individually. The decision to readmit a student will be based on the following criteria:
    1. KCMA cumulative GPA of at least 2.50
    2. Cumulative GPA of 2.00 in nursing (excluding failed course)
    3. Available space in the nursing program
    4. Evaluation of the student's standing, relative to any revisions that may have occurred in the curriculum, courses, or requirements
    5. Review and evaluation of student's academic and clinical performance at the time of withdrawal or dismissal
    6. Submission of a written plan for academic success
    7. Evaluation of faculty recommendation for program re-entry
- Remediation may be required for students who have been out of the nursing program for a period of one year or longer.
- Students are not eligible for readmission after failure to progress in two nursing courses except for NRSA 240.
    1. A grade of WF is equivalent to a failure.
    2. A WP in any NRSA course that reflects a grade of C- or D is also considered a failing grade in the Division of Nursing.

PROGRAM OF STUDY FOR ASSOCIATE OF SCIENCE PROGRAM

		Sem. I	Sem. II
BIOL	Anatomy and Physiology I	4	
MATH	Meet College core requirements	(0-3)	
PSYC	General Psychology	3	
NRSA 110	Nursing Foundations	6	
RELB 110	Biblical Resources for Understanding Health Care (if math not needed)	2	
BIOL	Anatomy and Physiology II		4
PSYC	Life span development		3
NRSA 118	Introduction to Pharmacology		2
NRSA 120	Basic Nursing Concepts		6
	TOTALS	15-18	15

		Sem. III	Sem. IV
ENGL 105	Academic Discourse I	3	
NUTR	Basic Nutrition	2	
NRSA 130	Family and Newborn Nursing	4	
NRSA 131	Psychiatric Mental Health Nursing	4	
RELB 110	Biblical Resources for Understanding Health Care (if not taken Sem. I)	(2)	
BIOL	Microbiology		4
RELX	Religion elective		2
PEAC	Wellness		1
NRSA 221	Wellness and Health Alterations in Children		4
NRSA 222	Wellness and Health Alterations in Adults		4
	TOTALS	13-15	15

		Sem. V
ENGL 106	Academic Discourse II	3
RELX	Religion elective	2
PEAC	Physical education elective	1
NRSA 230	Advanced Nursing Concepts	7
NRSA 240	Synthesis of Nursing Theory and Practice	1
	TOTAL	14

Note: Not all arts and sciences courses are offered each term. Students should complete all courses no later than the semester indicated on the program information sheet in order to ensure course availability, to avoid class conflicts, and to avoid a delay in graduation.

PROGRAM OF STUDY FOR ASSOCIATE OF SCIENCE PROGRAM WITH ADVANCED PLACEMENT FOR LPNs

		Sem. I	Sem. II
NRSA 129	Transition course: LPN to RN	3	
MATH	* Meet core requirements	(0-3)	
PSYC	* General Psychology	3	
BIOL	* Basic human physiology	4	
ENGL	Academic Discourse I or equivalent		3
NRSA 130	Family and Newborn Nursing		4
NRSA 131	Psychiatric Mental Health Nursing		4
RELB 110	Biblical Resources for Understanding Health Care		2
	TOTALS	10-13	13

		Sem. III	Sem. IV
BIOL	Microbiology	4	
RELX	Religion elective	2	
PEAC	Wellness	1	
NRSA 221	Wellness and Health Alterations in Children	4	
NRSA 222	Wellness and Health Alterations in Adults	4	
ENGL	Academic Discourse II		3
RELX	Religion elective		2
PEAC	Physical education elective		1
NRSA 230	Advanced Nursing Concepts		7
NRSA 240	Synthesis of Nursing Theory and Practice		1
	TOTALS	15	14

*NRSA 129 must be taken before nursing courses can be started.

Note: Not all arts and sciences courses are offered each term. Students should complete all courses no later than the semester indicated on the program information sheet in order to ensure course availability, to avoid class conflicts, and to avoid a delay in graduation.

PROGRAM OF STUDY FOR ASSOCIATE OF SCIENCE PROGRAM WITH ADVANCED PLACEMENT FOR SELECT MVCTC LPNs*

		Winter	Summer
PSYC 112	General Psychology	3	
BIOL 120	Introduction to Human Physiology	4	
MATH 105	Fundamentals of Mathematics	3	
ENGL 105	Academic Discourse I	3	
NRSA 117	Professional Role Transition for LPNs		1
RELB 110	Biblical Resources for Understanding Health Care		2
PEAC 178	Wellness		1
NRSA 130	Family and Newborn Nursing		4
NRSA 131	Psychiatric Mental Health Nursing		4
	TOTAL	13	12

		Fall	Winter
BIOL 151	Microbiology	4	
NRSA 221	Wellness and Health Alterations in Children	4	
NRSA 222	Wellness and Health Alterations in Adults	4	
RELX	Religion elective	2	
NRSA 230	Advanced Nursing Concepts		7
NRSA 240	Synthesis of Nursing Theory and Practice		1
ENGL 106	Academic Discourse II		3
RELX	Religion elective		2
PEAC XXX	Elective		1
	TOTAL	14	14

*Must be selected through an application and interview process exclusively for recent graduates of the LPN program at the Miami Valley Career Technology Center. Contact the Division of Nursing office for specific admission criteria.

PROGRAM OF STUDY FOR ASSOCIATE OF SCIENCE PROGRAM WITH ADVANCED PLACEMENT FOR MILITARY MEDICAL TECHNICIANS

	First year	Credits by term	
		Sem. I	Sem. II
BIOL	Anatomy and Physiology I	4	
MATH	Meet core degree requirement	(0-3)	
PSYC	General Psychology	3	
RELB 110	Biblical Resources for Understanding Health Care (if math not needed)	2	
BIOL	Anatomy and Physiology II		4
PSYC	Life span development		3
NRSA 119	Transitions course: Med. Tech. to RN		1
NRSA 118	Introduction to Pharmacology		2
NRSA 120	Basic Nursing Concepts		6
	TOTALS	9-12	16

	Second year	Credits by term	
		Sem. III	Sem. IV
RELB 110	Biblical Resources for Understanding Health Care (if not taken in semester 1)	2	
ENGL 105	Academic Discourse I	3	
NUTR	Basic Nutrition	2	
NRSA 130	Family and Newborn Nursing	4	
NRSA 131	Psychiatric Mental Health Nursing	4	
BIOL	Microbiology		4
RELX	Religion elective		2
PEAC	Wellness		1
NRSA 221	Wellness and Health Alterations in Children		4
NRSA 222	Wellness and Health Alterations in Adults		4
	TOTALS	15	15

		Sem. V
ENGL 106	Academic Discourse II	3
RELX	Religion elective	2
PEAC	Physical education elective	1
NRSA 230	Advanced Nursing Concepts	7
NRSA 240	Synthesis of Nursing Theory and Practice	1
	TOTAL	14

Minimum required total credits if all courses are taken at KCMA=64.

Note: Not all arts and sciences courses are offered each term. Students should complete all courses no later than the semester indicated on the program information sheet in order to ensure Course availability, to avoid class conflicts, and to avoid a delay in graduation.

STANDARDIZED TESTING

The Associate of Science nursing program requires standardized testing in each of the nursing courses. There will be an additional fee each semester for the standardized testing package.

LICENSURE INFORMATION AND BACKGROUND CHECK

In order to practice as a nurse, graduates must take and pass a national licensure exam and apply for licensure in the states in which they wish to be employed. Application for licensure includes a background check. The following crimes are automatic bars to licensure: aggravated murder, kidnapping, sexual battery, murder, rape, gross sexual imposition, voluntary manslaughter, aggravated robbery, aggravated arson, felonious assault, and aggravated burglary. Further, the Ohio Board of Nursing may propose to deny an application for the following: any felony, a crime involving gross immorality or moral turpitude, a misdemeanor drug law violation, or a misdemeanor committed in the course of practice.

Other than the automatic licensure bars described above, the Ohio Board of Nursing is unable to give definitive answers regarding licensure prior to entry into or during participation in a nursing education program. The Ohio Board of Nursing is unable to advise, speculate, or give informal answers to the question of licensure prior to the time the application for license is filed.

Bachelor of Science in Nursing completion degree

PURPOSE STATEMENT

The purpose of the Bachelor of Science in Nursing (BSN) completion degree is to prepare registered nurses to provide professional nursing care to clients, families, and communities in the spirit of Christian caring and service. Graduates are prepared to be citizen leaders in the community. The degree provides a general and professional education intended to enhance professional growth, facilitate career mobility, and serve as a foundation for graduate education.

DESCRIPTION OF THE DEGREE

The BSN completion degree is designed for registered nurses who have an associate degree or its equivalent in nursing. The degree consists of 64 semester credits and is the equivalent of the junior and senior years of a four-year baccalaureate degree. All nursing and non-nursing coursework required for the degree is offered online to ensure access to anyone wishing to pursue baccalaureate education. Clinical course requirements may be met in the geographic area where the student lives. Non-nursing courses are also available on campus.

Students may begin the degree any semester and may choose a full-time or part-time pace of study. Upper-division nursing courses must be completed within five (5) years of first enrollment in a nursing course. Cognate and arts and sciences courses may be taken prior to enrollment in nursing courses or may be taken concurrently with nursing courses. A maximum of 12 arts and sciences and any needed elective credits may be taken after the upper-division nursing courses are completed. Students who do not engage in coursework toward the degree for a period of one year or more must reapply. Students will be readmitted under the current curriculum, policies, and *Academic Bulletin.*

END-OF-PROGRAM STUDENT LEARNING OUTCOMES

The graduate of the BSN completion degree:

1. Incorporates current knowledge, theory, and research into nursing practice in multiple settings with diverse populations.
2. Assumes responsibility and accountability for the legal implications and ethical decision-making of professional nursing care.
3. Demonstrates Christian caring and professional nursing values of personal integrity, accountability, advocacy, ethical principles, and respect for others in nursing practice.

4. Collaborates and negotiates with clients, families, and other health care personnel in providing culturally appropriate direct and indirect care.
5. Engages in learning experiences that promote ongoing personal and professional growth.
6. Uses effective communication skills and information technology in managing and coordinating health care across the life span.
7. Empowers self and others through an integration of leadership and management skills in nursing and non-nursing arenas.
8. Participates in professional organizations and political and regulatory processes in helping shape the health care delivery system.
9. Manages physical, fiscal, and human resources in a health care setting.
10. Demonstrates competence in health promotion, maintenance, and restoration in the context of individuals' and communities' health beliefs and values.
11. Incorporates the Christian principles of service and citizenship for the benefit of society.
12. Uses the human functioning patterns framework in providing whole-person care to improve the wellness of individuals and communities.

ACCREDITATION

The program is accredited by the National League for Nursing Accrediting Commission, 61 S. Broadway, New York, NY 10006; 212-363-5555 Ext. 153.

ADMISSION REQUIREMENTS

Note: Degree requirements change regularly; students should check www.kcma.edu for the most up-to-date information.

In addition to meeting the requirements for admission to KCMA (see the admission section of this *Academic Bulletin),* applicants to the BSN completion degree must meet the following requirements to be considered for admission:

1. Completion of an associate degree or its equivalent in nursing: To assist diploma nurses to establish credit equivalent to an associate degree, KCMA will grant 38 semester credits for the nursing courses taken in the diploma program. An additional block of 26 semester credits in supporting courses is required. These credits may be obtained by taking courses at KCMA, by transferring in credit, or by receiving credit by examination. Students will be advised regarding options for meeting the supporting course credit requirement.
2. Possession of an unencumbered registered nurse license in the U.S. state in which the student will complete clinical learning requirements. Students in process of licensure may enroll in a maximum of 12 credits of upper-division nursing theory courses without being accepted to the BSN completion degree. This is called the "12 credit option."
3. Complete the student personal statement form provided with application materials.

PRE-ENROLLMENT REQUIREMENTS

To enroll, a student must:

1. Have proficiency in the Microsoft Windows environment that includes word processing, spreadsheets, and PowerPoint; a student also must be able to navigate the Internet and use e-mail and attachments.
2. Have a broadband Internet connection and an e-mail address
3. Meet computer technical requirements as stipulated on the BSN section of the College Web site.

REQUIREMENTS FOR REGISTRATION FOR CLINICAL COURSES

Clinical placement is evaluated and approved by the nursing faculty.

1. Certification in cardiopulmonary resuscitation: Health Care Provider from the American Heart Association or Professional Rescuer from the American Red Cross.
2. Documentation of fulfilling health requirements, including immunizations, as specified in the *KCMA Student Handbook*.
3. Provision of own transportation to, during, and from clinical learning sites.
4. Have a criminal background check performed by a College-approved service no more than six months prior to beginning the clinical experience. Contact the admissions office for approved services.

REQUIREMENTS FOR PROGRESSION AND GRADUATION

1. Students must achieve a minimum grade of C- in all courses required for the degree. Students with a grade lower than a C- in any required course must repeat it.
2. No more than two (2) nursing courses may be repeated.
3. A student may not enroll in a nursing course more than twice; a grade of W does not apply. Grades of WP and WF are considered enrollment.
4. To graduate, the student must satisfactorily complete at least 64 semester credits (42 at the upper-division level), including specified nursing courses, cognates, arts and sciences courses, and electives.
5. The student must meet all other graduation requirements as specified in this *Academic Bulletin*.

PROGRAM OF STUDY FOR BSN COMPLETION DEGREE

Required core courses		Credits
NRSA 310	Success Strategies for Online Learning	2
NRSA 316	Theoretical and Conceptual Foundations of Professional Nursing Practice	3
NRSA 325	Health Assessment (1 credit theory; 1 credit lab)	2
NRSA 335	Introduction to Nursing Research	3
NRSA 345	Issues and Trends in Health Care	3
NRSA 355	The Role of the Professional Nurse in Health Promotion	3
NRSA 371	Alternative Therapies for Health and Illness	3
NRSA 416	Community-Oriented Nursing Perspectives and Practice (clinical course)	5
NRSA 426	Nursing Informatics Applications	1
NRSA 436	Leadership and Management in Nursing Practice (clinical course)	5
NRSA 446	Senior Capstone	1
	TOTAL	31

Required cognate courses		Credits
BIOL 350	Pathophysiology	3
HEPR 430	Instructional Planning and Delivery	3
Statistics	One course (KCMA's is 4 credits)	3-4
HEPR 375	Cultural Diversity in Health Care	3
HEPR 310	Health Care Economics and Finance	3
	TOTAL	15-16

Degree core requirements		Credits
Humanities	At least two courses from literature, history, philosophy, music, art, theater, or foreign language	6
Religion	Upper division, including the required course RELP 315, Spirituality in Healing and Health Care	6
Sociology		3
Speech Comm.	One course	3
	TOTAL	18

Total semester credits for the BSN completion degree	64-65

Division of Allied Health

The KCMA Division of Allied Health comprises four departments: diagnostic medical sonography, radiologic sciences and imaging, respiratory care, and health care professional studies. This chapter of the *Academic Bulletin* describes the programs available in each department.

- Health care professional studies (two tracks — leadership/education or sonography)
- Diagnostic medical sonography (for KCMA graduates only)
- Radiologic sciences and imaging (two tracks)
- Respiratory care

Radiologic sciences and imaging and respiratory care have associate degree majors tailored to prepare students for the specific professional demands of the field. Students accepted into one of these programs are placed in the department of their specialty and advised academically by faculty in the department.

Each department also offers a Bachelor of Science in Health Professions (BSHP) completion major as an option. Bachelor's degree completion students in these majors continue to be advised by faculty in the applicable major department, but their studies are also administered by the BSHP program. In addition to taking upper-division courses in a specific major, bachelor's completion students will take health professions core courses as outlined in the BSHP degree core requirements section.

THE BACHELOR OF SCIENCE IN HEALTH PROFESSIONS COMPLETION PROGRAM

Conditional admission to bachelor's programs may be available for KCMA associate degree students who wish to pursue bachelor's-level courses of study. Prior to acceptance into the BSHP completion program, a student enrolled in a clinical program of study may take up to 12 hours of health professions (HEPR) courses. A list of these courses can be found on the KCMA Web site (www.kcma.edu).

Students in the second year of their health professions programs may request conditional admission through the admissions office.

Allied Health: Bachelor of Science in Health Professions

Paula Reams, Chair; Jennilou Grotevant, advisor; Susan Price, faculty

STATEMENT OF PURPOSE

The Bachelor of Science in Health Professions degree at Kettering College of Medical Arts provides high quality, values-based baccalaureate education in health-related fields with the spirit of Christian caring and service.

DEGREE DESCRIPTION

Kettering College of Medical Arts offers a Bachelor of Science in Health Professions designed for those who have obtained an associate degree or its equivalent in allied health care and wish to pursue a Bachelor of Science degree. The course of study is the equivalent to the junior and senior years of a four-year baccalaureate program. Students may choose a full-time or part-time pace of study, selecting coursework from modalities that include traditional, online, and web-centric learning environments.

Attitudes and values fostered in this degree will enhance career mobility within health care settings and may serve as a foundation for graduate education. The Bachelor of Science in Health Professions curriculum consists of concentration areas in health professions and specific health care disciplines that enhance and build upon the associate degree through clinical experiences.

MAJORS

BSHP majors for those seeking greater emphasis in specific health care disciplines are offered in:

- Advanced imaging
- Diagnostic medical sonography (KCMA graduates only)
- Respiratory care

For students who desire a non-clinical track for their BSHP degree, the Health Care Professional Studies major provides course options in leadership, education, and sonography.

Students who wish to enroll in the BSHP program without earning an associate degree will be reviewed individually to establish credit equivalent to an associate degree.

DEGREE OUTCOMES

Graduates of the Bachelor of Science in Health Professions degree acquire advanced skills, knowledge, and values to expand their professional roles in the health care system while incorporating a comprehensive knowledge base as a health care professional.

The graduate earning the Bachelor of Science in Health Professions degree:

- Integrates communication skills in interdisciplinary teams within the health care industry.
- Incorporates information technology skills in a variety of health care settings.
- Engages in critical thinking, reflection, and problem solving through evidence-based practice in multiple health care settings.
- Contributes to and advocates for continuous improvement of the health care system through promoting public policy.
- Demonstrates respect and adaptability for cultural, ethnic, and individual diversity within a changing health care environment.
- Incorporates current knowledge, theory, and research into health professions practice.
- Demonstrates professional, ethical, spiritual, and compassionate service within the health care arena.
- Integrates the Christian principles of service and citizenship for the benefit of society.
- Empowers himself or herself and others through an integration of leadership, management, and teaching/learning skills in the health care environment.
- Integrates population-based and preventive health care when working with individuals, families, and communities.

ADMISSION REQUIREMENTS

- Complete the student personal statement form provided with application materials. Statement must be completed and returned with the application; essays will be graded for content and used to assess writing abilities.
- Fulfill one of the following:
  1. Have associate degree or its equivalent* (64 credits in a health science field)
  2. Have completed a certificate/diploma program
  3. Be enrolled in the second year of a health professions major in good standing
- Apply to the program in the following manner:
  1. Students new to KCMA must complete the new-student admission process.
  2. Students continuing from one of the KCMA associate degree majors or who are in the second year of the health professions major may request conditional admission through the admissions office (on file in the admissions office).

* Equivalency decisions will be made on a case-by-case basis.

COURSE OF STUDY

The Bachelor of Science in Health Professions degree requires a minimum of 64 credits: however, different majors may require more hours. Bachelor's completion-seeking students are required to take a minimum of 34 hours at KCMA to complete the degree.

All students must take:

1. College core requirements (see College core requirements for Bachelor of Science in Health Professions degree).
2. Health professions core courses.
3. Cognate courses as required by the major.
4. Health professions electives as stipulated by the major
5. Other electives as stipulated by the major.

BACHELOR OF SCIENCE IN HEALTH PROFESSIONS DEGREE CORE

- Arts and sciences courses (18-19 hours to meet core requirements)
- Health professions courses (18 hours in HEPR core, required cognate courses, plus 6-9 additional study hours, depending on the major)
- Electives (10-12, depending on the major)

Health professions core courses (18 hours required)

HEPR 380	Introduction to Health Professional Studies	1
HEPR 310	Health Care Economics and Finance	3
HEPR 330	Community Health Perspectives	3
HEPR 340	Legal and Ethical Considerations in Health Care	3
HEPR 348	Concepts of Management and Leadership in Health Care	3
HEPR 410	Health Care Statistics and Research	3
HEPR 415	Health Care Informatics Applications for Health Professions	1
HEPR 481	Capstone/Senior Project	1

See each major for specific requirements.

PROGRESSION

A grade of C- or below in HEPR 380, Introduction to Health Care Professional Studies, must be repeated with a final grade of C or higher before any additional HEPR courses are taken.

LEAVE OF ABSENCE

If a student is planning on taking a leave of absence for more than one semester (including summer semester), then the student must fill out a leave of absence form. Students gone for two semesters or more without completing the form must reapply to the college and if reaccepted must meet the requirements of the current *Academic Bulletin* at the time of readmission.

GRADUATION REQUIREMENTS

1. Students must achieve a minimum cumulative GPA of 2.0.
2. Students must achieve a C or better in all HEPR core and/or cognate courses for graduation.
3. If a student receives a grade of C- or below in any HEPR course, the course must be retaken for it to count for graduation.

Allied Health: Health Care Professional Studies

Paula Reams, Chair; Jennilou Grotevant, advisor; Susan Price

MISSION STATEMENT

The health care professional studies program at Kettering College of Medical Arts provides high quality, values-based baccalaureate education in health-related fields with the spirit of Christian caring and service.

DESCRIPTION OF THE PROGRAM

The health care professional studies major is designed for those who have obtained or are in the process of obtaining an associate degree or its equivalent in allied health or nursing and wish to pursue a Bachelor of Science in Health Professions (BSHP) degree. The health care professional studies program empowers individuals to expand their career paths. Graduates work in areas of management, education, and business as well as advanced allied health professions.

PRE-ENROLLMENT REQUIREMENTS

To enroll in HEPR courses, the following requirements must be met:

1. All students enrolled in HEPR are expected to be proficient in the computer skills required for document preparation, Internet searching, and the use of e-mail.
2. All students must have access to the Internet.
3. A conditional application to the baccalaureate completion program must be filled out and submitted to the admissions office.

ADMISSION REQUIREMENTS

Note: Degree requirements change regularly; students should check www.kcma.edu for the most up-to-date information.

- The student personal statement form provided with application materials must be completed and returned with the application. Essays will be graded for content and used to assess writing abilities.
- Fulfill one of the following:
  1. Have associate degree or its equivalent* (64 credits in a health science field)
  2. Have completed a certificate/diploma program
  3. Be enrolled in the second year of a health professions major in good standing
- Apply to the program in the following manner:
  1. Students new to KCMA must complete the new-student admission process.
  2. Students continuing from one of the KCMA associate degree majors or who are in the second year of the health professions major may request conditional admission through the admissions office (on file in the admissions office).

* Equivalency decisions will be made on a case-by-case basis.

PROGRESSION

A grade of C- or below in HEPR 380, Introduction to Health Care Professional Studies, must be repeated with a final grade of C or higher before any additional HEPR courses are taken.

LEAVE OF ABSENCE

If a student is planning on taking a leave of absence for more than one semester (including summer semester), then the student must fill out a leave of absence form. Students who are not enrolled for two consecutive semesters or more without completing the form must reapply to the college and, if reaccepted, must meet the requirements of the current *Academic Bulletin* at the time of readmission.

GRADUATION REQUIREMENTS

1. Students must achieve a minimum GPA of 2.0.
2. Students must achieve a C or better in all HEPR core and/or cognate courses for graduation.
3. If a student receives a grade of C- or below in any HEPR course, the course must be retaken for it to count for graduation.

HEALTH CARE PROFESSIONAL STUDIES PROGRAM OF STUDY (HEPR TRACK)

Health professions core courses (18 hours required)

HEPR 380	Introduction to Health Professional Studies	1
HEPR 310	Health Care Economics and Finance	3
HEPR 330	Community Health Perspectives	3
HEPR 340	Legal and Ethical Considerations in Health Care	3
HEPR 348	Concepts of Management and Leadership in Health Care	3
HEPR 410	Health Care Statistics and Research	3

HEPR 415	Health Care Informatics Applications for Health Professions	1
HEPR 481	Capstone/Senior Project	1

Health Professions cognate courses (9 hours required)

Leadership cognates

HEPR 420	Health Care Personnel Management	3
HEPR 451	Interdisciplinary Team Practice in Community-Based Care	3
HEPR 448	Leadership Theory in Health Care	3
	OR	

Education cognates

HEPR 430	Instructional Planning and Delivery	3
HEPR 431	Teaching Learners in Health Care	3
HEPR 432	Professional Development in Health Care	3

Health professions additional elective study (6 hours required)

Students choose from the following courses:

HEPR 302	Mission Experience in Cultural Diversity	3
SPAN 301	Spanish for Health Professions	3
HEPR 325	Issues and Trends in Health Care	3
HEPR 345	History of Health Care in the United States	3
BIOL 350	Pathophysiology	3
HEPR 355	Medical Imaging Modalities	3
HEPR 360	Advanced Cardiac Life Support	1
HEPR 370	Special Topics in Health Professions	3
HEPR 371	Alternative Therapies for Health and Illness	3
*HEPR 448	Leadership Theory in Health Care	3
HEPR 460	Forensics in Health Care	3
HEPR 470	Human Genetics and Genomics for Health Professions	3
*HEPR 420	Health Care Personnel Management	3
*HEPR 430	Instructional Planning and Delivery	3
*HEPR 431	Teaching Learners in Health Care	3
*HEPR 432	Professional Development in Health Care	3
HEPR 440	Special Projects in Health Care (may be repeated up to 6 hours with permission of advisor)	1-3
*HEPR 451	Interdisciplinary Team Practice in Community-Based Care	3

Electives (12 hours required)

*May not be taken as an elective if taken as a cognate.

SONOGRAPHY TRACK

All of the above, plus the following cognates in place of the leadership or education cognates:

- HEPR 448 OR HEPR 430 (3 credits)
- MESO 400 (3 credits)
- MESO 401 (3 credits)

Note: Total hours for all tracks are the same.

HEALTH CARE PROFESSIONAL STUDIES DEGREE COMPLETION SUGGESTED SEQUENCE OF COURSES

	First year	Credits by term		
		Fall	Winter	Summer
HEPR 380	Intro. to Health Care Prof. Studies	1		
HEPR 310	Health Care Economics and Finance	3		
HEPR 330	Community Health Perspectives	3		
RELX 3XX	Upper division religion elective	2		
HEPR 348	Concepts of Management and Leadership in Health Care	3		
XXX	Upper division elective		3	
HEPR 410	Health Care Statistics and Research		3	
RELP 315	Spirituality in Healing and Health Care		2	
MATH 215	Probability and Statistics		4	
HEPR 340	Legal and Ethical Considerations in Health Care			3
XXX	Upper division Group II elective			3
XXX	Upper division elective			3
	TOTALS	12	12	9

	Second year	Credits by term		
		Fall	Winter	Summer
HEPR 448	Leadership Theory in Health Care			
	OR			
HEPR 431	Teaching Learners in Health Care	3		
HEPR 415	Health Care Informatics Applications for Health Professions	1		
HEPR XXX		3		
SOCI 375	Cultural Diversity in Health Care	3		
XXX	Upper division Group II elective	3		
XXX	Upper division elective		3	
HEPR 451	Interdisciplinary Team Practice in Community-Based Care			
	OR			
HEPR 430	Instructional Planning and Delivery		3	
HEPR XXX	HEPR elective		3	
RELX 3XX	Upper division religion elective		2	
HEPR 420	Health Care Personnel Management			
	OR			
HEPR 432	Professional Development in Health Care			3
HEPR 481	Capstone/Senior Project			1
XXX	Upper division elective			3
	TOTALS	13	11	7

Allied Health:
Department of Diagnostic Medical Sonography

Joyce Grube, Chair; Beth Maxwell; Rachel Moutoux; Kelvin Paulsen

DESCRIPTION OF THE PROGRAM

Diagnostic medical sonography uses sound waves (ultrasound) to produce both 2D and 3D dynamic images of tissue, organs, and blood flow inside the human body. The sonographer, a highly skilled advanced imaging specialist, uses sophisticated equipment in order to master the art of scanning. Sonographers work closely with physicians to provide accurate detection of disease and the highest-quality patient care.

Areas of specialization including abdominal, vascular, obstetrics/gynecology, and echocardiography are all available in a single bachelor's degree curriculum at KCMA. Therefore, the KCMA graduate is well-suited to work in any sonography specialty and, with the BS degree, has the comprehensive education required to become a leader in the sonography profession.

Students must complete prerequisite coursework (year 1) prior to submitting an application and being accepted from a competitive pool of applicants to the sonography program. Once the student is accepted, the sophomore year (year 2) will provide additional coursework in the arts and sciences with an introduction to sonography in the winter semester. The junior year (year 3), the student will begin sonography clinical experiences and classroom experience in abdominal and vascular technology. The last year (year 4) provides experiences in obstetrics/gynecology and adult echocardiography and a clinical externship. Upon successful completion of the program, a student receives the Bachelor of Science degree with a major in diagnostic medical sonography.

MISSION STATEMENT

The diagnostic medical sonography department is committed to excellence in providing quality learning experiences for students as they strive to become caring, competent, professional sonographers who serve human needs in the Christian spirit.

PROGRAM OUTCOMES

KCMA sonography graduates will demonstrate:

- Professional, compassionate care for patients and others.
- Reasoning ability and critical thinking skills.
- Technical competence as sonographers.
- Adherence to the Code of Ethics and Scope of Practice ascribed to by the Society of Diagnostic Medical Sonography.

- Respect for cultural, ethnic, and individual diversity.
- Effective written and verbal communication skills.
- Characteristics of lifelong learners.

ACCREDITATION

The diagnostic medical sonography program meets the essentials of and is accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP) upon recommendation from the Joint Review Committee for Diagnostic Medical Sonography (JRCDMS).

PROFESSIONAL REGISTRATION

Upon successful completion of the junior year, students are eligible to write the physics and instrumentation examination for the American Registry of Diagnostic Medical Sonography (ARDMS). Upon successful completion of the entire curriculum, graduates are eligible to write the sonography specialty examinations of Abdomen and Small Parts, Vascular Technology, Obstetrics and Gynecology, and Adult Echocardiography examinations for the ARDMS.

The ARDMS may deny eligibility to those who have been convicted of, entered a plea of guilty to, or entered a plea of no contest to a crime directly related to public health or safety or the provision of diagnostic medical sonography or vascular technology services. Contact the ARDMS at 800-541-9754 or http://ardms.org for further information.

ADMISSION REQUIREMENTS

Note: Degree program requirements change regularly; students should check www.kcma.edu for the most up-to-date information.

Admission to the diagnostic medical sonography program is competitive and occurs one time during the academic year for fall entry. Preference is given to individuals who demonstrate academic strength in the prerequisite coursework. Prerequisite courses are available at KCMA prior to applying for the diagnostic medical sonography program. Transfer students are encouraged to contact the admissions office for advising on prerequisite course equivalency.

College admission: Applicants must meet all KCMA admission requirements.

GPA: Applicants must present transcripts reflecting a GPA of 2.5 or above (on a 4.0 scale) for all prerequisite courses and previous college credits.

Prerequisite courses:

- BIOL 119 Human Anatomy and Physiology I (4 credits)
- BIOL 129 Human Anatomy and Physiology II (4 credits)
- ENGL 105 Academic Discourse I (3 credits)
- COMM 214 Speech Communication (3 credits)
- MATH 105 Fundamentals of Mathematics if needed (0-3 credits)
- PEAC 178 Wellness (1 credit)
- PHYS 131 Survey of Physics (4 credits)
- RTCA 120 Basic Patient Care (2 credits)
- RTCA 121 Medical Terminology (1 credit)
- SOCI 115 Principles of Sociology (3 credits)

Notes on prerequisites:

1. A minimum grade of C is required for prerequisites, whether completed at KCMA or elsewhere.
2. Students must have completed all prerequisites before an application will be reviewed for admission to the program.

Computer proficiency: All students accepted into the sonography program are expected to be proficient in computer skills required for document preparation, Internet search, and e-mailing.

CPR: All sonography students must be certified in cardiopulmonary resuscitation (CPR) by completing the class offered by KCMA during the first sonography clinical course in the program. Students are not required to complete CPR prior to enrollment.

Background check: Students must request and pay to have a criminal background check performed by a College-approved service no more than six months prior to beginning the clinical experience. Please contact the admissions office for approved service contact information. Commencement of the clinical portion of the program is contingent upon successful clearance of the background check.

Technical standards: Applicants must meet certain physical and health requirements defined as technical standards. The standards are described on the sonography Web site and in the *Student Handbook*.

Deadline: Applications are accepted until April 1 of the year in which the student wishes to be accepted. All supportive documentation must be received by May 1.

SELECTION PROCESS

- Only students completing the application process will be considered.
- Selection is based on:
  1. Completion of prerequisites and academic strength demonstrated in the prerequisite coursework.
  2. Evaluation of academic experience.
  3. Evaluation of student personal statement.
- Additional qualifiers such as ACT or SAT scores, previous academic degrees, and degrees in allied health or nursing may influence acceptance.
- Preference may be given to equally qualified applicants completing prerequisite courses at KCMA.
- The diagnostic medical sonography selection committee will review all applicants following completion of KCMA's winter semester.
- Selections will be made no later than May 15.

PROGRAM OF STUDY

NOTE: This describes a curriculum proposal which currently is pending approval from the Ohio Board of Regents. Final word on the approval is expected by the summer of 2010. In case of delays in this process, please refer to the 2009-10 Academic Bulletin for the existing course of study.

Below is a recommended sequencing of prerequisites (year 1) and the required curriculum for years 2, 3, and 4 in the diagnostic medical sonography program. The prerequisites may be completed on a full- or part-time basis. For students taking prerequisite courses elsewhere: All, with the exception of religion (RELB 110 and RELB Elective 1), must be completed by the end of winter term at KCMA for consideration of fall enrollment.

	Year 1	**Credits by term**		
		Fall	**Winter**	**Summer**
BIOL 119	Anatomy and Physiology I	4		
ENGL 105	Academic Discourse I	3		
MATH 105	Fundamentals of Mathematics (if needed)	0-3		
RELB 110	Bib. Resources for Understanding Health Care	2		
RTCA 121	Medical Terminology	1		
SOCI 115	Principles of Sociology	3		
BIOL 129	Anatomy and Physiology II		4	
COMM 214	Speech Communication		3	
PHYS 131	Survey of Physics		4	
PEAC 178	Wellness		1	
RELB	Religion Elective 1		2	
RTCA 120	Basic Patient Care		2	
	TOTALS	13-16	16	0

Note: Acceptance to the sonography program is required for further progression.

	Year 2	**Credits by term**		
		Fall	**Winter**	**Summer**
BIOL 263	Sectional Anatomy	3		
ENGL 106	Academic Discourse II	3		
HIST	History Sequence I	3		
	Humanities Elective	3		
PEAC	Physical education elective	1		
RELB 110	Biblical Resources for Understanding Health Care (if not already completed)	2		
RELP 253	Morality and Medicine	2		
HIST	History Sequence II		3	
	Humanities Elective		3	
MATH 165	College Algebra and Trigonometry		3	
PSYC 112	General Psychology		3	
RELX	Religion Elective 2 (Cluster A)		2	
SONO 201	Introduction to Sonography		1	
	TOTALS	15-17	15	0

	Year 3	Credits by term		
		Fall	Winter	Summer
SONO 300	Clinical Sonography I	4		
SONO 301	Sonographic Physics & Instrumentation I	2		
SONO 306	Abdominal Sonography I	4		
SONO 311	Vascular Sonography I	4		
RELX	Religion Elective 3		2	
SONO 302	Sonographic Physics & Instrumentation II		2	
SONO 305	Clinical Sonography II		4	
SONO 307	Abdominal Sonography II		3	
SONO 312	Vascular Sonography II		3	
RELB	Religion Elective 1 (if not already completed)			2
SONO 310	Clinical Sonography III			4
SONO 316	Cardiac Testing			1
SONO 321	Gynecological Sonography			2
	TOTALS	14	14	7-9

	Year 4	Credits by term		
		Fall	Winter	Summer
BIOL 350	Pathophysiology	3		
RELP 315	Spirituality in Healing and Health Care	2		
SONO 400	Clinical Sonography IV	4		
SONO 401	Echocardiography I	4		
SONO 421	Obstetrical Sonography	4		
SOCI 375	Cultural Diversity in Health Care		3	
SONO 402	Echocardiography II		3	
SONO 405	Clinical Sonography V		4	
SONO 408	Seminar/Capstone		1	
SONO 411	Special Project in Sonography			
	OR		2	
SONO 420	Sonography Specialty Topics			
SONO 410	Clinical Externship			4
SONO 406	Registry Review			2
	TOTALS	17	13	6

CLINICAL INFORMATION

1. **Clinical education:** To be of maximum benefit to the sonography student and to enhance versatility and skills, KCMA provides a wide variety of clinical experiences. These rotations include hospitals, outpatient imaging centers, and physician offices. The student may be assigned to KCMA's sonography clinical affiliates anywhere in Ohio, Northern Kentucky, or Indiana. The final summer externship provides full-time experience in various specialties and unique opportunities in sonography.

In cooperation with the clinical coordinator, students may choose a clinical site anywhere in the United States and/or experiences in sonography education, research, management, and mission trips.

2. **Clinical contact hours:** The student will accumulate more than 1,900 clinical hours in diagnostic medical sonography.
3. **Reliable transportation:** Students are responsible for their own transportation to clinical education assignments.
4. **Attendance:** The professional demands of diagnostic medical sonography make attendance for class and clinicals a requirement for student success.

PROGRESSION

In order to progress in the diagnostic medical sonography program, the student must:

- Earn a grade of C or higher for all diagnostic medical sonography (SONO) courses and all other arts and sciences courses.
- The student who receives a grade below C or W (WP or WF) in a sonography (SONO) course will be dismissed from the program and must apply for readmission. Students will be readmitted under the *Academic Bulletin* in use at the time they reapply.

READMISSION

Students wishing to apply for readmission should apply in writing to the department chair of diagnostic medical sonography. If readmitted, a student may repeat a course only once. A course must be repeated the next term in which the course is offered. Requests for readmission will be evaluated on an individual basis. A student readmitted after receiving a grade below C in a didactic sonography course will be required to register for an audit in the concurrent clinical sonography course in which the didactic course is being repeated. Satisfactory completion of the audit is required for progression to the next clinical sonography course.

The decision to readmit a student will be on the following criteria:

1. Available space within the program.
2. Review and evaluation of the student's standing, relative to any revisions that may have occurred in the program.
3. Review and evaluation of academic and clinical performance.
4. Submission of evidence demonstrating potential for academic success.

GRADUATION REQUIREMENTS

1. Students must achieve a minimum GPA of 2.0.
2. Students must achieve a C or better in all sonography (SONO) courses and all other arts and sciences courses for graduation.
3. If a student receives a grade of C- or below in any arts and sciences course, the course must be retaken prior to graduation.
4. Students must meet all other graduation requirements as specified in this *Academic Bulletin.*

Allied Health: Department of Radiologic Sciences and Imaging

Larry Beneke, Chair; Frank Brewster; Rob Hoover; Taryn Talbott.

MISSION STATEMENT

The radiologic sciences and imaging department is dedicated to educating students who are committed to becoming caring, competent, and professional imaging specialists. It is our commitment, through accredited student education, to provide the health care community with imaging specialists who are skilled professionals, serving human needs in the Christian context.

RADIOLOGIC SCIENCES AND IMAGING PROGRAMS

Radiologic technologists, nuclear medicine technologists, and advanced imaging technologists are dedicated to providing patients with the highest-quality care and supporting physicians and other medical professionals in conserving life and preventing disease. They use a variety of procedures and sophisticated equipment for imaging body structures and organs as well as perform interventional procedures designed to treat various disease processes.

Kettering College of Medical Arts radiologic sciences and imaging programs are competency-based. They provide a combination of didactic theory and clinical applications of that theory to prepare students to meet the challenges of advancing technology in the current health care environment.

KCMA offers the following:

Radiologic technology: Prepares students to perform radiographic procedures, administer basic levels of patient care, and qualify for the American Registry of Radiologic Technologists (ARRT) registry examination.

Nuclear medicine technology: Prepares students for matriculation into The University of Findlay Nuclear Medicine Institute, where they learn to perform nuclear medicine procedures, administer basic patient care, and qualify for the ARRT registry examination in nuclear medicine technology or the Nuclear Medicine Technology Certification Board (NMTCB) examination.

Advanced imaging technology: Prepares graduates of accredited radiologic technology, nuclear medicine, or radiation therapy programs to perform imaging procedures in one or more of the following modalities; CT, MRI, vascular interventional, and cardiovascular interventional technologies.

PROGRAM OUTCOMES

The following statements describe the student outcomes of the programs offered by the Department of Radiologic Sciences and Imaging:

- Students will be technically and clinically competent in their chosen area of imaging.
- Students will demonstrate professional, compassionate care and concern within their communities of interest.
- Students will demonstrate critical thinking and problem-solving skills.
- Students will demonstrate skills and techniques that limit exposure to medical ionizing radiation and create safe imaging environments.
- Students will demonstrate effective written and verbal communication skills.
- The program will supply its community of interest in a timely manner with registered technologists who are a credit to their profession.
- The program will produce graduates who will value continued growth and development in their profession.
- Students will pledge to follow the code of ethics established by the American Registry of Radiologic Technologists.

ACCREDITATION

Kettering College of Medical Arts is accredited by the Higher Learning Commission of the North Central Association of Colleges and Schools and the Ohio Board of Regents. Program accreditations include:

Radiologic technology: The radiologic technology course of study is accredited by the Joint Review Committee on Education in Radiologic Technology (JRCERT), 20 N. Wacker Drive, Suite 2850, Chicago, IL 60606-3182, 312-704-5300; and by the Ohio Department of Health X-Ray Control Program.

Nuclear medicine technology (NMI at The University of Findlay): The nuclear medicine technology course of study is accredited by the Joint Review Committee on Educational Programs in Nuclear Medicine Technology (JRCNMT), 2000 W. Danforth Road, Suite 130, No. 203, Edmond, OK 73003; 405-285-0546; http://www.jrcnmt.org/.

PROFESSIONAL REGISTRATION

Radiologic technology: The radiologic technology graduate is eligible to sit for the American Registry of Radiologic Technologists ARRT RT (R) Entry Level Examination. While in the program, the student is eligible for licensure by the Ohio Department of Health X-Ray Control Program. Applicants may wish to contact other states for licensure requirements.

Nuclear medicine technology: The nuclear medicine technology graduate is eligible to sit for the American Registry of Radiologic Technologists ARRT RT (N) and/or the Nuclear Medicine Technology Certification Board. Upon successful completion of the ARRT and/or CNMT examination, the graduate is eligible for licensure by the Ohio Department of Health X-Ray Control Program. Applicants may wish to contact other states for possible licensure requirements.

Advanced imaging technology: Students who hold ARRT, NMTCB, or ARDMS certification may be eligible to sit for the Advanced-Level examination upon completion of ARRT-required clinical hours and procedural competencies. See the program director for details.

Note: A felony or misdemeanor conviction may result in a delay or rejection by the professional certification agencies and state licensing process. Please contact program officials for more details.

CLINICAL EDUCATION SITES

The radiologic sciences and imaging programs offer a wide variety of clinical education sites is provided. These include hospitals, independent imaging centers, and physician offices. Clinical hours may vary from site to site and will include evening rotations for radiologic technology students. These assignments will be within a 70-mile radius of the College. Students must provide their own reliable transportation to clinical education sites.

Applicants to any of the radiologic sciences and imaging programs must realize that each program is limited in size by its credentialing agencies and the availability of clinical rotations. It is not possible to accept more students than accrediting agencies approve and the clinical education sites permit.

Each student entering one of the radiologic sciences and imaging programs must present current immunization verification that meets the KCMA requirements. (Some clinical sites may have additional health requirements and require background checks.)

CLINICAL HOURS FOR RADIOLOGIC TECHNOLOGY

Fall	16 hours/week x 7 weeks	112 hours
Winter	16 hours/week x 15 weeks	240 hours
Summer	24 hours/week x 10 weeks	240 hours
Fall	24 hours/week x 15 weeks	360 hours
Winter	24 hours/week x 15 weeks	360 hours
Summer	8 hours/week x 10 weeks	80 hours
TOTAL		1,392 hours

Note: The hours listed above are an approximation and may vary from semester to semester due to scheduled college recesses and holidays. If circumstances warrant, the student may be granted a period of time longer than six semesters to complete the clinical competencies. The student shall not exceed 40 hours of combined clinical experience and didactic contact hours per week. No more than 25 percent of the clinical time will be scheduled during the evenings.

CLINICAL HOURS FOR ADVANCED IMAGING TECHNOLOGIES

Each one-semester clinical experience in the advanced imaging modalities of computed tomography, magnetic resonance imaging, vascular-interventional technology, and cardiac-interventional technology require approximately 300 contact hours in clinical experience. Each clinical week generally has three eight-hour days.

CLINICAL HOURS FOR NUCLEAR MEDICINE

The Nuclear Medicine Institute at the University of Findlay assigns and manages all clinical hours for these students. The second and third semesters, at NMI, satisfy these clinical hour requirements.

Radiologic technology

RADIOLOGIC TECHNOLOGY PROGRAM ADMISSION REQUIREMENTS

Note: Degree program requirements change regularly; students should check www.kcma.edu for the most up-to-date information.

Applicants to radiologic technology must meet the following requirements to be considered for admission:

1. Meet all admission requirements for Kettering College of Medical Arts.
2. Provide evidence of a quality academic background by passing the following college courses or transfer equivalent credits with grades of C (2.0) or higher:
   - BIOL 119 and BIOL 129 (Human Anatomy & Physiology I and II)
   - MATH 105 (Fundamentals of Mathematics)
   - ENGL 105 (Academic Discourse I)
   - SOCI 115 (Introduction to Sociology)
   - CPTR 102, 103, 140 (Applications in Word, Excel, and PowerPoint)
   - PSYC 112 (General Psychology)
   - COMM 214 (Speech Communications)
   - PHYS 131 (Survey of Physics)

PROGRAM PRE-ENROLLMENT REQUIREMENTS

The following items must be completed and maintained in order to begin and progress in the major:

Immunizations

- All college-required immunizations must be completed before the student can begin clinical experience. Individual clinical sites may require additional immunizations, all of which must be completed and maintained throughout that assignment. The immunization record must be submitted prior to registration for classes.
- Failure to document immunizations will result in the student not being allowed to continue in the clinical portion of the program until compliance is proven.

Clinical observation

- Students accepted into the major must provide proof of observation in a full-service radiology department before they are allowed to register for classes. The appropriate form is mailed to the student with the acceptance letter in May prior to beginning classes in August.

Background checks

- All students must register and pay for a background check so that the results are received by the college by May 1 prior to the year they wish to enter the clinical program. Background checks completed before April 1 will not be accepted. The only background check approved by the College is www.certifiedbackground.com. If this search reveals a record of felony or misdemeanor activity, program officials will require the applicant to complete a “pre-application” process with the American Registry of Radiologic

Technologists (ARRT). For more information, call 651-687-0048 or see www.arrt.org.

- While acceptance into the program may not be denied by a negative background check, approval to take the end-of-program certification examination (ARRT) may be. An applicant in this category will not be able to enroll in the program, if accepted, until the ARRT approval has been received. If the ARRT approval is denied, the applicant will not be admitted to the program.

Personal health insurance

- All students must be covered by health insurance. This may be done by a shared family policy or by purchasing the college's suggested coverage or other private insurance that will cover the student in the clinical setting.
- Without this insurance, the student accepts responsibility for any health care costs incurred while at the clinical site.
- Hospitals and other medical facilities can be hazardous. Students must be prepared to be accountable for the cost of treatment made necessary by injuries or illness sustained while on clinical assignment.

PROGRAM ADMISSION NOTES

1. Additional acceptance qualifiers such as current KCMA student, ACT composite score, and a GPA of 3.00 may influence acceptance.
2. Applicants must maintain minimal acceptance requirements in all academic work prior to matriculation into the program.
3. Application deadlines:
   a. The application deadline for fall semester enrollment is April 1.
   b. All updated supporting documents must be received by May 1.
   c. Applicants will be notified of acceptance by the end of May before the fall semester.
   d. Applications received after April 1 will be processed for the next academic year.
   e. Exceptions to these rules are contingent on space available in the program after the May admission process.
4. Due to State of Ohio regulations that govern radiation exposure to minors (those younger than 18 years), the student admitted to radiologic technology must be 18 years old by mid-October during the first semester in the program. This coincides with the first clinical assignment and possible exposure to ionizing radiation.
5. Prior conviction of a felony, gross misdemeanor, or misdemeanor may prohibit the student from taking the certification examination at the end of the program. Please contact program officials for more details.
6. Pregnancy is not a reason for being rejected or removed from the program. The student is advised, but not required, to inform program faculty of her pregnancy so that measures can be initiated that will protect the fetus from unnecessary exposure to ionizing radiation. Please note that the pregnant student assumes all responsibility for the safety of her fetus during the gestation period.

PROGRAM ACCEPTANCE NOTES

Preference will be given to KCMA students when academic records are equal.

PROGRESSION

1. Students must complete the core curriculum.
2. To remain in the radiologic technology program, students must earn a grade of C or higher in all coursework and maintain a minimum GPA of 2.00 in each term. Students with a minimum cumulative GPA of 2.50 or higher who do not successfully complete a required course may be allowed to remain in the program. The course must be repeated in the following term in which it is offered, as long as it is not a prerequisite to another course and the course schedule does not conflict with clinical rotation schedules. Students may not enroll in a course more than twice; grades of W do not apply. Grades of WP and WF count as enrolled in a course. Note: Courses taken out of sequence may require additional time to complete all coursework and delay eligibility to take the ARRT Registry examination.
3. Cardiopulmonary resuscitation (CPR): Students must document current CPR certification before starting the clinical portion of the program. This certification must be maintained while students are enrolled in the RSI programs. Certification from the Red Cross must be Professional Rescuer certification. Certification from the American Heart Association must be CPR for Health Care Professionals.
4. Attendance
   a. Didactic (classroom): A student whose absences equal or exceed one-fourth the number of class meetings is not permitted to take the final examination or receive credit for the course without approval of the department chair.
   b. Clinical (practicum): See the *Clinical Education Handbook* for the clinical attendance policy.
5. Clinical contact hours: Radiologic technology students will accumulate approximately 1,400 hours in clinical activities during the program. Please note that clinical hours for the entire program are outlined in the section of the *Academic Bulletin* entitled "Clinical hours for radiologic technology," which follows the programs of study. Each semester includes evening clinical experience. All clinical hours are part of the education program for which there is no financial remuneration. At no time will students be allowed to replace paid hospital staff. Students will not receive clinical credit for hours acquired while employed at an imaging facility.
6. To be eligible to take the ARRT Registry examination, the student must meet all program requirements and all associate degree requirements.

READMISSION

1. To be considered for readmission, the student must notify the admissions office in writing.
2. Students who have been out of the radiologic technology program for a period of one year or longer may be required to repeat courses already completed.
3. Requests for readmission will be evaluated individually. The decision to readmit the student will be made on the basis of the following criteria:
   a. Cumulative GPA of at least 2.50 in all coursework required for the associate degree in radiologic technology.

b. Available space in the program.
c. Evaluation of the student's standing, relative to any revisions that may have occurred in the curriculum, courses, or requirements.
d. Review and evaluation of the student's academic and clinical performance at the time of withdrawal or dismissal.
e. Patterns of withdrawals, repeats, and/or failures in the student's academic record.
f. Submission of evidence demonstrating a plan for academic success.

Students re-entering the radiologic technology program will be required to successfully complete any remediation as defined by the Department of Radiologic Sciences and Imaging. Students will be readmitted under the current *Academic Bulletin*. Students are not eligible for readmission if they have received a second grade below C- in a RTCA course unless approved by the program director and the Dean for Academic Affairs.

SUGGESTED PROGRAM OF STUDY (ASSOCIATE DEGREE)

	Prerequisite year	Credits by term	
		Fall	Winter
BIOL 119	Human Anatomy and Physiology I	4	
MATH 105	Fundamentals of Math	3	
ENGL 105	Academic Discourse I	3	
SOCI 115	Principles of Sociology	3	
CPTR 102, 103, 104	Word, Excel, and PowerPoint	3	
BIOL 129	Human Anatomy and Physiology II		4
PSYC 112	General Psychology		3
COMM 214	Speech Communication		3
PHYS 131	Survey of Physics		4
	TOTALS	16	13

	First year	Credits by term		
		Fall	Winter	Summer
RELB 110	Biblical Resources for Understanding Health Care	2		
RTCA 114	Practicum I	1		
RTCA 115	Radiology in Modern World	1		
RTCA 116	Radiologic Technology I	3		
RTCA 116L	Radiologic Technology I Lab	1		
RTCA 120	Patient Care	2		
RTCA 121	Medical Terminology	1		
PEAC 178	Wellness	1		
BIOL 263	Sectional Anatomy		3	
RELX	Religion elective		2	
RTCA 123	Practicum II		2	
RTCA 126	Radiologic Technology II		3	
RTCA 126L	Radiologic Technology II Lab		1	
RTCA 131	Practicum III			2
RTCA 133	Radiologic Technology III			2
RTCA 135	Fundamentals of Radiation and Generation I			2
RTCA 137	Formulating Radiographic Technology			2
	TOTALS	12	11	8

	Second year	Credits by term		
		Fall	Winter	Summer
ENGL 118	Writing and Research in the Health Care Professions	3		
RTCA 210	Advanced Patient Care	2		
RTCA 215	Practicum IV	3		
RTCA 218	Fundamentals of Radiation and Generation II	3		
RTCA 220	Radiologic Technology IV	2		
PEAC	Elective		1	
RTCA 219	Pathology for Radiographers		3	
RTCA 222	Principles of Radiobiology		1	
RTCA 231	Quality Assurance in Radiology		2	
RTCA 239	Practicum V		3	
RELP 253	Morality in Medicine		2	
RTCA 240	Practicum VI			1
RTCA 291	Radiology Simulated Registry			2
	TOTALS	13	12	3

(Associate of Science degree completed.)

Advanced placement for graduates of accredited RT programs

The Radiologic Technology program at Kettering College offers advanced placement into the Associate of Science degree for those who can document formal training in radiologic technology but who do not qualify for registration by the American Registry of Radiologic Technologists (ARRT).

Each candidate, for this track, will be reviewed on a case-by-case basis. The applicant must meet all admission criteria for the College and the program. Individuals must understand that all AS degree and program requirements must be completed in order to be eligible to take the ARRT examination. Contact program personnel for more information.

In addition, advanced placement may be granted to radiographers who are certified by ARRT but do not have associate degrees. These individuals must complete all associate degree core requirements as directed by the current *Academic Bulletin.*

BACHELOR OF SCIENCE IN HEALTH PROFESSIONS DEGREE
SUGGESTED PROGRAM OF STUDY: AS THROUGH BS COMPLETION

	Prerequisite year	Credits by term	
		Fall	Winter
BIOL 119	Human Anatomy and Physiology I	4	
MATH 105	Fundamentals of Math	3	
ENGL 105	Academic Discourse I	3	
SOCI 115	Principles of Sociology	3	
CPTR 102, 103, 104	Word, Excel, Power Point	3	
BIOL 129	Human Anatomy and Physiology II		4
PSYC 112	General Psychology		3
COMM 214	Speech Communication		3
PHYS 131	Survey of Physics		4
	TOTAL	16	14

	First year	Credits by term		
		Fall	Winter	Summer
RELB 110	Biblical Resources for Understanding Health Care	2		
RTCA 114	Practicum I	1		
RTCA 115	Radiology in the Modern World	1		
RTCA 116	Radiologic Technology I	3		
RTCA 116L	Radiologic Technology I Lab	1		
RTCA 120	Patient Care	2		
RTCA 121	Medical Terminology	1		
PEAC 178	Wellness	1		
SOCI 375	Cultural Diversity in Health Care	3		
BIOL 263	Sectional Anatomy		3	
RELX	Religion elective		2	
RTCA 123	Practicum II		2	
RTCA 126	Radiologic Technology II		3	
RTCA 126L	Radiologic Technology II Lab		1	
BIOL 350	Pathophysiology		3	
RTCA 131	Practicum III			2
RTCA 133	Radiologic Technology III			2
RTCA 135	Fundamentals of Radiation and Generation I			2
RTCA 137	Formulating Radiographic Technique			2
HEPR elective				2-3
	TOTALS	15	14	10-11

Note: The AS degree candidate may apply for conditional admission to the BS degree program at this time.

	Second year	Credits by term		
		Fall	Winter	Summer
ENGL 118	Writing and Research in the Health Care Professions	3		
RTCA 210	Advanced Patient Care	2		
RTCA 215	Practicum IV	3		
RTCA 218	Fundamentals of Radiation and Generation II	3		
RTCA 220	Radiologic Technology IV	2		
HEPR 380	Introduction to Health Care Professional Studies	1		
PEAC	Elective		1	
RTCA 219	Pathology for Radiographers		3	
RTCA 222	Principles of Radiobiology		1	
RTCA 231	Quality Assurance in Radiology		2	
RTCA 239	Practicum V		3	
RELP 253	Morality and Medicine: Christian Perspectives on Bioethical Issues		2	
HEPR 310	Health Care Economics and Finance		3	
RTCA 240	Practicum VI			1
RTCA 291	Radiology Simulated Registry			2
RELP 315	Spirituality in Healing and Health Care			2
	TOTALS (Associate of Science degree completed)	14	15	5

	Third year	Credits by term
		Fall
CT/MRI Track		
ADIM 300	CT Theory	3
ADIM 304	Practicum I	4
ADIM 328	Clinical Aspects of CT	3
BIOL 263**	Sectional Anatomy	3
BIOL 350	Pathophysiology	3
HEPR 360***	Advanced Cardiac Life Support	0-1
	TOTAL	16-17
	OR	
VIT/CIT Track		**Fall**
ADIM 310	Vascular Interventional	3
ADIM 324	Practicum III	4
RTCA 210**	Advanced Patient Care	2
BIOL 350	Pathophysiology	3
HEPR 360***	Advanced Cardiac Life Support	0-1
	TOTAL	12-13

** as needed; *** credit or certificate

CT/MRI Track		**Winter**
ADIM 303	MRI Theory	4
ADIM 314	Practicum II	4
ADIM 428	Clinical Aspects of MRI	3
HEPR 330	Community Health Perspectives	3
	TOTAL	14
	OR	
VIT/CIT Track		
ADIM 410	Angiography II	4
ADIM 434	Practicum IV	4
RESA 320	Cardiopulmonary Monitoring	3
HEPR 330	Community Health Perspectives	3
	TOTAL	14

		Summer
RELX Up.Div.	Elective	2
SocSci Up.Div.	Elective	3
MATH 215	Probability and Statistics	4
Humanities	Elective	3
HEPR 340	Legal and Ethical Considerations in Health Care	3
	TOTAL	15

	Fourth year	**Credits by term**
		Fall
Humanities	Elective	3
RELX Up.Div.	Elective	2
HEPR 410	Health Care Statistics and Research	3
HEPR 415	Health Care Informatics Applications for Health Professions	1
HEPR 481	Capstone/Senior Project	1
	TOTAL	10
	(Bachelor of Science degree completed)	

Nuclear medicine technology

This program is affiliated with the Nuclear Medicine Institute (NMI) at The University of Findlay, 1000 N. Main St., Findlay, OH 45840-3695; 419-434-4708.

TWO-YEAR PROGRAM

The nuclear medicine program is a cooperative educational endeavor with NMI at The University of Findlay. The first year of the program is spent at Kettering College of Medical Arts acquiring the courses required for admission to the NMI program. During the first semester in the program on the Kettering campus, the student must apply for admission to NMI. Once accepted, the student will spend the first semester of their second year at the Findlay campus and the final two semesters at a clinical site arranged by the student and the clinical coordinator of the NMI program.

When all requirements have been met at Kettering College of Medical Arts and the NMI program at The University of Findlay, Kettering College will award the Associate of Science degree in nuclear medicine technology, and the NMI awards a certificate of completion.

REGISTRATION ELIGIBILITY

Graduates of the nuclear medicine program may be eligible for both of the national examination boards — one administered by the American Registry of Radiologic Technologists (ARRT), and one offered by the Nuclear Medicine Technology Certification Board (NMTCB).

ADMISSION REQUIREMENTS: YEAR 1

Note: Degree program requirements change regularly; students should check www.kcma.edu for the most up-to-date information.

The admission requirements to the KCMA nuclear medicine program are:

1. Meet all admission requirements for Kettering College of Medical Arts.
2. Be a graduate of an accredited high school with a minimum cumulative GPA of 2.50 (GED score of 50) or have college minimum cumulative GPA of 2.50 for at least 12 credits.
3. Provide evidence of a quality academic background in basic science and mathematics. This includes a grade of at least C in one algebra course and two science courses (biology, chemistry, or physics). One of the science courses should include a laboratory.

ADMISSION REQUIREMENTS: YEAR 2

During the first semester at KCMA, the student should apply to the NMI program at The University of Findlay. Acceptance to the program is not guaranteed and is competitive. (See the program director of RSI at Kettering College for the necessary documents for NMI.) Students should review the NMI Web site to ensure that they have an understanding of the NMI program. See the Web site for The University of Findlay, www.findlay.edu. Click "Professionals and Guests," then "Nuclear Medicine Institute."

Tuition, transportation, room, and board: Nuclear medicine students will pay their second-year tuition to The University of Findlay, not KCMA. Students are responsible for their own

transportation to NMI and to the affiliate hospital. Students must also arrange and pay for room and board while enrolled in the NMI program.

1. NMI admission is not guaranteed and is contingent upon:
    a. Documentation of a minimum of 8 hours of observation in a nuclear medicine department. Some clinical training sites require more than the minimum 8 hours. Students should check with an NMI clinical coordinator for additional information.
    b. Acceptance by an NMI clinical affiliate for the 1,400-hour clinical training session. This is an interview process and is arranged by NMI.
    c. Providing NMI three positive references.
    d. Providing NMI official high school transcripts.
    e. Providing NMI official post-secondary transcripts that document "C" (70 percent) or better coursework in the NMI prerequisites.
    f. Successful completion of a student background check.
    g. Completion of NMI application.
2. Students accepted into the NMI program must:
    a. Provide documentation to NMI of current CPR certification that will remain valid throughout the clinical practicum.
    b. Provide documentation of satisfactory medical health per clinical sites' requirements.
3. All prerequisites for the NMI experience must be passed with C (70 percent) or better.
4. For information about NMI, call the NMI administrative assistant: 419-434-4708.

PRE-ENROLLMENT REQUIREMENT

Applicants must meet requirements to enroll in MATH 165, College Algebra and Trigonometry. This may be achieved by transferring an equivalent algebra course or receiving a score of at least 70 percent on the KCMA mathematics placement test.

ADMISSION NOTES

Two-year program

1. Additional acceptance qualifiers such as medical observation, status as a current KCMA student, KCMA recommendation forms, ACT composite score, and a GPA of 3.00 may influence acceptance.
2. Applicants must maintain minimal acceptance requirements in all academic work prior to matriculation into the program.
3. Due to State of Ohio regulations that govern radiation exposure to minors (those younger than 18 years), the student admitted to radiologic technology or nuclear medicine must be 18 years old by mid-October during the first semester in the program. This coincides with the first clinical assignment and possible exposure to ionizing radiation.
4. It is recommended that all students entering radiologic sciences and imaging programs have computer skills that will enable them to use word processing and/or Windows and spreadsheet operations. Please refer to specific course descriptions for more details.

5. Prior conviction of a felony, gross misdemeanor, or misdemeanor may prohibit the student from taking the certification examination at the end of the program. Please contact program officials for more details.
6. Pregnancy is not a reason for being rejected from or removed from the program. The student is advised but not required to inform program faculty of her pregnancy so that measures can be initiated that will protect the fetus from unnecessary exposure to ionizing radiation. Please note that the pregnant student assumes all responsibility for the safety of her fetus during the gestation period.

REGISTRATION PROCESS FOR SECOND-YEAR NUCLEAR MEDICINE STUDENTS

1. Students must pre-register at KCMA for the final three semesters (at NMI) before leaving the Kettering College campus.
2. Students must obtain their KCMA advisor's signature and immunization clearance on all four forms (the current term and the entire next year).
3. Students must sign a University of Findlay financial disclaimer form found in the student services office. This form outlines the specific financial requirements for the yearlong process of registration. NMI students will not be charged a program fee from KCMA but will be assessed the general fee, which may be paid in advance or prior to receiving their diploma and/or grade transcript from KCMA.
4. Students must return their student ID to the student finance office and have a zero balance prior to going to Findlay.
5. Students must arrange to send official KCMA transcripts to NMI from the KCMA records office at the end of their first year at KCMA.

CLINICAL EDUCATION

Nuclear Medicine students will be required to complete clinical experience during the second year of the program. The NMI clinical coordinator will arrange these rotations.

PROGRESSION REQUIREMENTS

Students completing the KCMA curriculum shall first meet certain requirements for admission to NMI. These basic requirements are:

1. GPA in didactic courses
   a. Students must have a cumulative grade point average of 2.00 (C) or better.
   b. Students must have earned no less than a 2.00 (C) in each specific science-related foundation course. These include anatomy and physiology, chemistry, biology, mathematics, and physics.
2. GPA in clinical (NMI) courses: Satisfactory performance must be maintained. Unsatisfactory performance in clinical coursework will require the student to withdraw and/or be dismissed from the program even if a grade point average of 2.00 (C) or above is maintained in didactic courses.
3. Students accepted into this program must document competency in computer and Internet use and Microsoft Word, Excel, and PowerPoint software. These may be taken as individual courses or as competency tests.

4. Practicum contact hours: Practicum hours will be required of all students. All clinical experience is part of the educational program for which there is no financial remuneration. These assignments are arranged while enrolled in The University of Findlay's NMI program.
5. Withdrawal/failure: A student may not enroll in a course more than twice; a grade of W does not apply. Grades of WP and WF count as being enrolled in the course.
6. The student will be awarded the Associate of Science degree from Kettering College and the certificate of completion from The University of Findlay (NMI) when all program and degree requirements are met.

READMISSION

1. To be considered for readmission into the first year of the nuclear medicine program, the student must notify the KCMA admissions office in writing.
2. Requests for readmission to KCMA will be evaluated individually. The decision to readmit the student will be based on the following criteria.
   a. Cumulative GPA of at least 2.50 in all coursework required for the associate degree in nuclear medicine.
   b. Available space in the program.
   c. Evaluation of the student's standing, relative to any revisions that may have occurred in the curriculum, courses, or requirements.
   d. Review and evaluation of the student's academic performance at the time of withdrawal or dismissal.
   e. Patterns of withdrawals, repeats, and/or failures in the student's academic record.
   f. Submission of evidence demonstrating potential for academic success.
3. Students re-entering the nuclear medicine program will be required to successfully complete any remediation as defined by the Department of Radiologic Sciences and Imaging. Students will be readmitted under the current *Academic Bulletin*. Students are not eligible for readmission if they have received a second grade below C- in a required course unless approved by the KCMA program director and the KCMA Dean for Academic Affairs.

SUGGESTED COURSE OF STUDY

	First year	Credits by term		
		Fall	Winter	Summer
COMM 214	Speech Communication	3		
MATH 165	College Algebra and Trigonometry	3		
PHYS 141	General Physics I	4		
Computer	Competency tests or credit	0-4		
CHEM 125	General Chemistry with Qualitative Analysis	4		
BIOL 119	Human Anatomy and Physiology I		4	
ENGL 105	Academic Discourse I		3	
PHYS 152	General Physics II		4	
RELB 110	Biblical Resources for Understanding Health Care		2	
RELX	Elective		2	
BIOL 129	Human Anatomy and Physiology II			4
SOCI or PSYC	Elective (sociology or psychology)			3
PEAC 178	Physical Education/Wellness			1
RELX	Elective			2
PEAC	Elective			1
RTCA 121	Medical Terminology			1
	TOTALS	14-18	15	12

Second-year courses offered at NMI are listed and taught at the 400 level. These courses are not offered at KCMA and are subject to change.

Second year		Credits by term		
		Fall	Winter	Summer
NMED 406	Molecular Imaging Mathematics	3		
NMED 416	Molecular Imaging Physics	2		
NMED 425	Molecular Imaging Radiobiology	1		
NMED 435	Molecular Imaging Radiation Protection	2		
NMED 445	Molecular Non-Imaging Procedures	3		
NMED 455	Molecular Imaging Procedures	5		
NMED 462	Radionuclide Therapies	1		
NMED 465	Radiochemistry and Radiopharmaceuticals	3		
NMED 472	Molecular Imaging Instrumentation	3		
NMED 475	Molecular Imaging SPECT	1		
NMED 477	Molecular Imaging PET	1		
NMED 485	Clinical Nuclear Medicine I		12	
NMED 486	Clinical Nuclear Medicine II			12
NMED 487	Molecular Imaging Capstone			1
	TOTALS	25	12	13

BACHELOR OF SCIENCE COMPLETION

Graduates of accredited nuclear medicine programs who are certified by either the ARRT or NMTCB may apply for certain advanced imaging technologies tracks or completion of a Bachelor of Science in Health Professions at KCMA.

Advanced imaging technologies

Advanced imaging is a specialized field in radiologic technology that includes computed tomography (CT), magnetic resonance imaging (MRI), vascular interventional technology (VIT), and cardiovascular interventional technology (CIT).

The RSI department offers the following programs in advanced imaging:

- BS in Health Professions degree, advanced imaging track
- Certificates in MRI, CT, vascular interventional technology (VIT), and cardiovascular interventional technology (CIT)

Students entering KCMA as graduates of an associate degree or certificate program in radiologic technology, nuclear medicine, radiation therapy, or diagnostic medical sonography may continue their education with the following options:

1. BS in Health Professions
   a. Advanced imaging track: The registered technologist will begin with one year (two semesters) in the advanced imaging technologies of computed tomography (CT) and magnetic resonance imaging (MRI), or vascular interventional technology (VIT) and cardiovascular interventional technology (CIT). The student must complete all core requirements in the arts and sciences and health professions courses to meet the requirements for the BS degree. (See the advanced imaging track description at the end of this *Bulletin* section).
   b. Health care professional studies track: A course of study in arts and sciences and health professions that will complete the BS degree requirements but without the advanced imaging courses. See the degree requirements section of this *Bulletin* for more information.
2. Certificate programs: Certificate programs in CT, MRI, vascular interventional technology, or cardiovascular interventional technology are offered as one-semester courses of study. These may be taken individually or as paired programs that may lead to the BS degree. (See the advanced imaging track at the end of this *Bulletin* section).

All advanced imaging programs require practicum experience in the semester in which the clinical aspects courses are taught. Each student will be evaluated on classroom and practicum experiences. Completion of the clinical portions of these certificates is competency-based. To pass each clinical course, the student must complete all competencies required by the ARRT. See course syllabus for details.

ADMISSION REQUIREMENTS

Note: Degree program requirements change regularly; students should check www.kcma.edu for the most up-to-date information.

Applicants to the advanced imaging majors will satisfy the following criteria to be considered for admission:

Bachelor of Science in Health Professions or advanced imaging certificates

1. Meet all admission requirements for Kettering College of Medical Arts.
2. Provide evidence of graduation with at least a 2.30 GPA from a radiologic sciences program accredited by the Joint Review Committee on Education in Radiologic Technology (JRCERT) — OR — provide evidence of certification by ARRT, ARDMS, or NMTCB in radiologic technology, nuclear medicine technology, radiation therapy, or sonography.
3. Request and pay to have a background check performed by a College-approved service no more than six months prior to beginning the clinical experience. Please contact the admissions office for approved service contact information. Commencement of the clinical portion of the program is contingent upon successful clearance of the background check.

Note: It is recommended that all students entering radiologic sciences and imaging programs have computer skills that enable them to use Windows, word processing, spreadsheet, and PowerPoint operations. Please refer to specific course descriptions for more details.

CLINICAL EDUCATION

1. All advanced imaging programs require clinical experience. Each modality has approximately 300 contact hours per semester.
2. The student must pass each clinical course with a grade of C or higher.
3. Failure or withdrawal from an advanced imaging course requires that all courses in the modality be repeated.
4. A student may not enroll in a course more than twice. Grades of WP or WF will be counted as being enrolled in the course.
5. Attendance: All clinical absences must be made up. These make-up assignments must be scheduled with the track coordinator and the clinical site and completed before academic credit will be given.
6. Transportation: Students are responsible for their own transportation to area hospitals for clinical education assignments.
7. Clinical rotations: To be of maximum benefit to the imaging student and to enhance the student's versatility and skills, a wide variety of clinical rotations are provided. This includes hospitals, independent imaging centers, and physicians' offices. The student may be assigned to KCMA clinical affiliations anywhere within 70 miles of KCMA.
8. Previous experience: The Department of Radiologic Sciences and Imaging may grant clinical credit for previous clinical training or experiences to advanced imaging students. In order to receive clinical credit for previous clinical training or experience, students must petition for approval to the Dean for Academic Affairs and the program director.

Acceptance of the petition will be based on employee records and supervisor verification of a minimum of one year of continuous employment in specific advanced imaging modalities (CT, MRI, VIT, or CIT). Part-time experience will be considered if the student was employed at least 20 hours per week (half of full-time equivalent).

9. Space availability: All applicants must realize that all of the programs are limited in size by their certification agencies and by the availability of clinical sites. It is impossible to accept more students than our accreditation agencies approve and the clinical sites allow.

PROGRESSION REQUIREMENTS

1. GPA in arts and sciences courses: In order to remain in the advanced imaging program, a student must earn a grade of C or above in BIOL 263, Sectional Anatomy; RESA 320, CP Monitoring; RTCA 210, Advanced Patient Care; and all program-required HEPR classes.
2. GPA in advanced imaging courses: A minimum cumulative grade point average of 2.00 (C) in advanced imaging technology courses must be maintained. Students must earn a grade of C or above in all ADIM courses. Failure to achieve at least a C in any ADIM course will result in dismissal from the program, and the student must submit a written request in order to be readmitted. Readmitted students will be under the current *Academic Bulletin* for that academic year.

READMISSION

A student who has one ADIM failure may apply for readmission into advanced imaging through the admissions office. Students are not eligible for progression or readmission after receiving a grade below C- in two advanced imaging courses.

BACHELOR OF SCIENCE IN HEALTH PROFESSIONS, ADVANCED IMAGING TRACK

The following is a description and list of credits required for the Bachelor of Science in Health Professions, advanced imaging track.

Total hours/credits required for degree: 66-67 minimum	
(at least 42 must be upper-division)	
Degree core credits	22
HEPR credits	24
ADIM credits	20-21
Degree core	
Humanities (6 hours)	
Elective courses	
Religion (6 hours)	
RELP 315 Spirituality in Healing and Health Care	2
RELX upper division elective	2
RELX upper division elective	2
Mathematics (4 hours)	
MATH 215 Probability and Statistics	4
Social sciences (3 hours)	
SOCI 375 Cultural Diversity in Health Care	3
Natural sciences (3 hours)	
BIOL 263 Sectional Anatomy	3
Health professions cognates	
Health professions (24)	
HEPR 310 Health Care Economics and Finance	3
HEPR 330 Community Health Perspectives	3
HEPR 340 Legal and Ethical Considerations in Health Care	3
HEPR 348 Concepts of Management and Leadership in Health Care	3
BIOL 350 Pathophysiology	3
HEPR 360 Advanced Cardiac Life Support	0-1
HEPR 410 Health Care Statistics and Research	3
HEPR 415 Health Care Informatics Applications for Health Professions	1
HEPR 380 Introduction to Health Care Professional Studies	1
HEPR 481 Capstone/Senior Project	1
HEPR Elective	3

Advanced imaging cognates

ADIM (21 hours) sectional imaging technologies		
ADIM 300	CT Theory	3
ADIM 328	Clinical Aspects of CT	3
ADIM 304	Practicum I (CT)	4
ADIM 303	MRI Theory	4
ADIM 428	Clinical Aspects of MRI	3
ADIM 314	Practicum II (MRI)	4
	OR	
ADIM (20 hours) vascular imaging technologies		
ADIM 310	Angiography I	3
ADIM 324	Practicum III	4
ADIM 410	Angiography II	4
ADIM 434	Practicum IV	4
RESA 320	Cardiopulmonary Monitoring	3
RTCA 210	Advanced Patient Care	2

COMPLETION REQUIREMENTS

1. Bachelor of Science degree:
   a. Complete all required and elective courses with a cumulative GPA of 2.00 or greater.
   b. Complete core and major requirements.
   c. Complete all program requirements.
   d. Complete all graduation requirements including residency.
2. Certificate: Complete all required courses per modality (CT, MRI, VIT, or CIT).

CERTIFICATE PROGRAMS OF STUDY

■ Certificate in computed tomography (CT)

BIOL 263	Sectional Anatomy	3
ADIM 300	CT Theory*	3
ADIM 328	Clinical Aspects of CT*	3
ADIM 304	Practicum I (CT)	4
	TOTAL	13

* Note: ARRT Registry review material will be incorporated into this course.

■ Certificate in magnetic resonance imaging (MRI)

BIOL 263	Sectional Anatomy	3
ADIM 303	MRI Theory*	4
ADIM 428	Clinical Aspects of MRI	3
ADIM 314	Practicum II (MRI)	4
	TOTAL	14

* Note: ARRT Registry review material will be incorporated into this course.

■ Certificate in vascular interventional technology (VIT)

ADIM 310	Angiography I*	3
ADIM 324	Practicum III (General Angiography)	4
HEPR 360	Advanced Cardiac Life Support (Proficiency or Credit)	0-1
RTCA 210	Advanced Patient Care	2
	TOTAL	9-10

* Note: ARRT Registry review material will be incorporated into this course.

■ Certificate in cardiovascular interventional technology (CIT)

ADIM 410	Angiography II	4
ADIM 434	Practicum IV (Cardiac Angiography)	4
RESA 320	Cardiopulmonary Monitoring	3
	TOTAL	11

PROFESSIONAL REGISTRATION

The advanced imaging programs prepare the students for the American Registry of Radiologic Technologists' post-primary certification examinations in CT, MRI, VIT, and CIT. Didactic and clinical courses help prepare but cannot guarantee eligibility for these examinations. For more information on the eligibility requirements, refer to the ARRT Web site: www.arrt.org.

BACCALAUREATE COMPLETION ADVANCED IMAGING TRACK

Track coordinator: Lawrence Beneke

Graduates in an accredited RT program have the following options:

1. If the radiologic technologist completed a non-degree program, he or she must complete the Associate of Science and Bachelor of Science degree core requirements to meet graduation requirements for the Bachelor of Science in Health Professions degree. See the Associate of Science degree in radiologic technology in this *Bulletin.*
2. If the radiologic technologist completed an Associate of Science or an Associate of Applied Science program, he or she may follow the completion tracks described here.

Allied Health: Department of Respiratory Care

Nancy Colletti, Chairperson; Hope Appelbaum, Director of Clinical Education; Alisa French.

MISSION STATEMENT

The Department of Respiratory Care at Kettering College of Medical Arts, through qualified, dedicated faculty and the support of the College, Kettering Medical Center, and its clinical affiliates, is committed to providing quality learning experiences in the classroom, laboratory, and clinical settings. These experiences enable the student to develop the knowledge, skills, and caring attitude necessary to practice as competent, advanced respiratory care practitioners, seeking to maximize the physical, emotional, and spiritual health of their patients and community.

DESCRIPTION OF THE PROGRAM

Respiratory care is one of the most rapidly growing and challenging specialty areas in the allied health sciences. The primary purpose of respiratory care is to aid the physician in the diagnostic evaluation, treatment, and rehabilitation of patients with lung and/or heart disease.

The respiratory care program is designed to prepare students to function with intelligence, skill, and responsibility in this specialty area. Following successful completion of the second year, students receive an associate degree and are eligible for credentialing examinations offered by the National Board for Respiratory Care.

The associate degree program prepares graduates as competent advanced respiratory care practitioners. Completion of the Bachelor of Science in Health Professions degree provides additional training in respiratory care, as well as advanced skills, knowledge, and values which expand the therapist's role in the health care system. This is accomplished through the various technical courses offered. In addition, the respiratory care student will draw from the arts and sciences courses, which help the student develop an understanding of self, the environment, and one's relationship to life and service.

PROGRAM OUTCOMES

Upon successful completion of the respiratory care program, the graduate will be a competent advanced-level respiratory therapist. All graduates will demonstrate:

- Ability to recall, apply, and analyze information required of advanced-level respiratory therapists.
- Manual dexterity and technical proficiency necessary to perform as competent advanced-level respiratory therapists.

- Caring and positive attitude necessary for continued employment as advanced-level respiratory therapists.

ACCREDITATION

The respiratory care, Kettering College of Medical Arts program is accredited by the Commission on Accreditation for Respiratory Care (www.coarc.com), 1248 Harwood Road, Bedford, TX 76021-4244; 817-283-2835.

OHIO RESPIRATORY CARE BOARD POSITION ON REFUSAL TO ISSUE A LICENSE OR PERMIT TO PRACTICE

The Ohio Respiratory Care Board may refuse to issue a license or permit to persons who have been found to commit any grounds enumerated under Section 4761-09A of the Ohio Revised Code. For additional information, contact the Ohio Respiratory Care Board, 77 S. High St., 18th Floor, Columbus, OH 43266-0777; 614-752-9218.

ADMISSION REQUIREMENTS

Note: Degree program requirements change regularly; students should check www.kcma.edu for the most up-to-date information.

Applicants are considered for admission to the respiratory care program based on the following criteria:

1. Graduation from an accredited high school with a minimum cumulative GPA of 2.30 (GED score of 500) or have a previous college minimum cumulative GPA of 2.30 for at least 12 credits.
2. A quality academic background in basic science and mathematics. This will include a grade of at least C in one algebra course and two science courses, selected from biology, chemistry, or physics. One of the science courses should include a laboratory.
3. A pre-admission interview with program personnel and/or alumni.
4. Completed student personal statement.
5. Additional qualifiers such as job shadow experience, status as a current KCMA student, KCMA mathematics placement test, ACT composite score, and a GPA of 2.80 may influence acceptance.

PRE-ENROLLMENT REQUIREMENTS

1. Applicants must maintain minimal acceptance requirements in all academic work prior to matriculation into the program.
2. All students accepted for admission into the program must complete a mandatory four-hour job shadow experience with a respiratory therapist in a health care setting prior to course registration. Forms to document the job shadow experience are available in the admissions office.
3. Students must request and pay to have a criminal background check performed by a College-approved service no more than six months prior to beginning the clinical experience. Please contact the admissions office for approved service contact

information. Commencement of the clinical portion of the program is contingent upon successful clearance of the background check.

4. In order to participate in clinical activities, all students must have personal health insurance coverage and must maintain coverage during the time they are enrolled for professional courses (RESA).

CLINICAL EDUCATION

The practical application of respiratory care is learned through planned clinical experiences. Each semester, the respiratory care student will be required to complete clinical rotations at various hospitals throughout the community. The final summer term provides full time experience in various aspects of respiratory care. In cooperation with the director of clinical education, students may choose a local hospital or a hospital anywhere throughout the United States to perform their clinical practicum.

Schedules of classes and clinical rotations are established at the beginning of each semester. Transportation to clinical sites is the responsibility of the student.

PROGRESSION AND COMPLETION

Didactic: A grade of C- or above is required in all respiratory care (RESA) and health professions (HEPR) courses, and the student must maintain a cumulative grade point average of at least 2.00 (C) in order to continue in the program and graduate. Respiratory care students must earn a grade of C- or above in CHEM 105, BIOL 119, BIOL 151, and MATH 105.

Clinical: Students must receive passing scores on their final clinical evaluations each semester in order to continue in the program. All clinical policies are described in the *Respiratory Care Student Clinical Handbook*.

Practicum: In order to begin RESA 294 Practicum, the student must meet all of the following requirements:

1. Earn a passing score on the Entry Level Self-Assessment Examination.
2. Pass the Comprehensive Psychomotor/Affective Examination.
3. Be eligible for the associate degree by the completion of the semester during which the practicum is scheduled.

A student who does not meet the criteria for progression will be dismissed from the program and must apply for readmission.

Graduation: In order to graduate, the student must meet all of the following requirements:

1. Successfully complete all required respiratory care courses.
2. Successfully complete all required arts and sciences and health professions courses.
3. Successfully complete the Written Registry Self-Assessment Examination.

READMISSION

To be considered for readmission into the respiratory care program:

1. The student must submit a written request to the admissions office. Students who have been readmitted may be required to repeat courses.
2. A student may not enroll in a respiratory care course more than twice. A grade of W does not apply. Grades of WP and WF both count as enrolled in a course.
3. Courses must be repeated the following term in which the course is offered.

4. Current *Academic Bulletin* policies will be in effect upon readmission.

ASSOCIATE OF SCIENCE DEGREE IN RESPIRATORY CARE SUGGESTED SEQUENCE

	First year	**Credits by term**		
		Fall	**Winter**	**Summer**
CHEM 105	Chemistry for Health Sciences	4		
MATH 105	Fundamentals of Math	3		
ENGL 105	Academic Discourse I	3		
RESA 101	Patient Assessment	3		
RESA 112	Cardiopulmonary Anatomy and Physiology	3		
BIOL 119	Human Anatomy and Physiology I		4	
ENGL 118	Writing and Research in the Health Care Professions		3	
RESA 226	Pharmacology		2	
RESA 104	Case-based Pulmonary Pathology 1		2	
RESA 124	Respiratory Therapeutics		3	
RESA 125	Respiratory Care Clinical Practice 1		2	
RELB 110	Biblical Resources for Understanding Health Care			2
PEAC 178	Wellness			1
RESA 220	Respiratory Therapeutic and Diagnostic Procedures			3
RESA 222	Respiratory Therapeutic and Diagnostic Clinical Practice			2
	TOTALS	16	16	8

	Second year	**Credits by term**		
		Fall	**Winter**	**Summer**
BIOL 151	Microbiology	4		
RELB	Religion (Bible) elective	2		
RESA 217	Neonatal/Pediatric Respiratory Care	3		
RESA 204	Case-Based Pulmonary Pathology II	2		
RESA 230	Critical Care	4		
RESA 231	Critical Care Clinical Practice	2		
RELX	Religion elective		2	
PEAC	Physical Education Elective		1	
PSYC 112	General Psychology		3	
RESA 241	Advanced Diagnostics		3	
RESA 242	Advanced Diagnostics Clinical Practice		2	
RESA 250	Respiratory Care Capstone		2	
RESA 243	Special Procedures		3	
RESA 294	Respiratory Care Practicum			6
	TOTALS	17	16	6

	TOTAL CREDITS	79

BS IN HEALTH PROFESSIONS: RESPIRATORY CARE MAJOR

	Third year	Credits by term		
		Fall	Winter	Summer
RESA 3XX	Required cognate course	3		
HEPR 380	Introduction to Health Care Professional Studies	1		
HEPR 330	Community Health Perspectives	3		
RELP 315	Spirituality in Healing and Health Care	2		
MATH 215	Probability and Statistics	4		
HEPR 375	Cultural Diversity in Health Care		3	
RESA 3XX	Required cognate course		3	
HEPR 340	Legal and Ethical Considerations in Health Care		3	
	Social Science elective		3	
RELB 3XX	Religion Elective		2	
	General electives			6
TOTALS		13	14	6

	Fourth year	Credits by term		
		Fall	Winter	Summer
RESA 3XX	Required cognate course	3		
HEPR 310	Health Care Economics and Finance	3		
HEPR	Elective	3		
	Humanities Group II Elective	3		
RELX 3XX	Religion Elective	2		
HEPR	Elective		3	
HEPR 410	Health Care Statistics and Research		3	
HEPR 481	Capstone/Senior Project		1	
HEPR 415	Health Care Informatics Applications for Health Professions		1	
	Humanities Group II Elective		3	
	General electives		3	3
	TOTALS	14	14	3
	TOTAL CREDITS			64

EXTENDED CURRICULUM

A student wishing to take the respiratory care curriculum in an extended program of study may do so by distributing the first two years of coursework over a three year period. This is also advantageous to those who prefer a less demanding study program. The student should request admission to the Division of Arts and Sciences for the first year. After the first semester in arts and

sciences, the student may, upon application, be considered for admission to the respiratory care curriculum the following fall term.

ADVANCED PLACEMENT FOR GRADUATES OF ACCREDITED RESPIRATORY CARE PROGRAMS

The Department of Respiratory Care recognizes learning which can be validated by testing or academic records. Graduates of accredited respiratory care programs who are accepted into the advanced placement program will be granted credits for previous academic work in respiratory care depending upon academic and clinical background.

ADMISSION REQUIREMENTS FOR ADVANCED PLACEMENT

Note: Degree program requirements change regularly; students should check www.kcma.edu for the most up-to-date information.

To be considered for advanced placement, the applicant must:

1. Have graduated from a program accredited by the Commission on Accreditation of Allied Health Education Programs upon recommendation by the Committee on Accreditation for Respiratory Care.
2. Have worked at least one year as a graduate respiratory therapist or have passed the NBRC Entry Level Examination. Exception may be made to this policy upon demonstration of outstanding academic and clinical ability and interest in the field of respiratory care as determined by the respiratory care faculty.
3. Submit three references (two from respiratory care instructors, one from a respiratory care employer).
4. Have a minimum grade point average of 3.00 (B) for his/her work in the program, or have passed the NBRC Entry Level Examination.
5. Meet requirements for admission to Kettering College of Medical Arts.

Interested applicants should contact the department chairperson and complete a checklist for advanced placement. The curriculum will be determined on an individual basis and will be based on previous academic and clinical work in respiratory care as well as anticipated career goals.

PROFESSIONAL REGISTRATION

Upon completion of the associate degree, the respiratory care graduate is eligible to sit for the National Board for Respiratory Care (NBRC) Entry Level Examination. Upon successful completion of the NBRC Entry Level Examination, the graduate is eligible for licensure by the Ohio Respiratory Care Board, becomes a Certified Respiratory Therapist (CRT), and is eligible to sit for the NBRC Advanced Practitioner Examinations. Upon successful completion of these examinations, the Registered Respiratory Therapist (RRT) credential is awarded by the NBRC. For information, contact the National Board for Respiratory Care, 18000 W. 105th St., Olathe, KS 66061.

MORE INFORMATION ABOUT RESPIRATORY CARE

- National Board for Respiratory Care (credentialing organization): http://www.nbrc.org
- Ohio Respiratory Care Board (for licensing information): http://respiratorycare.ohio.gov
- Links for job opportunities and information about the profession: http://www.rtmagazine.com or http://www.focus.com
- Commission on Accreditation for Respiratory Care (accrediting organization): http://www.coarc.com

Graduate Bulletin

Kettering College of Medical Arts offers a Master of Physician Assistant Studies degree.

This section of the *Bulletin* provides information for students applying to or enrolled in the graduate program at Kettering College. For additional information, contact the KCMA physician assistant studies office.

Graduate Admissions

REGULAR ADMISSION

To be admitted into a graduate program, a student must have completed the program-specific admission requirements found in the program of study.

PERMISSION TO TAKE CLASSES

Permission to take classes is a temporary enrollment status. Applicants granted PTC status are classified as non-degree-seeking students and are not eligible to use financial aid funds. PTC status may include but is not limited to the following:

- Persons who desire to take a course for enrichment purposes.
- Students registered at another college or university who wish to take courses at KCMA through existing articulation agreements.

PTC status is granted on a space-available basis. A maximum of 18 credits may be taken while a student has PTC classification. Admission materials needed are:

1. Completed application.
2. Application fee (unless a previous KCMA student).
3. Transcripts from the highest level of educational experience (may use unofficial copies).

Written permission from the chair of the professional program (where applicable) is required before the student may register for requested course(s).

COMPUTER SKILL REQUIREMENTS

All students accepted into a graduate program are expected to be proficient in computer skills required for document preparation, Internet search, and e-mail communication.

APPLICATION /ADMISSION PROCESS

The application and admission process is outlined in the specific graduate program section.

COLLEGE RESERVATIONS ON ADMISSION

The admissions committee reserves the right to refuse admittance to an applicant who is unlikely to conform to the standards and ideals the College seeks to maintain. This denial of acceptance may be based in part upon previous academic performance and/or on the confidential recommendation forms received.

Individuals who have not first received formal notification of acceptance should not come to the College expecting to begin classes.

APPLICANT RESPONSE TO ACCEPTANCE

Applicants accepted to KCMA must notify the admissions office of their intent to attend or not to attend. Within 10 business days of receipt of the acceptance notice, the applicant must:

1. Return the completed acceptance reply letter that is included with the acceptance notice.
2. Remit the $500 nonrefundable acceptance deposit. This helps to assure the College that the applicant will attend and guarantees the applicant that a place is reserved in the curriculum to which acceptance was granted. (If the deposit is not received by KCMA, the applicant's reservation in that particular curriculum may be jeopardized.) Refer to the financial information section of the *Academic Bulletin* for specific details. This deposit will be applied toward the first semester's tuition.

At the time of acceptance to the College, applicants will also receive information about the health and immunization requirements necessary for enrollment at KCMA. These forms must be completed by the applicant's health care provider and returned to the College by the time of College registration.

REGISTRATION FOR CLASSES

Prior to registration, students are encouraged to review the *KCMA Student Handbook,* available online at www.kcma.edu. At registration, new students will need to have the following records on file:

1. Credit account agreement and disclosure statement
2. College and health insurance compliance forms
3. Student health history and immunization records

INTERNATIONAL STUDENTS

Kettering College of Medical Arts endeavors to make the process of enrolling international students as easy as possible. Because of the numerous steps involved in the issuance of the I-20, please refer to the guidelines listed in the Admissions chapter in the undergraduate section of this *Bulletin.*

GENERAL COLLEGE READMISSION POLICIES

Applicants readmitted to the College will be readmitted under the policies and curricula of the current *Academic Bulletin.* No additional application fee is needed; however, the program acceptance deposit will still be required.

Graduate Academic Policies

THE COLLEGE PROGRAM

The academic year at KCMA consists of one fall semester and one winter semester with an accelerated summer semester for the PA graduate program. A semester is generally 16 weeks in length, except for the accelerated summer semester, which is 10 weeks.

In a semester system, one academic credit typically means the course meets for one 50-minute period of instruction per week. This is considered one hour of instruction with 10 minutes of that hour used for passing time between classes. Therefore, a traditional three-credit course with no laboratory or clinical component will meet for three 50 minute periods or its equivalent. It is generally expected that for every credit a student takes, an additional four to five hours of work may be expected outside the regularly scheduled class time. Courses involving laboratory studies or clinical experiences have slightly modified credit values. For example, PHAS 510 and PHAS 515, both with four credits, have a laboratory component; these classes meet the equivalent of four hours weekly with four to six hours of laboratory time per week.

Clinical experiences based on 2.5 credits require approximately 40 hours of clinical work weekly.

GRADUATE PROGRAMS

Students in all graduate programs are expected to complete a scholarly project in order to complete requirements for a graduate degree.

REGISTRATION

The registration process takes place prior to the beginning of each semester. Please see KCMA's Web site (www.kcma.edu) for specific dates. To enhance and streamline the registration experience for students, the college has established these policies and processes:

- Prior to designated registration dates, a students must meet with his or her academic advisor for approval of the term schedule. The student's academic advisor is responsible for updating the online registration status for current students.
- Students may not register for courses that are in direct conflict with other courses or clinical assignments.
- A student and his or her advisor can access an individual computerized degree audit to assist them in tracking the student's graduation requirements. Students are strongly encouraged to take their courses in the sequence outlined in the *Bulletin.* Taking courses

later than the sequence outlined in the *Bulletin* may result in program completion delays. Students must submit out-of-sequence requests to the records office prior to registration.

- The records office reserves the right to remove a student who has registered online for a course for which he or she is not eligible.
- Students may audit courses with the permission of the department chairperson. Students are expected to attend courses regularly and meet the conditions for audit as stipulated by the instructor. Tuition is charged at one-half of the regular rate, and no academic credit is awarded.
- Business office clearance: Current students must have a student account balance below $100 in order to have business office clearance for registration. Payments can be made online. Allow two business days for processing. New students are required to pay the minimum of one-fourth of the semester tuition and fees at registration.

CLASS ATTENDANCE

The academic, laboratory, and clinical demands of the professional programs make class attendance — whether in traditional, online, or Web-enhanced courses — essential for a student's success. Therefore, specific attendance requirements are established by each department or instructor for every course. When a student is absent from class, for whatever reason, that student has lost the learning experience that class period would have provided. In such cases, it is the student's responsibility to make sure the scheduled learning still occurs.

In addition, because a student's absence may affect others in the learning group, individual faculty members or departments may add penalties or establish further attendance policies for classroom or clinical appointments. Students should carefully refer to the course or departmental policies.

For Web-enhanced courses, each date a submission is due is considered a date when the course meets. Students are required to attend at least one class meeting or make at least one submission within the first 10 business days of the regular semester, or they will be subject to administrative withdrawal from the course. A student will be considered absent from the course any date he or she fails to attend a scheduled meeting time or any time he or she fails to make a scheduled submission.

DISABILITIES ASSISTANCE

In accordance with the Americans with Disabilities Act (ADA), the College is committed to providing reasonable accommodations to individuals with disabling conditions. Those with physically disabling conditions must submit appropriate documentation of the disabilities to the office of the Dean for Assessment and Learning Support. Those students with diagnosed and documented learning problems must submit official documentation to the office of the academic support coordinator. In either case, to receive assistance, students must validate the identified conditions and submit the documentation to the appropriate offices.

INDEPENDENT STUDY

Registration for independent study may be appropriate when a student wishes either to learn about a subject not in the *Academic Bulletin* or to expand practical clinical experience. An independent study form, obtained from the records office, must be signed by the instructor and

the department chair before a student may register for independent study. A learning contract signed by the student, the supervising instructor, and the department chair is necessary before students begin the independent study.

POLICY FOR DROPPING/ADDING COURSES

It is the student's responsibility to arrange with the records office to drop or add courses. The procedure for dropping or adding a course is as follows:

- Secure a drop/add form from the records office.
- Secure signatures from the financial aid counselor, the student's designated academic advisor, and the instructor for the course.
- Each course listed on the drop/add form must have:
  1. Grade of WP or WF (if dropped 10 academic days after the beginning of classes).
  2. Last day of student course attendance/participation (if dropping a course).
- Return the drop/add form to the records office for final processing.

The time line for adding/dropping classes:

- The last day to add a class is five academic days after the beginning of classes.
- The last day to drop a class and receive a refund of 100 percent is 10 academic days after the beginning of classes. Tuition refunds may be given after 10 academic days if the student is receiving federal financial aid and completely withdraws from the college. (See financial aid section for further details).
- After 10 academic days, a grade of WP or WF will be assigned upon withdrawal from a class.
- The last day to drop a class with a WP or WF is three weeks before the beginning of final exams. No drops are permitted after this time, and a letter grade will be assigned. Refer to the academic calendar in the *Bulletin* for specific add and drop dates.
- Any student who has registered but has not attended any courses by the eighth business day of the course term will be administratively withdrawn from all courses. After this date, an administrative withdrawal will take place if a student is absent for a period of two consecutive weeks and does not contact the instructor or complete the appropriate paperwork.
- Upon dismissal from a program, a student will be administratively withdrawn from all program courses. Subsequent failure to attend non-program courses will result in withdrawal from these as well.
- Courses with nonstandard term lengths may have different time lines for meeting requirements and adjusting registration status. Students should contact student services for specifics.

Financial aid refunds are based on the last day the student attends or participates in the course. See the section of the *Bulletin* on financial information for the tuition refund policy.

Grades are based on the day the drop procedure is properly completed. The grade of WP is used to indicate that the student is passing, and the grade of WF is used to indicate that the student is failing when a course is dropped following the second week of a term. Students may not enroll in a course more than twice. Grades of WP and WF both count as enrolled in a course.

Students are advised that dropping a program course, prerequisite course, or corequisite course may put them out of sequence with the curriculum outlined in the *Bulletin* and delay their

completion of the desired degree. In this case, the student must submit an out-of-sequence form to the records office. Dropping a course also may jeopardize financial aid eligibility.

LIABILITY INSURANCE

Students enrolled in clinical training programs offered by Kettering College of Medical Arts are covered under Kettering Health Network Risk Management. This coverage is specifically limited to legal liability arising from the performance of, or failure to perform, duties relating to the training program in which students are enrolled. Any injuries or damages caused by unauthorized activities or activities outside the scope of the clinical training program are not covered by the above. Students must be officially registered at KCMA for this liability insurance to be in effect.

GRADES

The graduate programs require students maintain an overall GPA of 3.00. For information on the grading system how to calculate grade point average, see the academic policies chapter of the undergraduate section of this *Bulletin.*

INCOMPLETE

To be considered for a grade of incomplete (I), the student must be passing the course and have completed two-thirds of the term. An incomplete should not be given merely because a student fails to complete all the course requirements on time, but only if the work was not completed because of extenuating circumstances that the instructor considers to be unavoidable.

The student submits to the instructor a petition to receive an incomplete grade, stating the reason for the request. If approved, the instructor reports the incomplete grade as well as the grade the student will receive if the deficiency is not removed within the time limit. The instructor has the discretion to determine when the incomplete must be removed, but it must be removed at least by the end of the following semester. Under extenuating circumstances and with the approval of the department chairperson, the instructor may extend the period another semester by notifying the records office. It is the responsibility of the student to meet prearranged deadlines for timely completion of any incomplete grades. If a grade of I is not removed within one year, it converts to a grade of F unless special permission has been granted due to military deployment.

HONOR CODE

An atmosphere of academic integrity can be successfully preserved only when students and faculty unite in mutually supportive acts of trust and assistance. They share equally the obligation to create and promote ethical standards. It is the faculty's duty to uphold academic standards in both the classroom and the clinical settings and to ensure that students receive credit only for their own work; instructors will take any reasonable precautions necessary to achieve these goals.

Students are expected to join faculty members in maintaining an honorable academic environment. They are expected to refrain from unethical and dishonest activities such as lying, plagiarism, cheating, and stealing and are expected to report others who engage in such activities. Failure to report the occurrence of academic dishonesty is also classified as dishonest behavior. Allegations that cannot be resolved by faculty members and students on an informal basis will be handled under disciplinary procedures.

ACADEMIC PRIVACY

For academic privacy information, see the academic policies chapter of the undergraduate section of this *Bulletin.*

ACADEMIC APPEALS

Students who wish KCMA to make an exception to a standard academic policy may appeal in writing to the appeals committee through the registrar's office. (A copy of the appeals process is published in the Student Handbook.)

GRIEVANCE PROCEDURE

See the academic policies in the undergraduate section of this *Bulletin.*

GRADUATION REQUIREMENTS

All graduate students must meet the graduation requirements established within their programs of study.

VAUGHAN-BEAVEN HONORS FELLOWSHIP PROGRAM

For information on the Vaughan-Beaven Honors Fellowship, see the Anna May Vaughan-Winton Beaven Service Learning Honors Program chapter of the undergraduate section of this *Bulletin.*

GRADUATION IN ABSENTIA

Students receiving diplomas and certificates of completion are expected to be present for their graduation exercises and pay a graduation fee. A graduation-in-absentia fee will be charged to graduates who do not attend. The Dean for Academic Affairs must approve exceptions.

TRANSCRIPTS

The student, upon written request to the records office, may obtain official transcripts of his or her academic record. The request must include the student's signature and Social Security number. Telephone requests from students or written requests from other members of a student's family cannot be honored. Official transcripts given directly to students will be stamped "Student Copy." Transcripts will be issued only for students whose accounts are paid in full. The first transcript is provided at no cost; subsequent transcripts are provided for a fee (see the financial information section in the *Bulletin* for a listing of fees).

BANKRUPTCY, DEFAULT, AND TRANSCRIPTS

In cases where a student has filed for bankruptcy, requests for transcripts will be addressed on a case-by-case basis. It is, however, the policy of the College that insofar as student loan defaults are involved, the College will pursue collection of such loans to the full extent to which it is legally entitled.

Graduate Financial Information

ACCEPTANCE DEPOSIT

When the applicant receives notice of acceptance, he or she has 10 days in which to send in the acceptance deposit. This is a guarantee to the College that the applicant will attend. In turn, it also guarantees the applicant a place in the curriculum to which acceptance was granted, provided the applicant registers for classes by the required date. If, for any reason, the applicant is unable to attend the College and the admissions office receives written notification on or before the date specified in the applicant's acceptance letter, the deposit will be refunded. Applicants who do not withdraw by the aforementioned deadline and who do not enroll in the semester for which they have been accepted will forfeit their acceptance deposit. The acceptance deposit for a matriculated student will appear as a credit on the first month's financial statement.

DEPOSIT FOR INTERNATIONAL STUDENTS

In addition to program and Residence Hall deposits, a deposit of $1,500 (U.S. dollars) is required from an international student before an I-20 will be issued. This deposit will be held until the student completes an academic program, withdraws from the program, graduates, or transfers to another college. The $1,500 will be credited to the student's account at that time.

ROOM DEPOSITS AND CHARGES

Residence Hall space may be requested by remitting a $75 deposit, along with the Residence Hall information card, as directed by the letter from the admissions office. Early remittance of the deposit and the information card will help ensure Residence Hall lodging. Students who reserve Residence Hall space and then elect not to move into the Residence Hall must submit written notification to the admissions office by the date specified in the letter of acceptance to be eligible for a deposit refund.

Lease agreements must be signed in order for students to reside in the Residence Hall. At the beginning of each semester, a room charge is applied to the student account. Room rate information is available from the Residence Hall dean.

TUITION

Tuition for the physician assistant studies program is charged at a flat rate. Students enrolling for less than 6 credits will be charged per credit. Please refer to the KCMA Web site (www.kcma.edu) for the tuition and fee schedule. Tuition is payable by the deadline shown in the online academic calendar. See the KCMA Web site.

TUITION REFUND

Tuition and fees for full semester courses will be refunded 100 percent up to the close of the 10th business day of the semester in which the class is taught. Tuition and fees will also be refunded 100 percent to those who have not attended class. After the 10th business day of the term, the only refund given will be based on the federal refund calculation for Title IV recipients (see the financial aid office for details). A student who does not officially complete withdrawal procedures through the records office will be responsible for the full amount of the applicable tuition and fees. Non-attendance at classes, notification to the instructor, or notification to the academic department does not constitute official withdrawal. Courses with non-standard term lengths may have different refund periods. Students should contact student services for details.

PAYMENT OPTIONS

Kettering College of Medical Arts offers students two payment options. Students may elect to pay their entire tuition, fee, and Residence Hall (if applicable) bill before the semester begins. The College also offers a payment plan option that allows students to make four (three during the summer semester) equal monthly payments on their tuition, fee, and Residence Hall bill. The first payment for each semester is due before the semester begins, with a payment due each month thereafter. The due date for each payment is printed on the student's monthly statement. The student must sign a payment plan agreement each semester. Currently, Kettering College of Medical Arts does not charge a fee or interest to those utilizing the payment plan option, although late fees may be applied to a student's account if payments are not received by the due date. The College reserves the right to decline a student's payment plan request based on the account history of the individual. It is important to remember that should a student choose to withdraw from classes after the 100 percent refund period (see tuition refund section), he or she is still responsible for remitting all payments as scheduled.

METHODS OF PAYMENT

Kettering College of Medical Arts accepts cash, money orders, checks made payable to KCMA, or credit cards (Visa, MasterCard, Discover, and American Express). Credit card payments must be made online thought the CAMS Student Portal at https://camsweb.kcma.edu/estudent/login.asp. Please allow two business days for payments made online to be applied to a student's account. If paying by check, please indicate the student's name on the check to ensure that the proper account is credited. Checks coming from outside the United States must have indicated on the check that the amount is in U.S. dollars.

BUSINESS OFFICE CLEARANCE

Each semester of attendance, a student must receive business office clearance before registering online or submitting the registration form to the records office. Business office clearance consists of:

- For returning students, having the current semester's balance paid in full and a signed payment plan agreement for the upcoming semester on file with the student finance office.
- For new students, remitting at least the first payment of the payment plan along with a signed payment plan agreement or having adequate financial assistance in place for the new semester. Students unable to make initial payment or not having adequate financial aid in place must have an approved student finance appeal on file in the student finance office (see the director of student finance for more details) before receiving financial approval.

For more information about registration, refer to the Academic Polices section.

SATISFACTORY PROGRESS FOR FINANCIAL AID FOR PHYSICIAN ASSISTANT STUDENTS

To be eligible to receive financial aid, a student must maintain satisfactory progress toward completion of a program. The satisfactory progress of each student is reviewed at the end of each term. Failure to maintain satisfactory progress may jeopardize the financial aid a student receives. A student who fails to maintain satisfactory progress will receive a letter from the student finance office indicating that the student will be placed on financial aid probation the next term, as well as outlining the specific violation(s) of the policy on satisfactory progress for financial aid. Students not meeting the minimum requirements (as outlined below) will be given one semester to achieve satisfactory progress while still receiving financial aid. A student not meeting the minimum requirements by the end of the probation semester will not be eligible to receive financial aid until the minimum requirements are met. The minimum requirements for the physician assistant program are as follows:

1. Grade point average (GPA): Must be equal to or greater than 3.00 for the semester and cumulative. Transfer credit is not included in the GPA calculation.
2. Course completion: Student must complete at least 65 percent of the credits attempted during the current term. Successfully completed credits include grades of A, A-, B+, B, B-, C+, C, C-, D, P, and Y. Non-completed credits include grades of WP, WF, NP, F, and Z. Non-credit grades not included in the course completion calculation include grades of SA, UA, W, I, IP, X, and N.
3. Credits: The credits attempted for completion of an academic program cannot exceed 150 percent of the average program credits required for a degree. Students who desire to change their programs of study must notify the associate registrar because an extension or appeal of this policy may be necessary.
4. Master of Physician Assistant Studies degree: A maximum of 150 credits may be attempted.
5. Satisfactory progress appeal process: At times there are extenuating circumstances that may prevent a student from achieving satisfactory progress. A student who loses financial

aid due to not meeting the minimum requirements may make a written request for continuance to the director of student finance prior to the beginning of the succeeding term. The director of student finance will present the appeal request to the KCMA appeals committee. The student will receive a written response as to the action of the committee within approximately 10 business days.

FINANCIAL AID INFORMATION

The following checklist will guide individuals through the financial aid application process:

1. Complete and submit the Free Application for Federal Student Aid (FAFSA) or Renewal Application to the Federal Student Aid Programs.
2. Complete and submit the KCMA financial aid application to the KCMA student finance office.
3. Submit any additional paperwork as instructed by the KCMA student finance office.

A student must be enrolled at least half time (six credits) in order to receive most types of financial aid. However, some types require full-time (12 credits) attendance. Please contact the student finance office for more specific information.

Financial aid resources are first applied to charges on the student's account. Any remaining credit balance may then be issued to the student for living expenses.

TYPES OF FINANCIAL AID FOR GRADUATE STUDENTS

To apply for any type of federal or state financial aid, a student must complete a Free Application for Federal Student Aid. Notification of federal and eligibility will be directly forwarded to the KCMA student finance office. Contact the associate director of financial aid for additional information regarding the following:

Federal Perkins Loan: A federal loan with 5 percent interest. These loans are made to students through the student finance office of KCMA. No interest is charged while the student is attending school. Repayment begins nine (9) months after withdrawal or graduation, whichever comes first. Eligibility is based on exceptional need. Priority is given to allied health students who meet priority deadlines, as published.

Federal Work Study (FWS): This program provides jobs for students who demonstrate financial need. FWS gives students the opportunity to earn money to help pay their educational expenses. The student should indicate interest in the FWS program on the KCMA financial aid application.

William D. Ford Federal Direct Loan program: Includes the Federal Direct Stafford Loan (Direct Subsidized Loan), Federal Direct Unsubsidized Stafford Loan (Direct Unsubsidized Loan), and Federal Graduate PLUS Loan programs.

- **Federal Direct Subsidized Loans** are made available through the U.S. Department of Education, through the school, to the student. Eligibility for the Direct Subsidized Loan is based on the institution's cost of attendance minus financial aid and expected family contribution (as determined by the federal government). The federal government pays all of the interest on subsidized loans while the student is in school at least half time. The interest rate is fixed for loans disbursed after July 1, 2006, at 6.8 percent. Repayment begins six months after the student leaves school, graduates, or drops below half-time enrollment. Students with prior bachelor's

degrees are eligible to borrow under the Federal Direct Subsidized Loan program provided they have not borrowed in excess of the limits listed.

- **Federal Direct Unsubsidized Loans** have the same guidelines as the Federal Subsidized Loan program with the exception that the federal government does not pay the interest on the loan while the student is in school. The student can either pay the interest each month or allow the interest to accrue until repayment begins.
- **Federal Graduate PLUS Loan** is now available for graduate students to borrow for educational expenses. Graduate degree students are eligible to borrow under the PLUS Loan Program up to their cost of attendance minus other estimated financial assistance in the Direct Loan Program. Requirements include a determination that the applicant does not have an adverse credit history, repayment beginning on the date of the last disbursement of the loan, and a fixed interest rate of 7.9 percent. Applicants for these loans are required to complete the Free Application for Federal Student Aid (FAFSA). They also must have applied for their annual loan maximum eligibility under the Federal Subsidized and Unsubsidized Stafford Loan Program before applying for a Graduate/Professional PLUS loan.
- **Direct Subsidized and Unsubsidized Combined Annual and Aggregate Loan Limits:** A graduate degree student can borrow up to $20,500 per academic year. No more than $8,500 of this amount may be in subsidized loans. When you graduate with a graduate degree, the maximum total debt allowed from Direct and Stafford Loans is $138,500. No more than $65,500 of this amount may be in subsidized loans. This maximum total graduate debt limit includes Direct and Stafford Loans received for undergraduate study.

PART-TIME STUDENTS

A part-time student is one enrolled for less than 12 credits of study. The part-time student is subject to all fees charged to full-time students.

CLASS ATTENDANCE

The College must pay special attention to the attendance records of certain students. Students receiving assistance from federal agencies are required by those agencies to attend class regularly. If a student's attendance is required by a government agency, it is that student's responsibility to notify the instructor that he or she will need verification of attendance. Instructors cannot certify attendance if the student has not followed the attendance requirements set up in the course syllabus. Attendance verification will require the student to:

- Obtain the attendance form from the registrar's office;
- Have the form signed by all involved faculty on a weekly basis; and
- Return the completed form to the financial aid office as required by the federal agency.

NOTE: Students enrolled in the Bachelor of Science program with a human biology major who are seeking to complete the accelerated track for the MPAS should refer to the arts and sciences chapter in the undergraduate section of this *Bulletin* for details regarding that program of study.

Vaughan-Beaven Honors Fellowship

The Vaughan-Beaven Honors Fellowship program allows committed Kettering College of Medical Arts graduate students to invest in their communities and their personal growth by providing health care services in underserved populations. Fellowships combine service learning, personal growth, and leadership in the application of service to the local community. Engagement in health care related service should compose the majority of a Vaughan-Beaven Honors Fellowship.

Fellows should devote their health service time directly to an underserved community providing service to an identified community health need. The experience supports the mission of the Vaughan-Beaven Service Learning Honors Program by improving communities through leadership in service learning and fulfilling the following outcomes:

1. Integrate leadership skills and professionalism in the application of service in the local community.
2. Promote and communicate an understanding of cultural diversity/sensitivity and social/civic responsibility through commitment to lifelong service and learning.
3. Integrate the values of compassion, competence, citizenship, and character through personal and professional growth.
4. Incorporate effective communication multi-professionally within the global village.

Each applicant should develop a plan to include how the outcomes of the fellowship will be met.

Examples of direct service include but are not limited to:

- Teaching health in underserved schools
- Developing a health program for a specific population, such as the elderly, children, or single mothers
- Working in a free clinic or providing camp health care
- Developing a community health plan

Other activities such as research, public policy, office support, fund raising, and event planning may be part of a fellowship but are not considered direct service and should not constitute more than one-third of the proposed fellowship.

Because KCMA is a Seventh-day Adventist college, the Vaughan-Beaven Honors Fellowship should include intentional exploration of spiritual and moral concerns. When developing fellowship experiences, candidates are encouraged to consider how fellowship experiences will facilitate their spiritual development.

Applicants are strongly encouraged to seek challenging health care service experiences with which they are not currently familiar.

Requirements of the fellowship include satisfactory completion of:

1. SLHP 501, Health Care Activism
2. Two fellowship practicum experiences (SLHP 530 and 531) spanning two semesters (or 30 weeks) of an academic year. During the practicum experiences, students will engage in 120 hours of service, or approximately 4 hours of service per week. Clinical experiences required for programs do not count toward the service hours.

Fellowship opportunities: Available fellowship funds consist of approximately one-fourth tuition reimbursement for two college semesters. Application forms for the fellowship are available from the student finance office and must be submitted to the director of student finance by the first week in June.

WHO CAN APPLY?

The Vaughan-Beaven Honors Fellowship is open to all graduate students at KCMA who have completed the undergraduate requirements for the Vaughan-Beaven Service Learning Honors Program. Interested students must apply for the fellowship by the first week of June.

HOW TO APPLY

Candidates should submit a cover sheet (supplied by the SLHP coordinator) and a written proposal no longer than 10 double-spaced typed pages, plus one or more letters of commitment from a community partner. The 10-page limit does not include the cover page or community partner letters. Community partners must state in the letters of commitment that the fellow's health service commitment should be at least two-thirds service experience, with no more than one-third of the time devoted to research, policy, or administrative functions.

The proposal should address the following criteria:

1. Community partner: Who, what, where, how, etc. Please list all agencies where the fellow will be doing service. The letter of commitment should acknowledge the interest of the agency in hosting a KCMA fellow for the service learning experience; indicate a willingness to formalize the partnership if not already a partner; and give the name of the person(s) from the agency/school who will be involved in the project. How will the fellowship experience fit with mission of agency?
2. Benefit to the community: Describe the expected benefits of the service learning component to the community. Describe how you will collaborate with the community partner to ensure that the health service addresses a community-identified health need.
3. Learning of the fellow: How will the service learning experience relate to the mission and outcomes of the Vaughan-Beaven program? How will it relate to your own learning objectives? Describe how the personal learning will be enhanced by the service. Describe how reflection will be incorporated into the experience (such as journaling, presentation, etc.).
4. Description of the fellowship health service experience.
5. Each candidate must submit a letter of commitment and a digital copy of the fellowship application via e-mail to the program/fellowship coordinator no later than the first week in June of each year.

Graduate Program: Master of Physician Assistant Studies

DEPARTMENT PERSONNEL

Sue Wulff, Program Director; David Lim, MD, Medical Director; Joe Spears, academic coordinator; Lona Blake, clinical coordinator; Sarah Dennull, program/admissions coordinator; Fran Angerer; Ron Bowers; Jill Gulczinski; Millie Roach, Jeb Sheidler

STATEMENT OF PURPOSE

The mission of the KCMA physician assistant studies program is to provide, in a Christian environment, the academic and clinical experience necessary to develop competent empathetic professional health care providers who are dedicated to lifelong learning.

DEGREE DESCRIPTION

The MPAS degree is a clinically based program that provides the academic and clinical education necessary to become competent practicing physician assistants.

VISION FOR THE PA PROGRAM

The physician assistant course of study will produce outstanding new physician assistants. Using innovative learning methods and a commitment to mentor and empower students, KCMA educates its PA students to exhibit the highest standards of intellectual, ethical, and spiritual maturity. They exemplify professional excellence and leadership in meeting the challenges of the profession in an evolving health care environment.

CREDITS AND RESIDENCY REQUIREMENTS

The MPAS degree requires a minimum of 45 graduate level credits for graduation. All physician assistant (PHAS) courses must be taken at Kettering College.

DESCRIPTION OF THE PHYSICIAN ASSISTANT PROFESSION

The Standards and Guidelines for an Accredited Educational Program for the Physician Assistant provides the following description of the profession:

The physician assistant is academically and clinically prepared to provide health care services with the direction and responsible supervision of a doctor of medicine or osteopathy. Within

the physician/physician assistant relationship, physician assistants make clinical decisions, and provide a broad range of diagnostic, therapeutic, preventive, and health maintenance services. The clinical role of physician assistants includes primary and specialty care in medical and surgical practice settings. Physician assistant practice is centered on patient care and may include educational, research, and administrative activities.

The role of the physician assistant demands intelligence, sound judgment, intellectual honesty, appropriate interpersonal skills, and the capacity to react to emergencies in a calm and reasoned manner. An attitude of respect for self and others, adherence to the concepts of privilege and confidentiality in communicating with patients, and a commitment to the patient's welfare are essential attributes.

The specific tasks performed by individual physician assistants cannot be delineated precisely because of the variations in practice requirements mandated by geographic, political, economic, and social factors. At a minimum, however, physician assistants are educated in areas of basic medical science, clinical disciplines, and discipline-specific problem solving. Physician assistant practice is characterized by clinical knowledge and skills in areas traditionally defined by family medicine, internal medicine, pediatrics, obstetrics, gynecology, surgery, and psychiatry/behavioral medicine. Physician assistants practice in ambulatory emergency, inpatient, and long-term care settings. Physician assistants deliver health care services to diverse patient populations of all ages with a range of acute and chronic medical and surgical conditions. They need knowledge and skills that allow them to function effectively in a dynamic health care environment.

PROGRAM OUTCOMES:

Graduates of the KCMA physician assistant program will possess skills in the following areas:

- Medical knowledge
- Interpersonal communication skills
- Patient care
- Professionalism
- Practice-based learning and improvement
- Systems-based practice

ACCREDITATION/PROFESSIONAL ASSOCIATION

The physician assistant program at KCMA is accredited through the Accreditation Review Commission on Education for the Physician Assistant and the North Central Association of Colleges and Schools. The physician assistant program is also an active member of the Physician Assistant Education Association (PAEA).

CERTIFICATION

Successful completion of the program leads to a Master of Physician Assistant Studies (MPAS). Graduates are eligible for the examination administered by the National Commission on Certification of Physician Assistants (NCCPA). Certification is a requirement for registration/licensure to practice in all states.

ADMISSION PROCESS

Applicants who are not pre-PA students at KCMA or enrolled in the Bachelor of Science human biology major "3+2"-year MPAS accelerated curriculum must apply through Central Application Service for Physician Assistants (CASPA) at www.caspaonline.org. Applications must be received by CASPA no later than Oct. 1 of the year prior to matriculation.

KCMA human biology students applying for the accelerated curriculum will apply to the College as mentioned under "Special Admission Requirements."

Applicants must meet the following requirements to be considered for admission into the PA program at KCMA.

1. Degree: Completion of a bachelor's degree from a regionally accredited institution and prerequisite courses OR enrollment in KCMA BS degree, human biology major.
2. Prerequisite courses: Completion of prerequisite courses/degree must be at a regionally accredited college or university; prerequisite courses may be in process at the time of application.

   Natural sciences prerequisites (all must include lab component except biochemistry; see below):

Inorganic chemistry	8 credits
Organic chemistry	8 credits
Biochemistry (lab preferred)	4 credits
Human anatomy and physiology	8 credits
Microbiology	4 credits
Biology	8 credits
TOTAL	40 science credits

   Note: Natural science courses need to have been taken within 10 years of date of application; if older than 10 years, please consult the PA program director.

   Other prerequisites:

Psychology	3 credits
Life span development	3 credits
Statistics	3 credits
TOTAL	9 credits

3. Verification of prerequisite course completion: Students must complete and submit results of all prerequisite courses to the admissions office prior to the end of the first summer semester of the PA program. Official transcripts need to be submitted to admissions as soon as possible following completion of classes.
4. Technical standards: KCMA physician assistant students must meet the technical standards of KCMA and the PA program. The standards will be distributed to each applicant selected for an interview; if accepted, the student will be required to sign a

statement affirming that they have read, understood, and are able to comply with each of the standards.

Technical standards, as distinguished from academic standards, refer to the physical, cognitive, and behavioral abilities required for satisfactory completion of curriculum. The essential required abilities include motor, sensory, communicative, intellectual, behavioral, and social aspects. KCMA technical standards for all students include the ability to:

a. Think critically with sound judgment, emotional stability, maturity, empathy, and physical and mental stamina.
b. Learn and function in a variety of didactic and clinical settings.
c. Communicate effectively, both verbally and in writing, using appropriate grammar, spelling, and vocabulary.
d. Immediately comprehend and respond to auditory instructions or requests.
e. Think clearly and act calmly in stressful situations.
f. Perform a clinical experience up to 12 hours long in a single 24-hour period.
g. Work cooperatively, preserving relationships with other members of the health care team.
h. Perform fine and gross motor skills with both hands.
i. Apply adequate pressure to stop bleeding.
j. Perform cardiopulmonary resuscitation (CPR).

PA students also must have the ability to:

a. Take a medical history and perform a physical examination.
b. Possess the sensory, auditory, and visual acuity necessary to perform all aspects of the physical examination.
c. Discern skin, subcutaneous masses, muscles, joints, lymph nodes, and intra-abdominal organs.
d. Process and communicate information on the patient's status with accuracy in a timely manner for appropriate interaction with physician supervisors and other members of the health care team.
e. Understand and apply ethical standards for health care.
f. Demonstrate cognitive abilities necessary to master relevant content in basic science and clinical courses at a level deemed appropriate by the faculty.
g. Demonstrate emotional stability at a level necessary to deliver sound patient care in all settings and to interact with the interdisciplinary health care teams.

Applicants whose responses indicate that they cannot meet the expectations will be further reviewed by the admissions committee to assess the extent of difficulty and the potential for compensating for such difficulty. The college is committed to providing reasonable accommodation to individuals with disabling conditions.

5. GPA: Applicants must present transcripts reflecting a GPA of 3.00 for natural science prerequisites AND a 3.00 among all prerequisite courses.
6. Health care experience: Applicants must provide documentation of health care experience, either paid or voluntary, that reflects direct patient care with decision-making process necessary to become a successful PA student and graduate professional.

It is highly suggested that applicants have 1,000 hours of experience, which could be obtained in but not limited to the following roles: nurse, nurse's aide, emergency medical technician or paramedic, laboratory technician/phlebotomist, medical office assistant with patient care responsibilities, military medical specialist, respiratory care practitioner, radiological technologist, or mission worker.

7. Communication skills: Applicants must demonstrate strong written and oral communication skills. Written communication skills will be determined from an essay; oral communication skills will be determined during the interview process, which is by invitation only.
8. College admission: Applicants must meet all other requirements for admission to KCMA.
9. Pre-enrollment notes:
   a. Admitted students must have current CPR certification completed prior to the beginning of the first fall semester of the program.
   b. A criminal background check is required prior to beginning clinical rotations in certain locations.
   c. A felony or misdemeanor conviction may result in denial to participate in clinical rotations and/or rejection by professional certification agencies and state licensure boards. Please contact program officials for details.

SELECTION PROCESS

Selection for the PA program is very competitive. The following list informs applicants of the selection process.

- Only students fully completing the application process will be considered.
- Applicants meeting admissions requirements may be selected for the interview process.
- Preference may be given to applicants with the highest numbers of documented health care hours and the highest level of direct patient care.
- Preference will be given to equally qualified applicants completing prerequisite courses at KCMA.
- Selection is based on:
  a. Evaluation of academic and health care experience
  b. Completion of prerequisites and subsequent plans for completion
  c. Evaluation of written and oral skills as determined in the admission essay and interview
  d. Evaluation of three letters of reference written no more than 12 months prior to application deadline
- Once the interview process is completed, the PA faculty evaluates applicants on the above-mentioned criteria.
  a. Recommendations for admission from PA program faculty are submitted to the admissions office for final approval.
  b. Candidates are notified of their admission status approximately three to four weeks following the interview.
  c. Final selections will be made no later than March 15.

SPECIAL ADMISSION REQUIREMENTS

KCMA pre-PA students and students in the Bachelor of Science program with a major in human biology applying for the "3+2"-year MPAS accelerated curriculum will apply to the College and meet all of the applicable special admission requirements listed in the arts and sciences chapter in the undergraduate section of this *Bulletin.*

PROGRAM COSTS

Tuition is shown in the financial information chapter of the graduation section of this *Bulletin.* Approximate cost of books per semester is $500. The program requires students to purchase an iPod Touch and software as well as medical equipment. Software (approximately $250) for the Ipod Touch and medical equipment (approximately $950) must be purchased through the College; these costs are included in tuition.

PA PROGRESSION REQUIREMENTS

To progress in the physician assistant program, a student will:

- Continue to demonstrate professional and ethical behavior.
- Meet the standards for progression in each PHAS course. For example, PHAS 520 requires an 80 percent cumulative average on exams in order to progress. Each course syllabus delineates specific requirements as set by the instructor.
- Maintain a GPA of 3.00 in each term. Students with a term GPA below 3.00 will be placed on academic probation. Failure to achieve a 3.00 in any future semester will result in dismissal from the program.
- Maintain compliance with technical standards.

CONDITIONS FOR DISMISSAL

A student will be dismissed from the PA program for:

- Failing to meet progression requirements.
- Earning a failing grade in two different clinical courses or the same clinical course twice.
- Earning a GPA lower than 3.00 during the academic probation term.
- Breaching professional ethics or exhibiting any behavior that might pose a threat to the student or others.

Students dismissed under the first three criteria may reapply. Those dismissed for ethical or behavioral issues forfeit the ability to reapply.

READMISSION CRITERIA

Refer to the readmission section in the graduate admissions chapter.

GRADUATION REQUIREMENTS FOR MPAS DEGREE

- Satisfactorily complete all clinical rotations.
- Complete didactic and clinical courses as outlined in program of study.
- Successfully complete the summative evaluation for knowledge, clinical skills, and professionalism.
- Complete all other College requirements for graduation, including residency requirements.

PROGRAM OF STUDY FOR MPAS PROGRAM

NOTE: To progress from the summer semester to the fall semester, official record of degree and/or prerequisite requirements must have been documented in the college admissions office prior to the end of the summer semester.

Summer

PHAS 500 Introduction to the PA Profession	1
PHAS 503 Applied Pathophysiology	3
PHAS 504 Applied Sectional Anatomy	4
PHAS 505 Introduction to Medical Learning	1
RELP 315 Spirituality in Healing and Health Care	2
TOTAL	11

Fall

PHAS 510 Medical History/Physical Exam I	4
PHAS 520 Principles of Clinical Medicine I	6
PHAS 530 Pharmacology and Therapeutics I	3
PHAS 546 Clinical and Diagnostic Studies	3
PHAS 547 Medical Procedures	2
RELP 253 Morality and Medicine	2
TOTAL	20

Winter

PHAS 515 Medical History/Physical Exam II	4
PHAS 525 Principles of Clinical Medicine II	6
PHAS 535 Pharmacology and Therapeutics II	3
PHAS 550 Behavioral Medicine	3
PHAS 553 Clinical Genetics	2
PHAS 563 Geriatrics	1
PHAS 543 Clinical Case Studies in Faith, Diversity, and Ethics	2
TOTAL	21

Summer

PHAS 556 Emergency Medicine	3
PHAS 540 Pharmacology and Therapeutics III	2
PHAS 561 Pediatrics	2
PHAS 562 Women's Health	2
PHAS 565 Principles of Surgery	2
PHAS 568 Research Methods	3
TOTAL	14

Fall

PHAS 600 Seminar in PA Professional Development	1
PHAS 605 NCCPA Board Review I	1
PHAS 620 Clinical Rotation	2.5
PHAS 621 Clinical Rotation	2.5
PHAS 622 Clinical Rotation	2.5
PHAS 623 Clinical Rotation	2.5
TOTAL	12

Winter

PHAS 615 OSCE (Objective Structured Clinical Exam)	1
PHAS 610 NCCPA Board Review II	1
PHAS 624 Clinical Rotation	2.5
PHAS 625 Clinical Rotation	2.5
PHAS 626 Clinical Rotation	2.5
PHAS 627 Clinical Rotation	2.5
TOTAL	12

Summer

PHAS 628 Clinical Rotation	2.5
PHAS 629 Clinical Rotation OR PHAS 630 International rotation	2.5
PHAS 640 Capstone Project	2
PHAS 611 NCCPA Board Review III	1
TOTAL	8

TOTAL CREDITS FOR THE PROGRAM	98

Course Descriptions

ADIM 300 CT Theory **3 credits**

An introduction to sectional imaging accomplished with computed tomography technology. Topics covered will include but are not limited to the history of CT development, data acquisition, data processing, imaging production, image artifacts and quality, radiation dose, and quality assurance measures. Review for the ARRT Registry in CT will be included in the course. A typed paper or article reports are required in this course.

Prerequisite or corequisite: BIOL 263

ADIM 303 MRI Theory **4 credits**

A course covering topics including but not limited to the history of magnetic resonance, the physical properties of MRI, image weighting and contrast, pulse sequences, flow phenomena, instrumentation and equipment, contrast agents, patient and staff safety issues, and image artifacts and quality. Review for the ARRT Registry in MRI will be included in the course. A typed paper or article reports are required in this course.

Prerequisite or corequisite: BIOL 263

ADIM 304 Practicum I (CT) **4 credits**

A course organized as supervised education in computed tomography at an affiliated clinical education site. The student will observe, assist, and eventually perform all routine CT examinations. The course is competency-based. It is recommended that the student enter the course with a functional knowledge of Windows operations for the clinical setting.

ADIM 310 Angiography I **3 credits**

An introduction to angiography and interventional procedures. Topics of discussion in this course will include general angiographic procedures, including cerebral, visceral, and peripheral studies using conventional and digital imaging techniques. Discussions and demonstrations will also cover angiographic equipment and techniques. A typed paper or article reports are required in this course.

Prerequisites or corequisites: RTCA 210, HEPR 360

ADIM 314 Practicum II (MRI) **4 credits**

A course organized as supervised education in magnetic resonance imaging at an affiliated clinical education site. The student will observe, assist, and eventually perform all routine MRI examinations. The course is competency-based. It is recommended that the student enter the course with a functional knowledge of Windows operations for the clinical setting.

ADIM 324 Practicum III (vascular interventional technology) **4 credits**

Supervised education in vascular interventional technology at an affiliated clinical education site. The student will observe, assist and eventually perform varied routine angiographic examinations. The course is competency-based.

ADIM 328 Clinical Aspects of CT **3 credits**

A study of the clinical aspects of CT scanning that emphasizes the practical applications of CT technology: identifying gross sectional anatomy and pathology. Image artifacts and improvements and examination protocols will be discussed by way of case studies, lectures, and demonstrations. A typed paper or article reports are required in this course.

Prerequisite or corequisite: BIOL 263

ADIM 410 Angiography II **4 credits**

A course focusing on cardiac diagnostic and interventional procedures not covered in previous courses. Preparation for the ARRT Registry examinations will be incorporated. A typed paper or article reports are required in this course.

Prerequisites or corequisites: HEPR 360, RTCA 210, BIOL 350, RESA 320

ADIM 428 Clinical Aspects of MRI **3 credits**

A study of clinical MRI emphasizing the practical application of the technology, identifying gross sectional anatomy and pathology. Image artifacts and improvements and examination protocols will be discussed by way of case studies, lectures, and demonstrations. A typed paper or article reports are required in this course.

Prerequisite or corequisite: BIOL 263

ADIM 434 Practicum IV (cardiovascular interventional technology) **4 credits**

Supervised education in general cardiovascular interventional technology at an affiliated clinical education site. The student will observe, assist, and eventually perform varied duties in the cardiac diagnostic laboratory. The course is competency-based. It is recommended that the student enter the course with a functional knowledge of Windows operations for the clinical setting.

BIOL 105 Foundations of Biology I **4 credits**

The structure and function of the cell and its importance as the basic unit of life; the nature and function of organelles; an introduction to Mendelian and molecular genetics, cellular energetics, and the molecules essential to life. Three hours of lecture and three hours of laboratory weekly.

Prerequisites: Meet admission requirements to the BS with a major in human biology or nuclear medicine program, or hold a previous baccalaureate degree.

BIOL 110 Foundations of Biology II **4 credits**

Basic structural and functional characteristics that are fundamental to the kingdoms of living organisms; biodiversity, ecological principles, and evolution. Three hours of lecture and three hours of laboratory weekly.

Prerequisites: Meet admission requirements to the BS with a major in human biology, nuclear medicine program, or hold a previous baccalaureate degree.

BIOL 119 Human Anatomy and Physiology I **4 credits**

A practical, systematic study of the human body including both gross and microscopic anatomy and basic physiology. Topics covered include anatomical terminology, cell structure and function, body tissues, integumentary system, skeletal system, muscular system, nervous system, special senses, and endocrine system. Laboratory experiences are designed to supplement lecture topics and include dissection, cadaver study, microscopy, and physiology. Three hours of lecture and two hours of laboratory weekly.

Note: This course does not meet requirements for the human biology major.

BIOL 120 Introduction to Human Physiology **4 credits**

Systemic study of basic physiology of the human body. Laboratory experiences are designed to complement lecture topics and demonstrate relationships between anatomical structures and the functions they perform. Three hours of lecture and two hours of laboratory weekly.

Prerequisite: Grade of C- or higher in post-secondary anatomy course

Note: This course does not meet requirements for the human biology major.

BIOL 129 Human Anatomy and Physiology II **4 credits**

A practical, systematic study of the human body including both gross and microscopic anatomy and basic physiology. Topics covered include the cardiovascular, lymphatic, immune, respiratory, digestive, urinary, and reproductive systems; metabolism, fluid, and electrolyte balance; and acid-base balance. Laboratory experiences are designed to supplement lecture topics and include dissection, cadaver study, microscopy, and physiology. Three hours of lecture and two hours of laboratory weekly.

Prerequisite: BIOL 119.

Note: This course does not meet requirements for the human biology major.

BIOL 151 Microbiology **4 credits**

An introduction to general topics in microbiology. Topics include fundamentals of microbiology, survey of medically significant microorganisms, principles of immunology, infectious diseases and their causes, biotechnology, and some applied microbiology. Laboratory exercises focus on a broad range of microbiological techniques and procedures. Three hours lecture and four hours laboratory weekly.

BIOL 210 Human Anatomy **4 credits**

Structure and structural relationships of the human organ systems including topographical, histological, and developmental features. Three hours of lecture and three hours of laboratory weekly.

Prerequisite: Two semesters of college-level science.

BIOL 220 Human Physiology **4 credits**

Function and functional relationships of the human organ systems with an emphasis on homeostatic mechanisms. Three hours of lecture and three hours of laboratory weekly.

Prerequisites: Two semesters of college-level science.

BIOL 263 Sectional Anatomy **3 credits**

The study of human gross anatomy from the perspective of transverse, sagittal, and coronal views. Course uses a regional approach, which includes the head and neck as well as the thorax, abdomen, pelvis, extremities, and selected articulations. Particular emphasis is given to organ and vessel relationships important in understanding anatomy and applicable to radiologic science and imaging modalities. Four hours lecture and lab combination weekly.

Prerequisite: BIOL 119, 129 or the equivalent or BIOL 210

BIOL 295 Independent Study in Biology **1-3 credits**

A course intended primarily for transfer students whose previous coursework does not meet content or credit equivalency. Other extenuating circumstances may also require the use of an independent study. A student must submit the independent study request form, available from the records office, before an independent study is granted. Permission is given on an individual basis.

BIOL 297 Selected Topics in Sectional Anatomy **1 credit**

Prerequisite: Previous work in sectional anatomy and approval of the instructor.

BIOL 310 Histology **4 credits**

Microscopic structure of tissues and organ systems of vertebrates with functional correlations. Two lectures and two laboratories per week.

Prerequisites: Foundations of Biology I and II or Human Anatomy and Human Physiology

BIOL 315 Molecular Biology **4 credits**

Composition, structure, and function of the cell and its organelles; emphasis on intracellular and intercellular communication and control principles, including an introduction to the replication, control, and transmission of genetic information. Molecular techniques are emphasized in the laboratory. Three hours of lecture and three hours of laboratory weekly.

Prerequisites: BIOL 105 and 110, CHEM 211 and 222 with minimum grade of C-

BIOL 320 Topics in Biological Science **1-4 credits**

Study of one the traditional areas of the biological sciences such as immunology, developmental biology, medical genetics, or any of a variety of field-oriented courses. Lectures, laboratory times, and prerequisites will vary according to the topic offered.

Prerequisite: A year of college-level biology and chemistry

BIOL 325 Environmental Science **3 credits**

Basic ecological principles as applied to human activities, with a focus on contemporary environmental issues.

Prerequisite: One semester of college-level science

BIOL 330 Seminar in Human Biology **1 credit**

Topics of current interest in human biology, usually presented by guest lecturers. Majors in human biology are required to enroll in the course twice during their junior and senior years. One hour weekly. Pass/fail.

Prerequisite: Completion of freshman and sophomore years of the human biology major

BIOL 340 Biochemistry **4 credits**

The chemistry of those organic molecules of particular significance in living organisms; enzyme kinetics and energetics; central metabolic pathways, including the metabolism of carbohydrates, lipids, and proteins. Three hours of lecture and three hours of laboratory weekly.

Prerequisite: CHEM 211 with minimum grade of C-

BIOL 350 Pathophysiology **3 credits**

A study of homeostatic changes that occur with disease and the implications of those changes in the progression and treatment of disease. Generalized mechanisms of disease as well as diseases of individual organ systems will be examined, with a view to understanding homeostatic compensations that occur as a result of altered function.

Prerequisites: BIOL 119 and BIOL 129, or BIOL 210 and BIOL 220

BIOL 410 Genetics **4 credits**

Basic principles of genetic organization, chromosome mapping, prokaryotic and eukaryotic genetic control, and molecular genetic techniques. Three lectures and one laboratory per week.

Prerequisites: BIOL 105 and 110 with minimum grade of C-

CHEM 105 Chemistry for Health Sciences **4 credits**

Introduction to inorganic, organic, and biological chemistry with emphasis given to chemical principles applied to cellular biochemistry and human physiology. Designed for students preparing for health science careers, not majoring in chemistry, by establishing the chemical foundations for physiology, nutrition, microbiology, and pharmacology. Three hours of lecture and three hours of laboratory weekly.

Prerequisite/corequisite: MATH 105

CHEM 125 General Chemistry with Qualitative Analysis I **4 credits**

Part one of the one-year general chemistry sequence. Examination of the fundamental principles and laws of general inorganic chemistry: states of matter; atomic and molecular orbital theory; molecular structure; chemical bonding; stoichiometry; properties of solutions; chemical reactions; and qualitative analysis. Students gain skills in developing hypotheses, observing chemical phenomena, collecting data, and evaluating results critically. Three hours of lecture and four hours of laboratory weekly.

Prerequisite/corequisite: MATH 165

CHEM 136 General Chemistry with Qualitative Analysis II **4 credits**

Part two of the one-year general chemistry sequence. Kinetic molecular theory, acid-base theory, chemical kinetics and thermodynamics, chemical equilibria, electrochemistry, nuclear chemistry, and quantitative analysis. Intended for chemistry majors and students preparing for professional careers in medical and other technical fields. Three hours of lecture and four hours of laboratory weekly.

Prerequisite: CHEM 125 with minimum grade of C-

CHEM 211 Organic Chemistry I **4 credits**

Examination of the fundamental principles of molecular orbitals, bonding, functional groups, stereochemistry, nucleophilic substitution reactions (SN1, SN2), elimination reactions (E1,E2), and addition reactions. First in a two-semester sequence. Intended for chemistry majors and students preparing for professional careers in medical and other technical fields. Three hours of lecture and four hours of laboratory weekly.

Prerequisites: CHEM 125 and 136 with minimum grade of C-

CHEM 222 Organic Chemistry II **4 credits**

Investigation of the applications of spectroscopy (IR, NMR, CMR, UV-Mass) to identification of organic molecules. Introduction to aromatic substitution reactions, addition and substitution to carbonyl groups, substitution at the carboxyl group, enolates, organic radicals, and pericyclic reactions. Second in a two-semester sequence. Intended for chemistry majors and students preparing for professional careers in medical and other technical fields. Three hours of lecture and four hours of laboratory weekly.

Prerequisite: CHEM 211 with minimum grade of C-

CHEM 295 Independent Study in Chemistry **1-3 credits**

A course intended primarily for transfer students whose previous coursework does not meet content or credit equivalency. Other extenuating circumstances may also require the use of an independent study. A student must submit the independent study request form, available from the records office, before an independent study is granted. Permission is given on an individual basis.

COMM 214 Speech Communication **3 credits**

A class for the development of basic speech and interpersonal communication skills needed in everyday and professional life. The class focuses on intrapersonal examination, group participation, and public performance.

COMM 315 Communication for Health Care Teams **3 credits**

An examination of the traditional structures and functions from both interpersonal and small-group perspectives. The course begins with an overview of the fundamentals of effective interpersonal communication and moves on to examine small-group interaction and participation from a communication systems perspective. Includes discussion of group processes and leadership in group interaction.

CPTR 101 Introduction to Computers **1 credit**

This five-week course is designed for those with little or no knowledge of Windows-based PCs; it is the basis for subsequent computer offerings at KCMA. Skills include basic mouse operations, computer terminology and acronyms, components of a computer system, navigating Windows and using it to manage/control a PC, using integrated Windows applications and tools, and using the Internet and e-mail. This is a hybrid course, meaning that early class sessions will be in a traditional classroom, while later sessions will be online; learners will need access to a Windows PC with Internet access.

CPTR 102 Using Microsoft Word **1 credit**

This five-week online course on Microsoft Word requires a working knowledge of concepts presented in CPTR 101. It requires access to a PC with the appropriate software installed and an Internet connection. On satisfactory completion of this course, learners will be able to describe and navigate the software; format pages, paragraphs, and text; use watermarks; insert graphics and saved documents into open documents; change text format and style; edit text; use spelling and grammar tools; create and edit tables and lists; and manage non-printing characters. Course includes a unit on the creation and management of reference lists, citations, and bibliographies.

CPTR 103 Using Microsoft Excel **1 credit**

This five-week online course on Microsoft Excel requires a working knowledge of concepts presented in CPTR 101. It requires access to a PC with the appropriate software installed and an Internet connection. On satisfactory completion of this course, learners will be able to describe and navigate Microsoft Excel; use its editing, math, and logical functions; create formulas; use absolute cell references; use "if" conditions in formulas; format and edit cells, rows, columns, and worksheets; create and edit charts from table data (both embedded and as separate sheets); sort data; print specific parts of a workbook; work with worksheets larger than the screen; and rename sheet tabs.

CPTR 104 Using Microsoft PowerPoint **1 credit**

This five-week online course on Microsoft PowerPoint requires a working knowledge of concepts presented in CPTR 101. It requires access to a PC with the appropriate software installed and an Internet connection. On satisfactory completion of this course, learners will be able to describe and navigate the PowerPoint; select a design template; create and format slides with various layouts; modify slide masters; change slide layout; insert clip art and other enhancements; apply animations, transitions, and sound effects; sort slides; and change slide timing.

CPTR 225 **2 credits**
Integrating Computers into the Elementary and Secondary Classroom

An introduction for teachers to basic computer skills to help them use these skills in their classrooms and curricula.

CPTR 295 Independent Study in Computers **1-3 credits**

Independent study primarily for transfer students whose previous coursework does not meet content or credit equivalency. Other extenuating circumstances may also require the use of an independent study. A student must submit the independent study request form, available from the records office, before an independent study is granted. Permission is given on an individual basis.

CPTR 376 Advanced Computer Applications **2 credits**

Further study of Microsoft Office Suite applications, including PowerPoint, the mail merge and desktop publishing functions of Word, the advanced spreadsheet functions of Excel, and database design and implementation in Access. This course assumes a working knowledge of personal computer operations in general and Microsoft Office in particular.

ENGL 105 Academic Discourse I **3 credits**

A survey of the principles of composition with an emphasis on academic discourse — the ability to read, write, and think clearly and cogently in an academic context. It is a theme-based course intended to bring about effective academic writing, including appropriate rhetorical strategies and use of language. Writing assignments focus on summarizing, responding, evaluating, and persuading. The course also introduces elements of information literacy, including the ability to find appropriate sources and a familiarity with MLA documentation.

ENGL 106 Academic Discourse II **3 credits**

Builds on skills mastered in ENGL 105. This course employs literature and visual media to improve student reading and writing. Students also receive an introduction to literary analysis and critique and expand upon the information literacy concepts learned in ENGL 105, moving to more advanced levels of scholarship and research. Course results in a fully documented research project.

Prerequisites: ENGL 105 and word processing skills

ENGL 118 Writing and Research in the Health Care Professions **3 credits**

A course designed to build on those skills mastered in Academic Discourse I with an emphasis on the discourse of the health care professions, including document design and genres in the health professions. Course content includes information literacy and research methodology. Students will produce a variety of writing assignments, including a research paper consisting primarily of a literature review, and then present their findings to the class in a multimedia presentation. While specialized, this course emphasizes the research and writing skills that are central to any freshman composition research class.

Prerequisites: ENGL 105 and enrollment in a professional program of study; ENGL 118 is to be taken concurrently with a specific program course as outlined in the program course of study.

ENGL 215 Literature of the British Experience **3 credits**

Readings in British literature selected to offer the student an introduction to the literary heritage of Britain.

Prerequisite: Two semesters of college English or instructor's permission.

ENGL 216 Literature of the American Experience **3 credits**

Readings in American literature that will enable the student to explore America's literary heritage. Students will be encouraged to compare and contrast literary themes with their personal experience of growing up in the United States.

Prerequisite: Two semesters of college English or instructor's permission.

ENGL 218 Writing and Research in the Sciences **3 credits**

A course providing a rhetorical context in which to master the discourse of science. The emphasis is upon familiarizing students with the conventions of the major scientific genres and developing their proficiency in reading and writing in these genres, all while examining their rhetorical dimensions. Assignments include a research report, a review article, and a poster presentation of their research findings. This course meets the requirements for the second of a two-course composition sequence.

Prerequisite: ENGL 105

ENGL 296 Independent Study in Composition **1-3 credits**

Primarily for transfer students whose previous coursework does not meet content or credit equivalency. Other extenuating circumstances may also require the use of an independent study. A student must submit the independent study request form, available from the records office, before an independent study is granted. Permission is given on an individual basis.

ENGL 297 Independent Study in Literature **1-3 credits**

Primarily for transfer students whose previous coursework does not meet content or credit equivalency. Other extenuating circumstances may also require the use of an independent study. A student must submit the independent study request form, available from the records office, before an independent study is granted. Permission is given on an individual basis.

ENGL 320 Topics in Literature **3 credits**

An exploration of various social and cultural issues as manifested in the world of literature. The course will focus both on issues themselves as well as literary scholarship. Possible topics may include male/female relationships, medicine in literature, or race relationships in America.

Prerequisite: Two semesters of college English or instructor's permission.

GSCI 410 History and Philosophy of Science **3 credits**

The nature and development of modern science; the nature and limits of scientific methodology and knowledge; interfaces between science and other human intellectual endeavors. Three lectures per week.

Prerequisite: One full year sequential college science course

HEPR 302 Mission Experience in Cultural Diversity **3 credits**

An elective course for students interested in experiencing cultural diversity in a regional setting. Students practice health care skills, emphasizing cultural concepts in a medically underserved country. National and international health care issues and trends are discussed. Theory and laboratory. (*1 theory credit, 1 clinical credit)*

Prerequisite or corequisite: Cultural Diversity in Health Care; enrollment in a professional program.

HEPR 310 Health Care Economics and Finance **3 credits**

A perspective of the heath care economy, influencing forces, reimbursement models, market development, and health care finance applied to various work settings. Students will have the opportunity to integrate these economic factors with quality improvement processes and validate them through interactions with health care managers.

HEPR 325 Issues and Trends in Health Care **3 credits**

A course designed to examine national health care issues and trends with emphasis on the impact on the health care profession and on the delivery of health care. Past, present, and future trends related to the status of health and health care services in the United States will be discussed. Issues related to access to care, cost and payment, and political trends will be explored. Students will have the opportunity to evaluate the current status of the U.S. health care system.

HEPR 330 Community Health Perspectives **3 credits**

A study of health care needs and health care delivery within the context of community. The changing demography of the United States will be explored, highlighting the need to understand cultural diversity. Epidemiological thinking will provide a background for assessing various community aspects affecting health care. Emphasis is placed upon promotion of wellness and how to modify patient behavior as a basis for improving health care delivery within the community.

HEPR 340 Legal and Ethical Considerations in Health Care **3 credits**

A study of the relationship of the health care professional to the regulatory and ethical issues affecting health care. Topics covered include the evolution of legal and ethical issues, trends in legislation affecting health care, risk management, and the process of collaborative decision making.

HEPR 345 History of Health Care in the United States **3 credits**

A study of the changes in health care coverage from the founding of the United States through the beginning of the 21st century. Emphasis is on the advancement of health care during the 19th and 20th centuries. Subjects include the public reform movement's impact on health care during the early 1900s; gender and race in health care; the development of nursing and other specialty health occupations; and the changes in health care from advances in science and technology.

Prerequisite: Full freshman English sequence

HEPR 348 Concepts of Management and Leadership in Health Care **3 credits**

Exploration of management and leadership principles as practiced in the health care setting. The course addresses the role of the health professional in management and leadership positions focusing on departmental and organizational issues most likely to be encountered by leaders. Application of these principles will be developed through a short practicum experience.

HEPR 355 Medical Imaging Modalities **3 credits**

Explores medical imaging and how images are obtained in each modality. Topics include X-ray production and detection, interactions of radiation with biological tissue, flat-plane radiography fluoroscopy, computed tomography, radioisotope labeling, scintillation cameras, positron emission tomography, ionizing radiation dosage and safety, ultrasound generation and attenuation in biological tissue, ultrasound imaging techniques, magnetic resonance imaging, in vivo spectroscopy, and image quality. Designed for students preparing for managerial roles desiring background knowledge of imaging modalities outside their areas of expertise. Three hours lecture course.

HEPR 360 Advanced Cardiac Life Support **1 credit**

A course that provides the student with the opportunity to acquire knowledge and skills in advanced cardiac life support theory and techniques. Upon successful completion of the course, the student will receive American Heart Association certification as an Advanced Cardiac Life Support (ACLS) Provider. Graded on a pass/not pass basis.

Prerequisite: Current certification in Basic Life Support (CPR)

HEPR 370 Special Topics in Health Professions **3 credits**

An in-depth exploration of a topic of interest to the health care professional. Different topics may be offered, such as health policy, alternative therapies in health and illness, and professional issues. The course may be repeated for credit; specific topics may not be repeated.

HEPR 371 Alternative Therapies for Health and Illness **3 credits**

An introduction to the use of natural remedies and personal responsibility as aids in promoting health, preventing disease, and facilitating recovery from illness. A variety of complementary and alternative therapies are discussed, including Ellen White's eight basic essentials to living. Critical thinking is used to explore evidence-based research on complementary and alternative therapies.

Prerequisite: BIOL 119 and 129 or their transfer equivalents.

HEPR 375 Cultural Diversity in Health Care **3 credits**

The study of the principles of cultural diversity specifically applied to the health care setting. Students explore social and cultural dimensions of health and health care and discuss assessment and intervention techniques appropriate to specific cultural groups.

Prerequisites: ENGL 105 or equivalent and acceptance into a College major

HEPR 380 Introduction to Health Care Professional Studies **1 credit**

An introduction to an ongoing portfolio project that will be completed at the end of the program in the course HEPR 481. Based on the program outcomes and institutional outcomes, students will be given the tools to develop and produce a professional learning portfolio. Course must be taken in the first semester once a student is admitted to the HEPR program. Online course.

HEPR 410 Health Care Statistics and Research **3 credits**

A study of the relationship of the health care professional to scholarly research in the application of evidence-based medicine. Course provides an introduction to quantitative and qualitative research methodologies, developing a foundation for critically reviewing and evaluating published research for synthesis and application to improve the quality of patient care. Writing-intensive course.

Prerequisite/corequisite: MATH 214 or equivalent

HEPR 415 Health Care Informatics Applications for Health Professions **1 credit**

Integration of health care professions information with information management, information processing, and communication technology to support the health of individuals worldwide. Addresses the role of informatics in health care professional practice; includes clinical practice, leadership and management; patient education; and research.

HEPR 420 Health Care Personnel Management **3 credits**

A course applying personnel law and government regulations to policies and practices in a variety of health care systems. A case study approach focuses on processes and solutions to problems impacting employer and employee dynamics. Students will have the opportunity to interact with managers in the resolution of current personnel issues.

Prerequisite: HEPR 348 or permission of instructor

HEPR 430 Instructional Planning and Delivery **3 credits**

A course that emphasizes the basic principles of instructional design and implementation. Students will be introduced to the skills required for effective teaching in the classroom, laboratory, clinical, and community settings.

HEPR 431 Teaching Learners in Health Care **3 credits**

Explores different types of health care learners in a variety of health care settings. Concepts include assessing and evaluating heterogeneous learners emphasizing age, gender, generation, and cultural considerations. Students discuss the differences of teaching learners, whether individually, in a family, or in a group. They also will examine differences in patient teaching and health care professional education.

HEPR 432 Professional Development in Health Care **3 credits**

Exploration of assessment, planning, implementation, and evaluation of educational programs for health care professions. Students discuss and develop educational needs assessment, continuing education programs, and evaluations related to the educational needs of their chosen health care professions. Discussion includes policies, procedures, accreditation, and laws related to lifelong learning in health professions.

HEPR 440 Special Project in Health Professions **1-3 credits**

Allows students to pursue directed learning experiences in various aspects of allied health, including management, education, research, and other areas of interest. In consultation with a faculty advisor, students will develop a project from a list suggested by community health care organizations and institutions. Students will have the opportunity to apply program competencies in a realistic setting. Course is available each semester and will be scheduled on an individual basis. The course may be repeated once for credit.

Prerequisite: Completion of six (6) hours of health professions courses and permission of the instructor.

HEPR 448 Leadership Theory in Health Care **3 credits**

Expansion of leadership theory as applied to the health care professional's role in health care settings. Students will explore their leadership strengths and development opportunities through self-assessment tests. Leadership case studies will be examined to compare leadership styles within roles of health professionals and as citizen in society at large.

Prerequisite: HEPR 348 or permission of instructor

HEPR 451 Interdisciplinary Team Practice in Community-Based Care **3 credits**

An introduction and exposure to conceptual modes of interdisciplinary practice in community settings. Concepts will include managing change, resolving conflict, team dynamics, and dealing with issues of diversity within the practice of health care professions. Students will explore the backgrounds of other health care professions, the relationships of the various professions to each other, the roles each serves, and how the clinical work force is organized. This course will be taught using the principles of service learning and grant writing in relationship to interdisciplinary practice.

Prerequisite: HEPR 348 or permission of instructor

HEPR 460 Forensics in Health Care **3 credits**

Provides an evidence-based framework for multidisciplinary health care professionals to identify, assess, and care for victims of maltreatment and violence through the life span. Students learn to interpret legal and regulatory guidelines and apply scientific forensic principles to the clinical setting as they deliver care to at-risk populations of various cultures and generations. Case study analysis assists in synthesis of forensics in health care through injury identification; evidence collection techniques including trace evidence and wound photography; and documentation strategies using body maps.

Prerequisites: PSYC 112 General Psychology or SOCI 115 Principles of Sociology

HEPR 470 Human Genetics and Genomics for Health Professions **3 credits**

Emphasizes and explores the field of human genetics/genomics in the health care arena and the role of the health provider in genetics. Students discuss and practice assessment of the client, family, and the community related to genetics and examine pathology in genetics and the relationship to environmental factors. Topics include the Human Genome Project; human and molecular genetics; legal and ethical implications; genetic services; and culturally sensitive care.

Prerequisites: HEPR 340 or a health assessment course

HEPR 481 Capstone/Senior Project **1 credit**

A senior project in which students demonstrate their health care professional growth through integration of knowledge and skill showing achievement of program outcomes. Continuing from HEPR 380, the student produces a professional portfolio that demonstrates achievement of the program outcomes. Students present the final product to peers and/or other health care professionals. Must be taken in the last or second-to-last semester of the program. Online course.

Prerequisite: HEPR 380

HIST 101 History of Civilization I **3 credits**

The development of civilization from antiquity to the end of the Middle Ages with emphasis on the study of political, economic, social, and cultural forces which have shaped the course of civilization throughout the world.

HIST 102 History of Civilization II **3 credits**

A course that traces the history of Western civilization from the mid-17th century (Treaty of Westphalia) to the present, featuring the political, economical, social, cultural, intellectual, and religious forces that shaped this development.

HIST 151 United States History I **3 credits**

The development of United States history from the age of exploration to Reconstruction with emphasis on the political, religious, cultural, and economic forces that shaped early America. Topics will include the role of the Puritans on American heritage, the revolutionary era, Jacksonian America, the roots of the American Civil War and Reconstruction of the Union.

HIST 152 United States History II **3 credits**

The development of United States history from the Civil War to the present with emphasis on the political, cultural, and economic forces that have shaped the direction of modern America. Topics will include the industrial revolution, the Progressive Era, and American involvement in the world wars and the Cold War.

HIST 315 Topics in History **3 credits**

A focused exploration into diverse topics in history. The course may include the political, religious, social, economic, intellectual, and cultural forces in a variety of eras in American, European, and world history.

HIST 326 Recent American History **3 credits**

A study of people and events that shaped U.S. policies and influence life in the United States today. The major emphasis of this course is World War II to the present, understanding the emergence of the United States as a world power. The Korean and Vietnam wars and forces such as communism, the Cold War and rise of Third World powers will be explored. The study includes the impact of technical and scientific development and the dynamics of social change that characterized the 20th century.

Prerequisite: Full freshman English sequence

HIST 345 History of Health Care in the United States **3 credits**

A study of the changes in health care coverage from the founding of the United States through the beginning of the 21st century. Emphasis is on the advancement of health care during the 19th and 20th centuries. Subjects include the public reform movement's impact on health care during the early 1900s; gender and race in health care; the development of nursing and other specialty health occupations; and the changes in health care from advances in science and technology.

Prerequisite: Full freshman English sequence

KCMA 120 Overview of Health Occupations **1 credit**

Issues distinct to health care occupations from a holistic (whole-person) perspective; personal qualities, cognitive and psychomotor skills, and affective domain competencies specific to success in various health care disciplines. Designed to instill mutual understanding and respect for colleague health care professionals. Pass/fail.

KCMA 350 Practicum **1 credit**

Observation or supervised participation in health care-related research or professions. May be repeated for a total of five credits. Four credits are required for human biology majors. The requirement may be reduced by one credit for students who can properly document health care work experience. Pass/fail.

Prerequisite: KCMA 120

LART 320 Topics in Fine Art **3 credits**

An exploration of topics designed to foster awareness of and appreciation for a variety of forms of artistic media.

LART 327 Introduction to Western Arts **3 credits**

An overview of the stylistic character and cultural climate of the important epochs of Western civilization, including the relationship of painting, sculpture and architecture. Emphasis is on examining the fine arts in relationship to one another and in the context of social and political happenings of the time, leading to an awareness of fine arts as a mirror of the human condition.

MATH 105 Fundamentals of Mathematics **3 credits**

A wide variety of mathematical concepts. Topics include algebraic expressions and polynomials, factoring polynomials, laws of exponents, introduction to logarithms, measurement conversions within the metric and English systems, solving linear equations and inequalities in one variable, solving quadratic equations, graphing equations, right triangle trigonometry, estimating, interpreting graphs, basic probability, descriptive statistics, and significance.

Note: Students scoring less than 40 percent on the math placement test are encouraged to take a basic algebra and/or math refresher course before enrolling in this course.

MATH 165 College Algebra and Trigonometry **3 credits**

A foundational algebra and trigonometry course. Topics include order of operation, laws of exponents, radicals and rational exponents, solving linear equations and inequalities up to three variables, solving quadratic equations, factoring polynomials, operations on rational expressions, graphing linear and quadratic equations, relations and functions, solving systems of linear equations in two and three variables, trigonometry, exponential and logarithmic functions.

Prerequisite: One of the following must be met:

- MATH 105 with a grade of C- or above
- KCMA Math Placement Test score of 70 percent or greater
- Transfer credit equivalent to MATH 105
- ACT/SAT math sub score at or above the 50th percentile within the last five years

MATH 170 Precalculus **3 credits**

A preparatory course for Calculus. Topics include advanced trigonometry, conic sections, higher polynomials, arithmetic and geometric sequences and series, binomial theorem, matrix algebra, analytic geometry, functions, and graphs.

Prerequisite: MATH 165 with a minimum grade of C- or permission of instructor

MATH 215 Probability and Statistics **4 credits**

A introduction to probability and statistics. Topics include sampling methods, descriptive statistics, frequency distributions, probability, probability distributions (binomial and normal), sampling distributions, central limit theorem, correlation, regression, confidence interval limits, sample size estimates, hypothesis testing for one and two variables, one-way ANOVA, and chi square.

MATH 220 Calculus I **3 credits**

Introduction to the techniques of differentiation and integration of functions of one variable. Includes the chain rule, fundamental theorem, and extremum applications.

Prerequisite: MATH 170 or its equivalent

MATH 295 Independent Study in Mathematics **1-3 credits**

Independent study is available primarily for transfer students whose previous coursework does not meet content or credit equivalency. Other extenuating circumstances may also require the use of an independent study. A student must submit the independent study request form, available from the records office, before an independent study is granted. Permission is given on an individual basis.

MESO 400, 401 Advanced Project in Medical Sonography I, II **3 credits each**

Allows students to pursue advanced learning experiences in various aspects of sonography, including clinical opportunities, applications, education, management, mission work, research, and other areas of interest. Students will develop a project in consultation with a sonography faculty advisor. Advanced Project in Medical Sonography I and II are available each semester and will be scheduled on an individual basis. The course is graded on a pass/not pass basis.

Prerequisite: Acceptance to the BSHP program

Note: The following NMED courses are taken at and administered by The University of Findlay. Courses and programs are subject to change according to the decisions of the administration at The University of Findlay.

NMED 406 Molecular Imaging Mathematics **3 credits**

This course covers the mathematics applicable to the field of clinical nuclear medicine. Topics include activity units, the decay formula, radionuclide dose and dosage calculations, radionuclide equilibrium, radiation counting statistics, and MDA.

NMED 416 Molecular Imaging Physics **2 credits**

Starting with applicable concepts of classical physics, this course covers atomic structure, mass-energy relationships, electromagnetic radiation, decay modes, half-life, and the interaction of radiation with matter. Inverse square law, shielding, and exposure calculations are also covered. Radionuclide production methods are presented.

NMED 425 Molecular Imaging Radiobiology **1 credit**

Basics of radiobiology, including the molecular and cellular effects of radiation, the acute and chronic effects of radiation, and how radiation affects the various tissues and organ systems of the body, will be covered. Stochastic and nonstochastic effects are covered.

NMED 435 Molecular Imaging Radiation Protection **2 credits**

Topics include licensing requirements; guidelines and regulations for radiation protection; governing agencies; radiation signs; record keeping; personnel and area monitoring; radionuclide receipt, storage and disposal; and management of clinical radiation spills and accidents.

NMED 445 Molecular Non-Imaging Procedures **3 credits**

In vivo non-imaging clinical procedures are covered in this course, including venipuncture, standard precautions, blood volume procedures, patient care, EKG, and non-imaging physiologic studies. Department organization, medical/legal issues of patient care, and medical/legal terminology are also covered.

NMED 455 Molecular Imaging Procedures **5 credits**

This course introduces topics that encompass the interrelated aspects of performing patient organ visualization procedures. Included are a review of the anatomy, physiology, and pathology of the various organs; radiopharmaceuticals; pharmaceuticals; applicable instrumentation; and a discussion of the methodologies and techniques used in performing the imaging procedure. Representative images are shown. The course will include a self-study assignment on pediatric nuclear medicine.

NMED 462 Radionuclide Therapies **1 credit**

Therapeutic clinical procedures are covered in this course, including the properties and selection of therapeutic radiopharmaceuticals; forms of therapy and radiation safety techniques involved with systemic therapy procedures.

NMED 465 Radiochemistry and Radiopharmaceuticals **3 credits**

Topics include radiochemistry, radionuclide generators, transient and secular equilibrium, radiopharmaceutical properties, pharmacological actions, localization methods, basic principles of immunology, and radiopharmaceutical preparation and quality control.

NMED 472 Molecular Imaging Instrumentation **3 credits**

This course is an introduction to the basic principles of molecular imaging radiation detection instrumentation and gamma spectroscopy. The design, operation, and quality control of gas-filled and scintillation instruments are covered. Detailed discussion of the components of a planar gamma camera system and dedicated computer, both hardware and software, is included.

NMED 475 Molecular Imaging SPECT **1 credit**

Detailed discussion of the components of a SPECT gamma camera system and dedicated computer, both hardware and software, image reconstruction, filtering, and other computer applications are covered. Data reduction and image analysis are described.

NMED 477 Molecular Imaging PET **1 credit**

Physics, radiopharmaceutical production and applications, imaging systems, and procedures and radiation safety for PET are discussed. Image reconstruction, data reduction, image analysis, and other computer applications for PET imaging are also covered.

NMED 485 Clinical Nuclear Medicine I **12 credits**

In the Clinical Nuclear Medicine series, students receive clinical training at one of the affiliate hospitals and possibly an affiliate radiopharmacy. The student receives instruction and participates in the performance of all types of clinical nuclear medicine procedures; patient care; administrative duties; radiopharmaceutical preparation and quality control; instrumentation usage and quality control; and radiation safety. Students also complete assigned clinical projects involving the clinical correlation between academic and practical experience.

NMED 486 Clinical Nuclear Medicine II **12 credits**

While enrolled in the Clinical Nuclear Medicine series, students receive clinical training at one of the affiliate hospitals and possibly an affiliate radiopharmacy. The student receives instruction and participates in the performance of all types of clinical nuclear medicine procedures; patient care; administrative duties; radiopharmaceutical preparation and quality control; instrumentation usage and quality control; and radiation safety. Students are also required to complete assigned clinical projects involving the clinical correlation between academic and practical experience. This course is a continuation of NMED 485.

NMED 487 Capstone **1 credit**

This course is a capstone for the NMI program. A one-year comprehensive final exam will be administered. This course will assist students in transitioning from academics into the profession of nuclear medicine technology.

Note on all nursing courses

Each credit for theory equals one clock hour.

Each credit for seminar equals two clock hours.

Each credit for clinical experience equals three clock hours.

NRSA 110 Nursing Foundations **6 credits**

Introduction to the fundamental concepts of Christian caring, professionalism, and the knowledge and clinical competencies needed to prepare the student for providing whole-person patient care. An overview of the patterns of human functioning provides the framework for health assessment, with the goal of maintaining and promoting the health of individuals within a variety of settings. The student is introduced to the mission of the nursing department and to the philosophy and conceptual framework of the curriculum. Health assessment, communication skills, critical reasoning, and clinical competencies are emphasized as elements of the professional nursing role. Emphasis is given to health promotion and to the human functioning patterns of protection, elimination, comfort/rest/activity/mobility, nutrition, and spiritual and psychosocial/cultural needs. *(4 theory credits, 2 clinical credits)*

Corequisites: BIOL 119; General Psychology; MATH 105; meet math competency

NRSA 117 **1 credit**

Professional Role Transition for Licensed Practical Nurses (LPNs)

Uses a seminar format that integrates prior knowledge with fundamental nursing concepts to enhance the LPN's transition to the role of the registered nurse. The student is introduced to the philosophy and conceptual framework on which the curriculum is based, the nursing process that serves as a model for the delivery of nursing care, and the role and responsibilities of the registered nurse.

Corequisites: NRSA 130; NRSA 131

NRSA 118 Introduction to Pharmacology **2 credits**

An introduction to general principles of pharmacology and implications for nursing practice. Theory only.

Prerequisites: BIOL 119; Math competency

Corequisite: BIOL 129

NRSA 119 Role Transition: Military Medical Technician to RN **1 credit**

Course is designed to integrate prior knowledge with fundamental nursing concepts to enhance the military medical technician's transition to the role of registered nurse. The student is introduced to the philosophy and conceptual framework on which the curriculum is based; the nursing process that serves as a model for the delivery of nursing care; and the role and responsibilities of the registered nurse.

Prerequisites: BIOL 119; general psychology; math competency

Corequisites: BIOL 129; life span development; NRSA 118, NRSA 120

NRSA 120 Basic Nursing Concepts **6 credits**

Helps students to develop basic nursing concepts and health promotion to enhance communication and clinical competencies. Using critical reasoning skills, students will explore the human functioning patterns to provide basic whole-person patient care to adults. Emphasis is given to the human functioning patterns of nutrition, growth and development, sensation/perception, elimination, comfort/rest/mobility, and fluid-gas transport. Theory and laboratory. *(4 theory credits, 2 clinical credits)*

Prerequisites: NRSA 110; BIOL 119; math competency; General Psychology; meet math competency

Corequisites: NRSA 118 Introduction to Pharmacology; BIOL 129 Anatomy and Physiology II

NRSA 129 Transitions Course: LPN to RN **3 credits**

This course enables the student to explore integrative concepts in nursing and to make the transition from licensed practical nurse to registered nurse. Students refine and update previous learning in addition to identifying goals for a successful transition into the RN program. Combined with classroom and nursing laboratory experiences, the student learns through the application of concepts. The student will demonstrate the ability to solve problems using the nursing process with a focus on client assessment and effective communication. *(3 credits; 30 lecture hours, 30 lab hours)*

Corequisites: BIOL 120; General Psychology; math competency

NRSA 130 Family and Newborn Nursing **4 credits**

Emphasizes wellness-focused nursing care to childbearing individuals and families experiencing developmental changes. Nursing care for childbearing individuals and families is provided in a variety of settings. Human functioning patterns are discussed with emphasis on the patterns of nutrition, growth and development, protection, and the spiritual, psychosocial, and cultural needs. Theory and laboratory. *(2 theory credits, 2 clinical credits)*

Prerequisites: BIOL 129; life span development; NRSA 118; NRSA 120; math competency required for students in the following programs: military medical technicians, advanced placement for LPNs, and advanced placement for recent LPN graduates of MVCTC.

Corequisite: NUTR 118

NRSA 131 Psychiatric Mental Health Nursing **4 credits**

Emphasizes nursing care to individuals and families experiencing emotional changes. Nursing care for individuals and families experiencing emotional changes is provided in a variety of settings. Human functioning patterns are discussed with special emphasis on the patterns of nutrition, growth and development, protection, sensation/perception and the spiritual, psychosocial, and cultural needs. Theory and laboratory. *(2 theory credits, 2 clinical credits)*

Prerequisites: BIOL 129; life span development; NRSA 118; NRSA 120; math competency required for students in the following programs: military medical technicians, advanced placement for LPNs, and advanced placement for recent LPN graduates of MVCTC.

Corequisite: NUTR 118

NRSA 200 Nursing Extern Elective: Acute Care Nursing Roles **2 credits**

Exploration of acute care nursing roles is accomplished through classroom presentations and precepted clinical experiences at one of the acute care centers. The development of critical thinking skills is enhanced through case studies and hospital role analysis. *(The extern program consists of 4 didactic hours per week and 32 clinical hours per week for 8 weeks.)*

NRSA 221 Wellness and Health Alterations in Children **4 credits**

Emphasis on whole-person nursing care of children/families experiencing developmental changes and health alterations. Nursing care of children and families is provided in a variety of culturally diverse settings including the community setting. Human functioning patterns are discussed with emphasis on the patterns of growth and development, protection, comfort/rest/activity/mobility, and fluid/gas transport. Theory and laboratory *(2 theory credits, 2 clinical credits)*

Prerequisites: NUTR 118, Nutrition; NRSA 130, Family and Newborn Nursing; NRSA 131, Psychiatric Mental Health Nursing

NRSA 222 Wellness and Health Alterations in Adults **4 credits**

Use of nursing concepts and critical reasoning to meet the whole-person needs of adults within a variety of culturally diverse settings. Students have the opportunity to use effective communication skills in promoting whole-person care of adults. Clinical competencies and experiences correlate health assessment and health promotion with the needs of adults. Human functioning patterns are discussed, with emphasis on the human functioning patterns of fluid-gas transport, protection, comfort/rest/activity/mobility, and sensation/perception. Theory and laboratory. *(2 theory credits, 2 clinical credits)*

Prerequisites: NUTR 118, Nutrition; NRSA 130, Family and Newborn Nursing; NRSA 131, Psychiatric Mental Health Nursing

NRSA 230 Advanced Nursing Concepts **7 credits**

An integration of nursing care using the categories of human functioning to promote patient wellness. Human functioning patterns are discussed, with emphasis on the patterns of elimination, fluid-gas-transport, sensation/perception, and the spiritual, psychosocial, and cultural needs of patients. Students have an opportunity to prioritize patients' needs and organize nursing care for patients who are at different levels on the health care continuum and within a variety of settings. Clinical experiences focus on management of care to individuals and groups of patients and collaborative interactions with other members of the health care team. The clinical experiences are precepted. Theory and laboratory. *(3 theory credits, 4 clinical credits)*

Prerequisites: BIOL 151, NRSA 221, NRSA 222

NRSA 240 Synthesis of Nursing Theory and Practice **1 credit**

Synthesis of nursing concepts and theory throughout the life span. The course completes formal preparation of students for the National Council on Licensure Examination for RNs (NCLEX-RN) and entry into professional practice. Seminar.

Corequisite: NRSA 230

NRSA 300 Camp Nursing **2 credits**

An elective course for students who have completed NRSA 120 or already have an Ohio RN license. In a camp-based setting, care is provided for children with multiple handicaps or who have been diagnosed with chronic illnesses such as diabetes or asthma. Nursing care activities may include daily assessments, activity and diet monitoring, checking blood sugar levels, and providing basic skill teaching to a variety of campers ages 7 to 17. Students are expected to be team players within their respective scope of practice limitations and communicate professionally with the interdisciplinary team. Theory and laboratory. *(1 theory credit, 1 clinical credit)*

NRSA 310 Success Strategies for Online Learning **2 credits**

Orients students to the philosophy and learning approach of the BSN completion program. Topics include electronic access tools, time management, online learning, communication and writing expectations. Course to be taken in first term of enrollment in program.

NRSA 316 **3 credits**

Theoretical and Conceptual Foundations of Professional Nursing Practice

Exploration of concepts and theories that influence professional nursing, including ways in which history has shaped the current status of nursing; characteristics of professionalism; the development and use of theory and science in nursing practice; and professional roles and behaviors.

Prerequisite or corequisite: NRSA 310

NRSA 325 Health Assessment **2 credits**

Expansion of health history and physical assessment skills for clients across the life span in a variety of settings. Emphasis is on a whole-person Christian caring approach for clients and includes spiritual, psychosocial, cultural, and physical assessments in determining the health of individuals. (1 theory credit; 1 laboratory credit)

Prerequisites: Anatomy and Physiology

Prerequisite or corequisite: NRSA 310

NRSA 335 Introduction to Nursing Research **3 credits**

Introduction to the basic research concepts necessary to evaluate published research for evidence-based nursing practice. Focus on the research process, reading and interpreting research reports, and evaluating the appropriateness of using the findings to guide professional practice.

Prerequisite or corequisite: Statistics, NRSA 310

NRSA 345 Issues and Trends in Health Care **3 credits**

A course examining national health care issues and trends and their impact on the delivery of health care and on nursing practice. Emphasis is on the nurse's role in health care issues.

Prerequisite or corequisite: NRSA 310

NRSA 355 The Role of the Professional Nurse in Promoting Health **3 credits**

Exploration of health promotion as an integrated role of the nurse in multiple and diverse settings including local, national, and international. Focuses on strategies to foster culturally acceptable healthy behaviors in individuals, families, and groups.

Prerequisite or corequisite: NRSA 310

NRSA 371 Alternative Therapies for Health and Illness **3 credits**

An introduction to the use of natural remedies and personal responsibility as aids in promoting health, preventing disease, and facilitating recovery from illness. A variety of complementary and alternative therapies are discussed, including Ellen White's eight basic essentials to living. Critical thinking is used to explore evidence-based research on complementary and alternative therapies.

Prerequisite: BIOL 119 and 129 or their transfer equivalents.

Prerequisite or corequisite: NRSA 310

NRSA 416 Community-Oriented Nursing Perspectives and Practice **5 credits**

A clinical course integrating nursing and community-oriented health to designated populations. Various determinants of health are explored and applied through virtual and actual community assessments. KCMA nursing conceptual framework is used to implement health promotion interventions at the primary, secondary, and tertiary levels. *(Clinical course: 3 theory credits, 2 clinical credits, 60 clock hours)*

Prerequisite or corequisite: NRSA 310

NRSA 426 Nursing Informatics Applications **1 credit**

Integration of nursing information with information management, information processing, and communication technology to support the health of individuals worldwide. Addresses the role of informatics in nursing practice; includes clinical practice, nursing administration, client education, and research.

Prerequisite: NRSA 310

NRSA 436 Leadership and Management in Nursing Practice **5 credits**

Application of leadership and management principles in a clinical setting. Case studies and clinical experiences are used to provide enrichment in a selected area of nursing practice. *(Clinical course: 3 theory credits, 2 clinical credits, 60 clock hours)*

Prerequisite or corequisite: NRSA 310

NRSA 446 Senior Capstone **1 credit**

A capstone course in which students demonstrate their professional growth through integration of knowledge and skills showing achievement of program outcomes.

Prerequisites/corequisites: All other nursing courses in the major

NUTR 118 Basic Nutrition **2 credits**

An introductory study of the principles of nutrition with an emphasis on the functions of the nutrients and their digestion, absorption, metabolism, and interrelationships. Knowledgeable selection of foods and principles of healthful living will be included.

Note: This course may not be applied to the core natural science requirement.

PEAC 150 Fitness Walking **1 credit**

A class designed to educate and motivate students to adopt fitness walking as a part of a healthy lifestyle.

PEAC 124, 125 Snow Skiing I, II **1 credit each**

A trip taken during spring break to a major ski area. There is an additional charge for this class. May be repeated for credit.

PEAC 132, 133 Cycling I, II **1 credit each**

A class designed to create an interest in cycling as a means of building and maintaining a strong fitness program emphasizing cardiovascular fitness.

PEAC 145, 146 Fitness I, II **1 credit each**

A class designed to increase students' understanding and appreciation of the values of physical education through selected strength, cardiovascular, and flexibility activities.

PEAC 161 Golf **1 credit**

Emphasis on the basic techniques, rules, and etiquette of golf. Greens fees are additional

PEAC 174, 175 Weight Training and Conditioning I, II **1 credit each**

Body development and cardiovascular activities for men and women. Weightlifting and cardiovascular programs are developed for each student. May be repeated for credit.

PEAC 178 Wellness **1 credit**

A class designed to give students the knowledge and skills needed to develop a wellness lifestyle. Included is the development of a coordinated and integrated living pattern involving the six dimensions: physical, intellectual, emotional, social, spiritual, and occupational. All six dimensions will be explored with an emphasis on the physical.

Note: Students are encouraged to take this course before other PEAC courses.

PEAC 185 **1 credit**

Used for transfer credit only. This course number is used for physical education electives that are transferable but are not content-equivalent to a KCMA course.

PHAS 500 Introduction to the PA Profession **1 credit**

Traces the history, development, and current status of the physician assistant profession. Students will explore the role of the physician assistant as part of the health care team. Students will research and investigate state and national legislation that governs the profession.

PHAS 503 Applied Pathophysiology **3 credits**

Introduces the student to the pathophysiology of common diseases encountered in clinical medicine. This course focuses on pathophysiology, which is the foundational knowledge needed to understand and recognize the disease state in humans, perform appropriate examination, order diagnostic testing, and recommend appropriate treatment.

PHAS 504 Applied Sectional Anatomy **4 credits**

Explores normal human anatomy in preparation for interpreting diagnostic studies and understanding normal and abnormal findings in humans.

PHAS 505 Introduction to Medical Learning **1 credit**

Introduction for PA students to the concepts of advanced study skills. This course uses a body systems approach to medical terminology through a review of basic anatomy, physiology, pathophysiology, diagnostics, therapeutics, and pharmacology.

PHAS 510 Medical History and Physical Examination I **4 credits**

Introduces the physician assistant student to basic interviewing and history-taking skills. Further, students explore the components of the complete physical examination and perform basic physical examination techniques.

PHAS 515 Medical History and Physical Examination II **4 credits**

Uses a problem-based approach to build on the basic history and physical examination skills obtained in PHAS 510 to evaluate and analyze complex cases. Students learn to integrate components of the physical exam based on the patient's history. Further, students explore advanced examination techniques and specialty tests.

Prerequisite: PHAS 510 Medical History and Physical Examination I

PHAS 520 Principles of Clinical Medicine I **6 credits**

Drawn from the NCCPA blueprint, course explores common medical and surgical disorders encountered in general adult medicine. This includes pertinent historical information; pertinent physical examination information; pathophysiology of selected medical conditions; epidemiology of selected medical conditions; risk factors for development of selected medical conditions; signs and symptoms of selected medical conditions; physical examination findings associated with selected medical conditions; appropriate physical examination directed to selected medical conditions; differential diagnosis associated with presenting symptoms or physical findings; diagnostic workup; treatment plan, both pharmacological and non-pharmacological; patient monitoring, including follow-up and further testing; and patient counseling and education. Students will develop and refine their clinical acumen through the use of case studies.

Prerequisite: PHAS 503 Applied Pathophysiology

PHAS 525 Principles of Clinical Medicine II **6 credits**

A continuation of PHAS 520 (Principles of Clinical Medicine I).

Prerequisite: PHAS 520 Principles of Clinical Medicine I

PHAS 530 Pharmacology and Therapeutics I **3 credits**

Drawn from the NCCPA blueprint, course introduces student to drugs and medicinal agents most likely encountered in primary care settings. Students will develop knowledge of: mechanisms of action; indications for use; contraindications; side effects; adverse reactions; follow-up and monitoring of pharmacologic regimens; risks for drug interactions; clinical presentation of drug interactions; treatment of drug interactions; drug toxicity; methods to reduce medication errors; cross-reactivity of similar medications; and recognition and treatment of allergic reactions. The ultimate goal of the course is to develop cognitive skills in: selecting appropriate pharmacologic therapy for selected medical conditions; monitoring pharmacologic regimens and adjusting as appropriate; and evaluating and reporting adverse drug reactions. Special attention is paid to the Ohio State Medical Board's PA Formulary and satisfies, in conjunction with PHAS 535, the requirement for 30 contact hours in pharmacology to ensure that graduates meet initial didactic requirements for an Ohio State Medical Board Physician Assistant provisional Certificate to Prescribe.

PHAS 535 Pharmacology and Therapeutics II **3 credits**

A continuation of PHAS 530 (Pharmacology and Therapeutics I).

Prerequisite: PHAS 530 Pharmacology and Therapeutics I

PHAS 540 Pharmacology and Therapeutics III **2 credits**

Using case-based learning, course introduces the student to general drug classifications and medicinal agents most likely encountered in primary care settings. Building on the content from Pharmacology I and II, students will use the pharmacological principles, dosing, patient education, pharmacodynamics, and therapeutic indications of commonly prescribed drugs. This course also introduces students to the requirements of the Ohio State Medical Board governing rules for Physician Assistant prescriptive practice.

Prerequisite: PHAS 535 Pharmacology and Therapeutics II

PHAS 543 Clinical Case Studies in Faith, Diversity, and Ethics **2 credits**

Explores the application of the principles of medical ethics, Christian faith, and cultural diversity to patient care. Students will interpret patient case studies and present these interpretations to a panel with expertise in each of the three areas.

Prerequisites: RELP 253, RELP 315

PHAS 546 Clinical and Diagnostic Studies **3 credits**

Provides instruction and practice necessary for ordering and interpreting appropriate diagnostic studies. Includes laboratory blood/fluid analysis, ECG interpretation, and diagnostic imaging.

PHAS 547 Medical Procedures **2 credits**

Instruction, demonstration, and practice of common medical procedures, which include but are not limited to injections, venipuncture, IV, Foley catheterization, suturing, and splinting/casting.

PHAS 550 Behavioral Medicine **3 credits**

Designed to help the PA student develop the necessary skills, knowledge, and sensitivity to intervene effectively for a variety of psychiatric, emotional, and social concerns presented by patients on a daily basis. Students gain skills in the evaluation, diagnosis, and management of patients with a variety of mental illnesses.

PHAS 553 Clinical Genetics **2 credits**

Emphasizes clinical rather than traditional human genetics and is a vital resource for health care professionals. The course stresses the importance of being able to anticipate disease based on individual characteristics or a family history and then providing the necessary measures to forestall further complications.

PHAS 556 Emergency Medicine **3 credits**

Presented primarily in a case-based format, course explores trauma and other medical disorders commonly seen in emergency department settings. The emphasis is on priorities in stabilization of patients with life-threatening trauma or illness and on appropriate diagnostic therapeutic procedures. Components of this course include Basic Disaster Life Support (BDLS) and Advanced Cardiac Life Support (ACLS) certification.

Prerequisite: Basic Life Support (BLS) certification

PHAS 561 Pediatrics **2 credits**

Introduction to common disorders of the pediatric population addressing clinical presentation, etiology, and diagnostic procedures, and management; includes appropriate physical examination techniques for the pediatric patient.

PHAS 562 Women's Health **2 credits**

Explores health care issues unique to women throughout the life span, including adolescent development, menstruation, breast health, pregnancy management, and menopause.

PHAS 563 Geriatrics **1 credit**

Addresses medical needs and problems of the geriatric patient population including physiological, psychological, and social changes associated with aging.

PHAS 565 Principles of Surgery **2 credits**

Introduces the student to the basic principles of surgery including preoperative evaluation and preparation of patients for surgery; assistance during the intraoperative period to develop an understanding of team member roles and an introduction to common operative procedures; and the care of surgical wounds and postoperative complications.

PHAS 568 Research Methods **3 credits**

A study of research design and methodologies necessary to develop a graduate-level research project. The course culminates in the development of the student's research proposal. A student applies statistical analysis and literature review in the process of producing the research proposal, including submission to the Institutional Review Board, if applicable.

Prerequisite: Statistics

PHAS 595 Independent Study **1 credit**

Intended for those students enrolled in the physician assistant program for whom, in special circumstances, additional work is recommended.

Prerequisite: Permission of the physician assistant program director

PHAS 600 Professional Development Seminar **1 credit**

Explores factors affecting role socialization as a physician assistant, with an emphasis on standards of quality assurance, the credentialing of continued competence, and policies governing the regulation of clinical responsibilities. The seminar emphasizes the skills needed for successful résumé development, contract negotiations, and ethical standards of behavior.

PHAS 605 NCCPA Board Review I **1 credit**

A focused Web-based course that integrates preparation for the national certifying exam with experiential knowledge gained through clinical rotations. Students will prepare information in portfolio format on specified topics based on the NCCPA blueprint, corresponding with individual clinical rotations. Portfolio information may include history and physical examinations, using laboratory and diagnostic studies, formulating most likely diagnosis, health maintenance, clinical intervention, pharmaceutical therapeutics, and application of basic science concepts. Students will complete four multiple choice, board-style exams correlating with each clinical rotation per semester.

PHAS 610 NCCPA Board Review II **1 credit**

A continuation of NCCPA Board Review I; a focused Web-based course that integrates preparation for the national certifying exam with experiential knowledge gained through clinical rotations. Students will prepare information in portfolio format on specified topics based on the NCCPA blueprint, corresponding with individual clinical rotations. Portfolio information may include history and physical examinations, using laboratory and diagnostic studies, formulating most likely diagnosis, health maintenance, clinical intervention, pharmaceutical therapeutics, and application of basic science concepts. Students will complete four multiple choice, board-style exams correlating with each clinical rotation per semester.

Prerequisite: PHAS 605 NCCPA Board Review I

PHAS 611 NCCPA Board Review III **1 credit**

A continuation of PHAS 605 and 610, integrating preparation for the national certifying exam with experiential knowledge gained through clinical rotations. Students will prepare information in portfolio format on specified topics based on the NCCPA blueprint, corresponding with individual clinical rotations. Portfolio information may include history and physical examinations, using laboratory and diagnostic studies, formulating most likely diagnosis, health maintenance, clinical intervention, pharmaceutical therapeutics, and application of basic science concepts. Students will complete two multiple choice, board-style exams correlating with each clinical rotation per semester. Course will culminate with a mock PANCE 360-question exam to prepare students for the Physician Assistant National Certifying Examination (PANCE).

Prerequisite: PHAS 605 NCCPA Board Review II

PHAS 615 Objective Structured Clinical Examination **1 credit**

In online format, course prepares the student for the objective structured clinical examinations (OSCEs), in which students perform clinical tasks in a series of stations while interacting with a standardized patient.

PHAS 640 Capstone Project **2 credits**

Provides each student the opportunity to present results of their individual capstone project or research topic, to synthesize previous study and work experience, and to demonstrate an understanding of the program and profession's principles.

Prerequisite: PHAS 568 Research Methods

PHAS 620, 621, 622, 623, 624, 625, 626, 627, 628, and 629 (or 630)
Clinical rotations (2.5 credits each)
Clinical experience education (40 weeks)

The clinical phase of the physician assistant program is 40 weeks. Each student is required to progress through eight required rotations: Adult Medicine I and II, Family Medicine, Surgery, Behavioral Medicine, Pediatrics, Women's Health, and Emergency Medicine. Each of these rotations is two to four weeks long. Additionally, each student must complete two rotations of selected electives.

The clinical education is taught by physicians and physician assistants. Each student is evaluated by his or her preceptor for the designated rotation. Students return to KCMA for testing as well as didactic and clinical skill workshops.

Adult Medicine I and II: Required rotations that emphasize pathophysiology, evaluation, diagnosis, and management of systemic and chronic diseases and conditions found in the clinical practice of internal medicine in both inpatient and outpatient settings. Inclusion of proper data collection through history and physical examination, formulation of accurate problem lists, accurate investigation, and treatment plans. Emphasis is placed on geriatric patients and complex patients with chronic and co-morbid conditions.

Family Medicine: Required rotation emphasizing the pathophysiology, evaluation, diagnosis, and management of systemic diseases and conditions unique to the clinical practice of family medicine. Inclusion of proper data collection through history and physical examination, formulation of accurate problem lists, accurate investigation, and treatment plans.

Surgery: Required rotation providing an orientation to patients of various ages with surgically manageable disease. The emphasis of the learning experiences are on the preoperative evaluation and preparation of patients for surgery; assistance during the intraoperative period to develop an understanding of team member roles and operative procedures; and the care of surgical wounds and post-operative complications.

Behavioral Medicine: Required rotation designed to provide an understanding of the behavioral components of health, disease, and disability. Exposure to patients with a variety of emotional illnesses and disabilities are used to develop informed history taking and mental status examination skills, abilities to recognize and categorize psychiatric disturbances, and techniques of early intervention and psychiatric referral.

Pediatrics: Required rotation designed to emphasize care of the child from birth through adolescence. The focus of the learning experience is on the recognition and management of common childhood illnesses, assessment of variations of normal growth and development, and the counseling of parents regarding immunizations, preventative health care visits, growth and development, nutrition and common psychosocial problems. Teaching rounds and lectures are used to introduce concepts of developmental disabilities and chronic care.

Women's Health: Required rotation that provides an exposure to the spectrum of problems and issues associated with women's health care. The learning experiences emphasize family planning and birth control; recognition and treatment of sexually transmitted disease; cancer detections; deliveries; and the evaluation of common gynecological problems. An exposure to the surgical management of gynecological problems is also provided.

Emergency Medicine: Required rotation designed to provide an in-depth exposure to the illnesses and injuries sustained by children and adults that necessitate emergency care. The educational experiences emphasize the focusing of interview and examination skills and performing of techniques and procedures essential to the proper management of life-threatening illness and injury. Ventilatory assistance, cardiopulmonary resuscitation, fluid and electrolyte replacement and acid-base balance are also stressed.

Electives: Two approved rotations selected by the student.

PHAS 630 International Clinical Rotation **2.5 credits**

An elective clinical experience outside the contiguous U.S. borders, preferably in an underserved area. This rotation is recommended for those students who have an interest in serving outside the U.S. contiguous borders in short-term or long-term medical missions after graduation. Lab fee will be included for this rotation only.

PHYS 131 Survey of Physics **4 credits**

A series of lectures and demonstrations covering mechanics, fluids, heat, sound, light, electricity, and atomic physics. The emphasis is on understanding natural phenomena with medical applications. Laboratory.

Prerequisite/corequisite: MATH 105

PHYS 141 General Physics I **4 credits**

Fundamental physics of mechanics and thermodynamics: kinematics, dynamics, gravity, work, energy, momentum, circular and rotational motion, fluids, kinetic theory, heat, and the laws of thermodynamics. Three hours of lecture and three hours of laboratory/recitation weekly.

Prerequisite/corequisite: MATH 165

PHYS 152 General Physics II **4 credits**

Fundamental physics of electromagnetism, optics, and modern physics: electric fields and currents, magnetic fields and induction, electromagnetic spectrum, light and optics, relativity, quantum theory, radioactivity, and elementary particles. Three hours of lecture and three hours of laboratory/recitation weekly.

Prerequisite/corequisite: MATH 165

PHYS 295 Independent Study in Physics **1-3 credits**

Independent study is available primarily for transfer students whose previous coursework does not meet content or credit equivalency. Other extenuating circumstances may also require the use of an independent study. A student must submit the independent study request form, available from the records office, before an independent study is granted. Permission is given on an individual basis.

PHYS 320 Topics in Physical Science **1-4 credits**

Study of one the traditional areas of the physical sciences such as quantitative analysis, physical chemistry, thermodynamics, optics, geology, or astronomy. Lectures, laboratory times, and prerequisites will vary according to the topic offered.

PHYS 325 Biophysics **4 credits**

Physical analysis and modeling of living systems and cellular processes. Topics may include membrane transport and electrical activity of muscle, nerve, and endocrine cells; cardiovascular, renal, respiratory, and gastrointestinal fluid dynamics; cellular effects of radiation. Three hours of lecture and three hours of laboratory/recitation weekly.

Prerequisites: PHYS 141, 152; BIOL 105, 110

PSYC 112 General Psychology **3 credits**

An introduction to the field of psychology. Principles and concepts basic to the following aspects of the science of behavior and mental processes are addressed: biological basis of behavior; sensation and perception; learning and thinking; emotions; motivation; personality; stress and adjustment; psychological disorders and their treatment; life span development; and social psychology.

PSYC 138 Human Growth and Development **3 credits**

An introduction to the processes of human development through the study of selected sequential changes occurring during the entire life span from conception through late adulthood, including death and dying. This course meets the standards for a required course in life span development.

Prerequisite: PSYC 112

PSYC 195 Independent Study in Psychology **1 credit**

Primarily for transfer students whose previous coursework does not meet content or credit equivalency. Other extenuating circumstances may also require the use of an independent study. A student must submit the independent study request form, available from the records office, before an independent study is granted. Permission is given on an individual basis.

PSYC 295 **1 credit**
Independent Study in Human Growth and Development

Primarily for transfer students whose previous coursework does not meet content or credit equivalency. Other extenuating circumstances may also require the use of an independent study. A student must submit the independent study request form, available from the records office, before an independent study is granted. Permission is given on an individual basis.

PSYC 330 Principles of Teaching and Learning **3 credits**

An exploration of learning theory and the process of teaching in a variety of settings. The course includes an overview of learning theories, learner assessment, and practice in formulating, implementing, and evaluating teaching plans. Opportunity will also be given for students to explore ways to incorporate continued learning as an essential element of their professional growth.

Prerequisite: A lower-level PSYC course

RELB 110 Biblical Resources for Understanding Health Care **2 credits**

A presentation of the scriptural origins of the Adventist Christian perspective on health care that inspired the creation of Kettering Medical Center and Kettering College of Medical Arts. Each class period following a general introduction is devoted to the detailed investigation and interpretation of a biblical passage that illuminates health care and the practices of those who provide it. The biblical materials are selected and organized in a way that is designed to introduce students to a Christian understanding of service, whole-person well-being, ethics, and diversity. All students are encouraged to take this course before any other religion course.

RELB 115 Introduction to Christianity (Spiritual Foundations cluster) **2 credits**

This course is, as its title suggests, an introduction to Christianity: Its backgrounds, origins, essentials, history, and forms. It is designed for the student who knows little or nothing about Christianity but can be illuminating for students who consider themselves familiar with Christianity since it views Christianity from a new and fresh perspective.

RELB 120 Basic Bible (Spiritual Foundations cluster) **2 credits**

This course is an exploration of the Christian Bible: what it is, where it came from, how it was created, what it is for, what it has meant over the centuries, and what it means today.

RELB 121 Personal Encounters with Jesus (Spiritual Foundations cluster) **2 credits**

An exploration of biblical narratives that describe and discuss Jesus' personal interactions with individuals of various cultures, socioeconomic means, and status. Students investigate the historical and cultural context in which these encounters occur to understand more about the nature and character of Jesus and how He might speak to the nature of our own personal encounters.

RELB 122 Stories of Salvation (Spiritual Foundations cluster) **2 credits**

A review of the central stories of scripture with an emphasis on understanding their significance for the individual student. The spiritual development of each biblical character will provide the foundation for exploring personal spiritual development.

RELB 123 Spiritual Formation (Spiritual Foundations cluster) **2 credits**

An exploration of the dynamics and concepts of Christian spiritual growth and formation, with an emphasis on classic spiritual disciplines such as prayer, meditation, and service. A major component of this learning experience is small-group work, group discussions, and presentations that challenge students to critically and constructively comprehend and chart their own spiritual journeys.

RELB 185

For transfer credit only. This course number is used for religion electives that are transferable but are not content-equivalent to a KCMA course.

RELB 205 Reflections on the Psalms (Spiritual Foundations cluster) **2 credits**

An exploration of spiritual power and value of the Psalms. Students explore what the Psalms communicate about God, prayer, praise, worship, and the trials and triumphs of the life of faith.

RELB 210 The Parables of Jesus (Spiritual Foundations cluster) **2 credits**

An exploration of many of the parables of Jesus through reading, thoughtful reflection, group discussion, and guided exposition. The emphasis is on what the parables meant to their original hearers and what the parables mean to us as hearers. Interpretation of the parables is consistent with the larger message of Jesus regarding the Gospel, God, and the kingdom, but seeks the personal meaning in the parables for those of us who encounter them today.

RELB 211 Life and Teachings of Jesus (Spiritual Foundations cluster) **2 credits**

A survey of the life and ministry of Jesus Christ to gain an understanding the challenge and possibilities of discipleship and the witness of the Christian church regarding Jesus.

RELX 220 Selected Topics in Religion **2 credits**

An exploration into selected topics in religion. Topics may include specific biblical topics, theological issues, and other religious studies.

RELB 225 Gospel of John (Spiritual Foundations cluster) **2 credits**

A verse-by-verse study of a Gospel written to explain why Jesus of Nazareth was accepted by some and rejected by others. John's uses of symbolism, stories, and Jesus' teachings are carefully explored in an effort to convey and help students experience the spirituality of John's connection to Jesus.

RELB 295 Independent Study in Religion **1-2 credits**

Primarily for transfer students whose previous coursework does not meet content or credit equivalency. Other extenuating circumstances may also require the use of an independent study. A student must submit the independent study request form, available from the records office, before an independent study is granted. Permission is given on an individual basis.

RELB 335 Paul and His Epistles (Spiritual Explorations cluster) **2 credits**

An exploration of the life and letters of the man known as "Paul, the Apostle." While Jesus "created" Christianity by his life, teachings, death, and resurrection, Paul also "created" Christianity by his tireless efforts over some thirty years to proclaim it, distribute it, defend it, explain it, live it, teach it, and die for it. By examining what Paul left behind in his letters, students seek to understand what he understood Christianity to be — and why he was willing to give his life for it.

RELP 215 Character and Ethics (Spiritual Explorations cluster) **2 credits**

An examination of character development and evaluation using classic and contemporary literary texts. The interplay of persons and principles forms the focus of the inquiry. What makes a person good? What makes an action right? How are the preceding questions and their answers related to one another? Stories assist students in probing these and related questions.

RELP 253 Morality and Medicine: Christian Perspectives on Bioethical Issues (Spiritual Explorations cluster) **2 credits**

A general review of ethical challenges that arise in health care. The analysis of the issues and the range of contemporary responses to those issues are set in the context of Christian convictions that both inform and invigorate action. Course materials emphasize moral discernment, rigorous argument, and conceptual resources for sustaining morality in medicine.

RELP 300 Desire, Happiness, and God (Spiritual Explorations cluster) **2 credits**

An exercise in extended reflection on paths to happiness. Using literary, theological, and philosophical writings, the course analyzes desire and its relationship to happiness and God.

RELP 302 Body, Mind, and Soul (Spiritual Explorations cluster) **2 credits**

An examination of the various understandings of what it means to be a body that has a mind and/or a soul, and of some real-world consequences of holding various views. Students develop practical applications that link the intellectual positions they adopt with their professional and personal lives.

RELP 304 Radical Requirements of the Christian Faith (Spiritual Explorations cluster) **2 credits**

A presentation of the radical nature of the New Testament call to discipleship. Students examine essays, books, people devoted to discipleship and study Scriptural passages in the Sermon on the Mount. Students are encouraged to re-evaluate their own journeys in discipleship.

RELP 305 Spiritual Dimensions of Death and Dying (Spiritual Explorations cluster) **2 credits**

A study of the process of dying from psychological, emotional, intellectual, and spiritual perspectives informed by the biblical teachings about death and dying. The intent of the course is to equip future health care workers with the information, perspective, and skills necessary to be helpful to others who are approaching their own death – often with pain, suffering, anxiety, fear, and difficulty – and to minister to those who love them and are suffering in their own ways. Course uses case studies, role playing, readings, lectures, class discussion, and interviews with the dying.

RELP 315 Spirituality in Healing and Health Care **2 credits**

Students investigate, experience and develop their own understanding of the body-mind-spirit relationship and explore various approaches to healing, the role of caregivers in the healing process, and the role of spirituality in healing and health care. The course emphasizes the student's own development of ideas for integrating spirituality in the delivery of health care. Note: This course does not meet associate degree religion requirements.

RELP 340 Christian Social Ethics (Spiritual Explorations cluster) **4 credits**

Explores Christian responsibility to society. Students use the Bible's social vision to consider how to address the needs and well-being of communities. Emphasis is placed on the availability and quality of health care. Coursework includes 10 service learning hours.

Prerequisite/corequisite: SLHP 301 International Health or SLHP 331 Health Care Needs of Underserved Populations

RELT 310 Christian Beliefs (Spiritual Explorations cluster) **2 credits**

An examination of the central teachings of the Christian church that give expression to the faith of the followers of Jesus Christ. Students explore what it means to be a Christian and what being a Christian means for everyday life. Particular attention is devoted to what students can hope for and the opportunity for freedom through faith.

RELT 325 World Religions (Spiritual Explorations cluster) **2 credits**

A survey course on the major religions of the world; introduces students to the basic teachings, rituals, and historical developments of each religion. Course emphasizes concepts of healing, the role of faith in illness, and how practitioners of specific religions conceive of God. Students will learn how to apply their knowledge of world religions to clinical settings.

RELX 320 Topics in Religion (Spiritual Explorations cluster) **2 credits**

An exploration of various topics such as grace and freedom; love and justice; God and human suffering; desire, happiness and God; and faith and art.

RESA 101 Patient Assessment **3 credits**

This course provides an introduction to patient evaluation and assessment of the cardiopulmonary systems. The application of patient history, diagnostic laboratory results, and physical examination findings in selecting appropriate Respiratory Care protocols will be discussed and practiced. Students will become American Heart Association BLS providers.

RESA 104, 204 Case-Based Pulmonary Pathology I, II **2 credits each**

This course provides a study of the etiology, pathophysiology, clinical findings, and management of patients with various pulmonary disorders. Using clinical case studies, students will apply basic respiratory care protocols to pulmonary disease management.

Corequisites for RESA 104: RESA 124 and RESA 125

Corequisites for RESA 204: RESA 230 and RESA 231

RESA 112 Cardiopulmonary Anatomy and Physiology **3 credits**

This course is a study of the basic gross and microscopic anatomy of the respiratory and circulatory systems. It also covers medical terminology; the normal mechanisms and control of ventilation; lung reflexes and defense mechanisms; principles of diffusion, perfusion, and gas transport; and the anatomy of the heart and its functions.

RESA 124 Respiratory Therapeutics **3 credits**

This course provides direct application of theory, operation, and delivery of respiratory care treatment modalities. Laboratory experience includes a hands-on approach to management and troubleshooting of respiratory care equipment. Patient care simulations will be used to practice the following respiratory care protocols: aerosol and humidity, medical gas, and bronchial hygiene therapies in the acute, sub-acute, and home care settings.

Corequisites: RESA 104 and RESA 125

Prerequisites: RESA 112 and RESA 101

RESA 125 Respiratory Therapeutics Clinical Practice **2 credits**

Students will complete 12 hours of clinical experience per week performing patient assessments, aerosol and humidity therapy, medical gas administration, and bronchial hygiene therapy in acute care hospitals, long-term care facilities, and home care settings.

Corequisite: RESA 124

RESA 217 Neonatal and Pediatric Respiratory Care **3 credits**

This course addresses care of the pediatric patient with cardiopulmonary disease. Diseases of neonates, infants, and children are discussed, as well as equipment and therapy techniques used in treating these diseases. The course includes anatomy, physiology, and pharmacology as they apply to the neonatal and pediatric age group. Clinical application is provided through RESA 201.

Corequisite: RESA 231

Prerequisite: RESA 220

RESA 220 Respiratory Therapeutics and Diagnostic Procedures **3 credits**

This course provides an overview of basic pulmonary function testing including arterial puncture and ABG analysis. In addition, patient care simulations will be used to practice endotracheal intubation, pulmonary rehabilitation, volume expansion therapy, and noninvasive positive pressure ventilation. Laboratory experience includes a hands-on approach to management and troubleshooting of PFT equipment, CPAP/BiPAP units, ABG sampling, and resuscitation equipment. Students will become American Heart Association BLS Instructors.

Corequisite: ENGL 118, RESA 222

Prerequisites: RESA 124, RESA 125

RESA 222 Respiratory Therapeutics and Diagnostic Clinical Practice **2 credits**

Students will complete 12 hours of clinical experience per week performing patient assessments, pulmonary function testing, endotracheal intubation, volume expansion therapy, and noninvasive positive pressure ventilation in acute care hospitals, long-term care facilities, and home care settings.

Corequisite: RESA 220

RESA 226 Pharmacology **2 credits**

Course covers principles of general pharmacology, drug action, and dosage calculation. Students will discuss indications, side effects, hazards, and mechanisms of action regarding respiratory, cardiovascular, neuromuscular, sedative-narcotic, and antimicrobial drugs.

Prerequisites: RESA 101, RESA 112

RESA 230 Critical Care **4 credits**

This course provides direct application of theory, operation, and delivery of mechanical ventilation. Laboratory experience includes a hands-on approach to management and troubleshooting of mechanical ventilators. Assessment of the critically ill patient in intensive care, long-term care, and home care settings is included. Students will begin developing an individual case study.

Corequisites: RESA 204, RESA 231

Prerequisites: RESA 220, RESA 222

RESA 231 Critical Care Clinical Practice **2 credits**

Students complete 12 hours of clinical experience per week performing patient assessments, ventilator initiation, care of the ventilator patient, ventilator weaning, and ventilator troubleshooting in acute care, long-term care, and home care settings. Clinical rotations include pediatric and neonatal intensive care units.

Corequisites: RESA 217, RESA 230

RESA 241 Advanced Diagnostics **3 credits**

This course expands on the advanced modes of mechanical ventilation and diagnostic procedures used in the critical care setting. Laboratory experience includes hemodynamic monitoring, 12-lead ECG, physiologic monitoring, and ventilator graphics. Each student will present a case study to the class and medical director.

Corequisite: RESA 242

Prerequisites: RESA 217, RESA 230, RESA 231

RESA 242 Advanced Diagnostics Clinical Practice **2 credits**

Students will complete 12 hours of clinical experience per week performing patient assessments, care of the ventilator patient, hemodynamic monitoring, 12-lead ECG, physiologic monitoring, and ventilator graphics in acute care hospitals, long-term care facilities, and home care settings. Clinical rotations include pediatric and neonatal intensive care units.

Corequisite: RESA 241

RESA 243 Special Procedures **3 credits**

This course provides an overview of special procedures within the scope of practice for an advanced respiratory care practitioner including bronchoscopy, tracheostomy, polysomnography, chest tubes, thoracentesis, and exercise stress testing. Students will become American Heart Association NRP, PALS, and ACLS providers.

Corequisites: RESA 241, RESA 242

Prerequisites: RESA 230, RESA 231

RESA 250 Respiratory Care Capstone **2 credits**

This course provides a study of professional topics as they relate to respiratory care. Emphasis is placed on therapist-patient relations including ethical issues, cultural competence, and patient education. Directed study will assist the student in preparation for NBRC examinations.

Corequisite: RESA 242

Prerequisites: RESA 217, RESA 230, RESA 231

RESA 294 Practicum **6 credits**

This course provides concentrated clinical experience in all areas of respiratory care. Emphasis is placed on the development of specific skills and knowledge in critical care, pulmonary function testing, and neonatal/pediatric care.

Prerequisite: RESA 250

RESA 295 Independent Study in Respiratory Care **1-3 credits**

An individualized program of independent study, clinical activity, research, or reading, jointly designed by a first- or second-year respiratory care student and an instructor with the approval of the program chairperson.

RESA 310 Cardiopulmonary Assessment **3 credits**

Presents in-depth knowledge of physical examination and diagnostic techniques for comprehensive evaluation of the cardiopulmonary system. The course focuses on methods of assessing the patient's current status and response to therapy. Techniques are demonstrated, and students have the opportunity to develop their skills in the laboratory setting.

RESA 311 Advanced Practice in Neonatal/Pediatric Respiratory Care **3 credits**

This course examines pathologies associated with congenital malformations of the newborn. Students develop an understanding of surgical interventions and the implications for the respiratory care management of patients before, during, and after surgery. Students complete 48 hours of clinical experience performing patient assessments and managing invasive and noninvasive mechanical ventilation, high-frequency oscillatory ventilation, medical gas administration, and extra-corporeal membrane oxygenation.

RESA 320 Cardiopulmonary Monitoring **3 credits**

Presents in-depth methods of monitoring the cardiopulmonary status of the patient. The course focuses on methods of assessing the patient's current status and response to therapy. Monitoring equipment is demonstrated, and the student has the opportunity to practice application of the equipment in a laboratory setting.

RESA 321 Pediatric Respiratory Care Case Management **3 credits**

This course provides a study of the pathophysiology, clinical findings, and management of pediatric patients with various clinical disorders. Students develop the skills in developing respiratory care plans for the management of pediatric patients suffering from pulmonary and non-pulmonary disorders. Students complete 48 hours of clinical experience developing respiratory care plans for patients in medical and pulmonary rehabilitation units.

RESA 330 Advanced Topics in Respiratory Care **3 credits**

Presents an in-depth explanation of a topic of interest to the advanced-level practitioner. A different topic is covered each semester and includes but is not limited to mechanical ventilation, delivery of respiratory care at alternate sites, pulmonary function testing, and professional issues. The course may be repeated for credit; specific topics may not be repeated.

RESA 331 Pediatric Polysomnography **3 credits**

This course is a study of the basic skills of polysomnography applied in the pediatric setting. Students identify at-risk patients; complete the initial diagnostic patient setup; interpret wave forms; analyze results; and develop treatment plans for sleep disorders in pediatric patients. Students complete 24 hours of clinical experience in the polysomnography laboratory.

RESA 495 Independent Study in Respiratory Care **1-3 credits**

An individualized program of independent study, clinical activity, research, or reading, jointly designed by a third- or fourth-year respiratory care student and an instructor with the approval of the program chairperson.

RTCA 114 Practicum I **1 credit**

An introductory internship of supervised practicum hours where the student acquires the knowledge and skills relevant to the use of radiologic methods and techniques. This course focuses on the upper and lower extremities and the respiratory and abdominal systems and is correlated with RTCA 116 and RTCA 116L through demonstrations, practice sessions, and laboratory simulations.

Corequisites: RTCA 116, RTCA 116L

RTCA 115 Radiology in the Modern Medical World **1 credit**

An introductory course into radiography specifically and the health care profession generally. Topics included are a brief history of medicine and radiology; hospital organizational systems; health care delivery setting; reimbursement policies within the health care industry; practicing in the medical field; ethical, professional, and medicolegal issues; and opportunities for career advancement.

Corequisites: RTCA 114, RTCA 116 and 116L

RTCA 116 Radiologic Technology I **3 credits**

An introduction to the field of radiography, including the following areas or concepts: basic radiographic terms and principles; radiation safety and protection; radiation exposure and techniques; gross and radiographic anatomy of the chest, abdomen, upper and lower extremities and the alimentary tract; radiographic positioning skills; compassionate patient care skills; radiographic terminology; and radiographic image identification and evaluation of the anatomic areas listed above.

RTCA 116L Radiologic Technology I Laboratory **1 credit**

A three-hour laboratory will be correlated with RTCA 116. The students will see demonstrations and be able to practice all radiographic examinations listed in the companion course (RTCA 116). Simulated competency tests will assess performance.

Corequisite: RTCA 116

RTCA 120 Patient Care **2 credits**

A course in basic patient care for the allied health worker that includes one hour of lecture and two hours of skills laboratory each week. These sessions include discussions, demonstrations, and competency examinations over the following topics: communication skills, vital signs, patient assessment, patient histories, body mechanics, infection control, oxygen administration, the principles of drug administration, and sterile technique. A typed paper is required in this course.

RTCA 121 Medical Terminology* **1 credit**

A one-hour-per-week course in basic medical terminology used in allied health professions, including correct spelling, abbreviations, word roots, and definitions. The course includes lecture, assigned workbook exercises, and written tests.

RTCA 123 Practicum II **2 credits**

A continuing internship of supervised clinical practicum hours where the student acquires the knowledge and skills relevant to the usage of radiologic methods and techniques. This course focuses on the genitourinary system, spine, and skull/facial radiography and is correlated with RTCA 126 and RTCA 126L through demonstrations, practice sessions, and laboratory simulations. It is recommended that the student enter the course with a functional knowledge of Windows operations for the clinical setting.

Prerequisite: RTCA 114

Corequisites: RTCA 126, RTCA 126L

RTCA 126 Radiologic Technology II **3 credits**

A continuation of Radiologic Technology I. The course includes discussions, demonstrations, radiographic image critique, and practice sessions over the radiologic examinations of the urinary system, spinal column, bony thorax, and cranium.

Prerequisites: RTCA 116, 116L, 119

Corequisite: RTCA 126L

RTCA 126L Radiologic Technology II Laboratory **1 credit**

A three-hour laboratory is correlated with RTCA 126. The students will see demonstrations and be able to practice the radiologic examinations listed in the companion course (RTCA 126). Simulated competency tests will assess performance.

Prerequisites: RTCA 116, 119

Corequisite: RTCA 126

RTCA 131 Practicum III **2 credits**

A continuing internship of supervised clinical practicum hours where the student acquires the knowledge and skills relevant to the usage of radiologic methods and techniques. This course focuses on portable/trauma, pediatric, surgical, and non-routine radiography and is correlated with RTCA 133 through demonstrations, practice sessions, and laboratory simulations. This course is competency-based. It is recommended that the student enter the course with a functional knowledge of Windows operations for the clinical setting.

Prerequisite: RTCA 123

Corequisite: RTCA 133

RTCA 133 Radiologic Technology III **2 credits**

A course that includes radiologic examination of the non-routine skeletal procedures, pediatric radiography, the biliary system, and mobile/trauma applications of radiologic technology. Discussions and demonstrations of radiographic image critique will be presented. A typed paper is required for this course.

Prerequisites: RTCA 126, 126L

RTCA 135 Fundamentals of Radiation and Generation I **2 credits**

An introductory study into X-ray generation, including fundamental X-ray generation; radiation protection; control of high voltage and electrical hazards; and methods of rectification. By the end of this course, the student will have received an introduction to the X-ray machine as well as an in-depth knowledge of electricity, magnetism, electromagnetism, electromagnetic radiation, digital imaging concepts, and the structure of the atom. A typed, documented paper is required for this course.

RTCA 137 Formulating Radiographic Technique **2 credits**

A study of the fundamental methods of producing high-quality radiographs with a minimum of patient exposure and cost. The course will review the effects of radiation on X-ray film and digital imaging receptors and how intensifying screens, grids, filters, and artifacts can affect the contrast, density, and image quality of the radiograph. Course also includes a comparison of digital and film processes. Knowledge of word processing and spreadsheets is recommended for this course.

Prerequisites: RTCA 126

RTCA 210 Advanced Patient Care **2 credits**

A course designed to provide advanced skills and knowledge in patient care. The course includes but is not limited to basic pharmacology for radiographers, emergency procedures, venipuncture, patient assessment and monitoring, drug administration, sterile procedures and setups, and basic laboratory values. Functional knowledge of word processing and presentation software such as Power Point are recommended for this course.

Prerequisite: RTCA 120, 121

RTCA 215 Practicum IV **3 credits**

A continuing internship of supervised clinical practicum hours where the student acquires knowledge and skills relevant to the use of radiologic techniques. This course focuses on mastering routine radiographic procedures covered in previous courses; trauma, surgery, and portable radiography; and semi-special radiologic procedures; course is correlated with RTCA 220. It is recommended that the student enter the course with a functional knowledge of Windows operations for the clinical setting.

Prerequisite: RTCA 131; corequisite: RTCA 220

RTCA 218 Fundamentals of Radiation and Generation II **3 credits**

A continuation of Fundamentals of Radiation and Generation I with special emphasis on modern X-ray tubes; processing; X-ray production and interaction with matter; digital imaging applications; radiographic film and recording devices; grids; three-phase generators; basic X-ray circuits; fluoroscopy; and image intensifiers.

Prerequisite: RTCA 135

RTCA 219 Pathology for Radiographers **3 credits**

A study of structural and functional manifestations of diseases that includes pathologic processes of all major anatomic systems and covers developmental, acute, chronic, traumatic, and neoplastic diseases. Discussion will center upon diseases related to imaging sciences. Classes will consist of lectures, discussions, and case presentations to enhance the students' critical thinking skills.

Prerequisite: RTCA 133

RTCA 220 Radiologic Technology IV **2 credits**

A continuation of Radiologic Technology I, II, and III. This course provides the student with a cognitive knowledge of special and semi-special imaging procedures and enables the student to understand and experience them in the clinical setting. Subjects covered include, but are not limited to: angiography, interventional procedures, myelography, arthrography, tomography, computed tomography, digital radiography, magnetic resonance imaging, mammography, and examinations of the reproductive system. A typed, documented paper is required for this course.

Prerequisites: RTCA 133, 137

RTCA 222 Principles of Radiobiology **1 credit**

A study of the biological effects of ionizing radiation. Emphasis is placed on the basic concept of radiation dose and the interactions of radiant energy with living matter. Mutagenesis, carcinogenesis, embryonic and fetal effects, and other topics relevant to medical applications of ionizing radiation are stressed. A typed paper is required for this course.

Prerequisites RTCA 218, 219

RTCA 231 Quality Assurance in Radiography **2 credits**

A study of the basic concepts and practical applications of quality control techniques employed in Radiologic Technology to monitor X-ray production equipment, film systems, film processing, and ancillary equipment. Functional knowledge of word processing and spreadsheets is recommended for this course.

Prerequisite: RTCA 218

RTCA 239 Practicum V **3 credits**

The fifth semester of supervised clinical practicum hours. The student applies the learned knowledge and skills relevant to the usage of radiologic methods and techniques. The student demonstrates final competency in a wide variety of radiographic procedures. It is recommended that the student enter the course with a functional knowledge of Windows operations for the clinical setting.

Prerequisite: RTCA 215

RTCA 240 Practicum VI **1 credit**

The last clinical term allows the student to demonstrate the affect skills necessary for the entry-level radiographer. Team work, professionalism, and multitasking are the major areas in which the student will be evaluated as a culmination of all clinical experiences.

Prerequisite: RTCA 239

RTCA 291 Radiology Simulated Registry **2 credits**

A course that prepares the second-year student radiographer for the ARRT Registry Examination through review and simulated registry examinations.

Prerequisite: All RTCA courses

RTCA 295 Independent Study in Radiologic Technology **1-3 credits**

An individualized independent study with the advice and approval of the radiologic sciences and imaging department faculty. The student may pursue the study of a specific area of radiologic technology such as research, laboratory experimentation, or both. Topics must be mutually agreed upon by the student and the instructor before registration.

SLHP 200 Health Care Needs of the Hispanic Population **2 credits**

A course designed to prepare students to provide accessible, culturally appropriate, quality health services to the Hispanic population. The emphasis of the class is twofold: to provide students with the tools necessary to address health care issues and research national health care trends through a culturally sensitive approach; and to introduce students to basic Spanish phrases and vocabulary so that they can communicate, interview, and provide care.

SLHP 301 International Health **2 credits**

An introduction to the global health care system emphasizing developing countries. Health and illness issues will be discussed in relation to the world community. Application of the topics discussed will be pursued in a service-learning experience outside the United States. Students will be expected to travel outside the United States. This course includes 40 service-learning hours. Students not enrolled in the service learning honors program may take course with permission of instructor(s) and advisor.

Corequisite or prerequisite for SLHP students: HEPR 375, Cultural Diversity in Health Care

SLHP 331 Health Care Needs of Underserved Populations **2 credits**

An introduction to the health care needs of underserved populations in the United States. Topics related to health and illness problems of diverse groups in the United States will be discussed, including but not limited to homeless groups, migrant workers, urban poor, and those living in rural settings. Application of the topics discussed will be used in a service-learning experience in a local community. This course includes 40 service-learning hours. Students not enrolled in the service learning honors program may take the course with permission from the instructor(s) and advisor.

Corequisite or prerequisite for SLHP students: HEPR 375, Cultural Diversity in Health Care

SLHP 501 Health Care Activism and Research **3 credits**

The study of health care delivery and health policy through research-based health activism. The focus is on developing a research proposal that reflects some health issue and how it coincides with a vision of social change in health care. Course develops practical skills for collecting and analyzing data and presenting it in a form understandable to policymakers. Students are encouraged to develop research project proposals that reflect their own interests and abilities. Graduate students taking this course write a research proposal.

Prerequisite: HEPR 410 or permission of instructor

SLHP 530 Fellowship Practicum I **2 credits**

Student starts to demonstrate the application of service in the local community. Implementing the first part of the project plan proposed in the student's fellowship application, the student serves at a local agency, providing service to clients with health care needs.

Prerequisite: Permission of instructor

SLHP 531 Fellowship Practicum II **2 credits**

Student completes the demonstration of the application of service in the local community using the approved plan from the fellowship application. The student completes the service project at a local agency, serving clients with health care needs.

Prerequisite: Permission of instructor

SOCI 115 Principles of Sociology **3 credits**

A general introduction to the basic forms of human association and interaction, dealing with social processes, institutions, cultures, and personality.

SOCI 226 Marriage and the Family **3 credits**

A study of the family as a social institution with emphasis on dating, love, courtship and marriage, sex, child-rearing, marital problems, and divorce.

SOCI 295 Independent Study in Sociology **1-3 credits**

Independent study is available primarily for transfer students whose previous coursework does not meet content or credit equivalency. Other extenuating circumstances may also require the use of an independent study. A student must submit the independent study request form, available from the records office, before an independent study is granted. Permission is given on an individual basis.

SOCI 304 Modern Social Problems **3 credits**

A concentration on major social problems in America. Content varies from semester to semester. Course will include historical development, current status, and analysis using major social theories.

SOCI 320 Topics in Social Science **3 credits**

An exploration into various issues associated with sociology and psychology.

SOCI 325 Topics in Cultural Studies **1-4 credits**

Study of one of the traditional areas of cultural studies. Lectures, laboratory times, and prerequisites will vary according to the topic offered.

SOCI 375 Cultural Diversity in Health Care **3 credits**

The study of the principles of cultural diversity specifically applied to the health care setting. Students explore social and cultural dimensions of health and health care and discuss assessment and intervention techniques appropriate to specific cultural groups.

Prerequisites: ENGL 105 or equivalent and acceptance into a College major

SONO 201 Introduction to Sonography I **1 credit**

An introduction to the profession of diagnostic medical sonography and the role of the sonographer. Emphasis on sonographic terminology, communication, and professionalism in the clinical setting; history of ultrasound, accreditation, professional organizations, and registry significance will be presented.

SONO 300, 305, 310 Clinical Sonography I, II, III **4 credits each**

Consecutive clinical sonography courses are an internship of supervised clinical practicum hours in which the student acquires the knowledge and skills relevant to abdominal, vascular, and gynecological sonography specialties. Students must achieve specific levels of clinical competence before advancing to the next clinical course.

SONO 301 Sonographic Physics and Instrumentation I **2 credits**

The first course in a two-course series of sonographic physics and instrumentation covering basic principles. Topics include sound wave anatomy and properties, attenuation, echoes, piezoelectricity, transducers, focus, resolution, and imaging instruments.

SONO 302 Sonographic Physics and Instrumentation II **2 credits**

The second course in a two-course series of sonographic physics and instrumentation covering basic principles. Topics include hemodynamics, Doppler equation, Doppler angle, color Doppler principles, color maps, continuous-wave and pulsed-wave Doppler, spectral analysis, spectral display, ultrasound artifacts, and bioeffects.

Prerequisite: SONO 301

SONO 306 Abdominal Sonography I **4 credits**

The first course in a two-course series covering sonographic imaging of the abdomen and small parts. General principles of sonography scanning procedures, lab values related to patient disease processes, ultrasound characteristics of the various organs, and pathology of the abdominal vasculature, liver, biliary system, pancreas, and spleen will be discussed.

SONO 307 Abdominal Sonography II **3 credits**

The second course in a two-course series covering sonographic imaging of the abdomen and small parts. Scanning procedures, lab values, ultrasound characteristics, and pathology of the gastrointestinal tract, kidneys, urinary tract, adrenal glands, prostate, thyroid, breast, and scrotum will be discussed.

Prerequisite: SONO 306

SONO 311 Vascular Sonography I **4 credits**

The first course in a two-course series covering the study and uses of sonography in the diagnosis of vascular disease. Basic protocols for performing vascular sonography including carotid, lower-extremity, and upper-extremity arterial testing will be discussed. Indications, patient history, physical examinations, imaging techniques, and arterial pathology will be covered in depth.

SONO 312 Vascular Sonography II **3 credits**

The second course in a two-course series covering the study and uses of sonography in the diagnosis of vascular diseases. Duplex, pulsed, and continuous-wave Doppler velocimetry and plethysmography testing of peripheral, intra/extracranial systems will be studied. Test validation, disease epidemiology, and therapeutic intervention in vascular disease will also be presented.

Prerequisite: SONO 311

SONO 316 Cardiac Testing **1 credit**

An introductory course that covers various forms of cardiac testing excluding echocardiography. Basic EKG interpretation and the principles of EKG, Holter monitoring, an introduction to cardiac catheterization, and cardiac stress testing will be covered.

SONO 321 Gynecological Sonography **2 credits**

Applications and scanning methods including transabdominal and transvaginal imaging of the female pelvis. Gynecologic pathology including tumors, pelvic inflammatory diseases, and congenital pelvic pathology will be presented. The menstrual cycle and its relationship to the sonographic appearance of reproductive organs and surrounding anatomy will be studied in depth.

SONO 395 Independent Study in Sonography **1-3 credits**

An individualized course in which the student may investigate a special topic related to diagnostic medical sonography. The student will design a project and present it to the instructor for final approval.

Prerequisite: Approval from department chair

SONO 400, 405 Clinical Sonography IV, V **4 credits each**

Consecutive clinical sonography courses are an internship of supervised clinical practicum hours in which the student acquires the knowledge and skills relevant to obstetrical sonography and echocardiography specialties. Students must achieve specific levels of clinical competence before advancing to the next clinical course and final clinical externship.

Prerequisite: MESO 310

SONO 401 Echocardiography I **4 credits**

The first course in a two-course series covering the study and use of sonographic imaging as it relates specifically to the heart. Two-dimensional imaging as well as M-mode and Doppler testing in the detection of diastolic dysfunction and valvular and ischemic heart disease will be studied. Specialty echocardiographic examinations such as transesophageal, stress, and contrast studies will be introduced.

SONO 402 Echocardiography II **3 credits**

The second course in a two-course series covering the study and use of sonographic imaging as it relates specifically to the heart. Pathophysiology of cardiac and pericardial disease processes, prosthetic heart valves, and cardiac tumors will be covered. An introduction to pediatric echocardiography and congenital heart defects will also be included in this course.

Prerequisite: SONO 401

SONO 406 Registry Review **2 credits**

A review class to prepare for the sonography registry examinations offered by the American Registry of Diagnostic Medical Sonography (ARDMS). This course consists of comprehensive review and simulated examinations in abdomen and small parts, vascular, obstetrics and gynecology, and adult echocardiography.

Prerequisite: SONO 405

SONO 408 Seminar/Capstone **1 credit**

A senior capstone course that emphasizes case study presentations, professional ethics, legal issues in sonography, informatics, resume writing, and employment opportunities.

SONO 410 Clinical Externship **6 credits**

A final clinical practice experience offered during the final semester of the sonography curriculum. Students may use this practicum as an opportunity to integrate their experience from the previous two years and select a sonography specialty or specialties in which to do their rotations. Practicum experiences may take place at any site in which the students are under the supervision of a physician or registered sonographer, vascular technologist, or echocardiographer. New outside clinical affiliations may be sought. The student is responsible (under the guidance of the clinical coordinator) for the arrangement of these experiences.

Prerequisite: SONO 405

SONO 411 Special Project in Sonography **2 credits**

Allows students to pursue advanced learning experiences in various aspects of diagnostic medical sonography. Students will develop a project in consultation with a sonography faculty advisor. This course is offered as a senior project course but may be substituted with a sonography specialty course.

SONO 420 Sonography Specialty Topics **2 credits**

A choice of advanced specialty topics in diagnostic medical sonography. Options may include the study of breast sonography, fetal echocardiography, pediatric echocardiography, neurosonography, and musculoskeletal sonography. This course may be substituted by completing the special project course.

SONO 421 Obstetrical Sonography **4 credits**

Applications and scanning methods of obstetrical sonography will be the focus of this course. Sonographic examination in early pregnancy, estimation of gestational age, the placenta, late pregnancy, abnormal growth and development, and special procedures will be presented. Pathology associated with pregnancy will be discussed. The application of sonography in the diagnosis and treatment of infertility will also be studied.

Prerequisite: SONO 321

SPAN 101 Spanish Culture and Communication I **3 credits**

Designed to develop basic communication skills in speaking, listening, reading, and writing the Spanish language. Strong emphasis will be given to cultural aspects of the language and Spanish-speaking communities. This course is for beginners with no previous exposure to the Spanish language.

SPAN 102 Spanish Culture and Communication II **3 credits**

Designed to continue developing basic communication skills in speaking, listening, reading, and writing the Spanish language. Strong emphasis will be giving to understanding and producing conversations and dialogues in the target language. Culture continues to be an important component of the course. Previous knowledge of Spanish is required.

Prerequisite: SPAN 101

SPAN 301 Spanish for Health Professions **3 credits**

A hands-on study of the Spanish language and culture related to health professions. Students gain familiarity with basic written and oral vocabulary for the assessment of Spanish-speaking patients in a variety of settings. A major component of the course is a service-oriented project in the community. Previous basic experience with the Spanish language is required.

Prerequisites: placement exam; one semester of college-level Spanish.

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Dave Weigley, MBA
President, Columbia Union Conference, SDA
Columbia, Md.

Duane Wood, DBA
Executive director, program development
Cedarville University

HONORARY MEMBERS

George G. Burton, MD
Associate Dean, medical affairs
Kettering College of Medical Arts

Theodore Miller, MD
Professor, Loma Linda University

THE COLLEGE

Kettering College of Medical Arts is the educational division of Kettering Medical Center, which in turn is part of the Kettering Health Network.

The college opened in 1967, and like the hospital next door, it was part of the original vision of Eugene and Virginia Kettering, Charles F. Kettering's son and daughter-in-law. Eugene and Virginia Kettering wanted education to be a key feature of the institution they worked so hard to establish, and programs in nursing, respiratory care, and radiologic technology came into being at the start. In 1969, 66 students made up the first graduating class.

The physician assistant program started in 1973; the diagnostic medical sonography program began in 1981. The college's first four-year degree, in health professions, came into being in 1997, and a bachelor's degree in nursing followed in 2001. In 2006, the college began offering a bachelor's in human biology and a master's degree in physician assistant studies.

OFFICERS OF THE COLLEGE

Chairman of the Board: Fred Manchur
President: Charles Scriven, PhD

EXECUTIVE TEAM

Dean for Academic Affairs: William G. Nelson, EdD
Dean for Assessment and Learning Support: Beverly Cobb, PhD
Dean for Enrollment Management: Victor Brown, MA
Senior Finance Administrator: Jack Burdick, CPA, MBA

GENERAL STAFF

Admissions and Records

Senior Information Officer: Jim Nesbit, MBA
Registrar: Robin Vanderbilt, BS

Libraries

Director of the Learning Commons and Medical Library: Beverly Ervin, MSA

Student Services

Dean for Assessment and Learning Support: Beverly Cobb, PhD
Dean for Enrollment Management: Victor Brown, MA
Director of Student Finance: Kim Snell
Student Accounts Representative: Melissa Reynolds
Director of Student Life and the Residence Hall: Amy L. Ortiz-Moretta, BS
Associate Director of Student Life and the Residence Hall: Jerry Mahn, MDiv, MBA

BUSINESS

Senior Finance Administrator: Jack Burdick, MBA, CPA (Tennessee)
Treasurer*: Ed Mann, BS
Vice President of Human Resources*: Beverly Morris, RN, MS
(*Kettering Medical Center positions)

ACCREDITATIONS

The College

The Seventh-day Adventist Board of Regents approved the opening of Kettering College of Medical Arts in September 1967. The Ohio Board of Regents authorized the degrees in March 1968. The North Central Association of Colleges and Schools, 30 N. LaSalle St., Suite 2400, Chicago, IL 60602, 800-621-7440, granted correspondent standing in July 1968, candidate standing in July 1970, and full accreditation in March 1974. The College has been approved by the respective U.S. government agencies for acceptance of foreign students and for student eligibility under the U.S. Department of Veterans Affairs education benefits and the U.S. Department of Education and Health and Human Services loans and grants. Individual professional curricula are approved as follows:

Diagnostic Medical Sonography

The diagnostic medical sonography program is accredited by the Commission on Accreditation of Allied Health Education Programs, 1361 Park St., Clearwater, FL 33756, upon recommendation by the Joint Review Committee on Education in Diagnostic Medical Sonography, 2025 Woodlane Dr., St. Paul, MN 55125-2998.

Nursing

The Associate of Science program is approved by the Ohio Board of Nursing, 17 S. High St., Suite 400, Columbus, OH 43215-7410. Both the Associate of Science and Bachelor of Science in Nursing completion programs are accredited by the National League for Nursing Accrediting Commission, 61 Broadway, 33rd Floor, New York, NY 10006.

Physician Assistant

The physician assistant program at KCMA is accredited through the Accreditation Review Commission on Education for the Physician Assistant, 12000 Findley Road, Suite 240, Duluth, GA 30097, and the North Central Association of Colleges and Schools. The physician assistant program is also an active member of the Physician Assistant Education Association (PAEA).

Radiologic Sciences and Imaging

Opened in 1965 as the Kettering Memorial Hospital School of Radiologic Technology, the radiologic technology program has been accredited by the Joint Review Committee on Education in Radiologic Technology, 20 N. Wacker Dr., Suite 2850, Chicago, IL 60606-3182, since that time.

The advanced imaging programs are accredited within the scope of the College's regional accreditation process.

The nuclear medicine program is accredited by the Joint Review Committee on Educational Programs in Nuclear Medicine Technology (JRCNMT), 2000 W. Danforth Road, Suite 130, No. 203, Edmond, OK 73003; 405-285-0546; http://www.jrcnmt.org/.

Respiratory Care

The respiratory care program is approved by the Ohio Respiratory Care Board, 77 S. High St., 16th floor, Columbus, OH 43215. The respiratory care, Kettering College of Medical Arts program is accredited by the Commission on Accreditation for Respiratory Care, 1248 Harwood Road, Bedford, TX 76021-4244.

Faculty

The date following the name indicates the year the faculty member began employment at Kettering College of Medical Arts. The date following the faculty member's academic rank indicates the year in which that rank was granted.

FRANCES ANGERER, 2006
MPH Johns Hopkins School of Public Health
BS University of Dayton
AS Kettering College of Medical Arts
PA-C
Assistant Professor, Physician Assistant, 2006

HOPE APPELBAUM, 2003
BS Wright State University
AS Kettering College of Medical Arts
RRT
Instructor, Respiratory Care, 2003

LAWRENCE R. BENEKE, 1985
MS University of Dayton
BS Heidelberg College
AA Fullerton Community College
RT(R) (ARRT)
Professor, 1995; Chair, Radiologic Sciences and Imaging, 1996

RONALD BOWERS, 2006
MS St. Francis University
BA Excelsior College, formerly Regents College
PA certificate U.S. Army
Assistant Professor, Physician Assistant, 2006

WENDY BOWLES, 2006
RN, CPNP
MSN University of Cincinnati
BSN Wright State University
Assistant Professor, Nursing, 2006

FRANK J. BREWSTER, 1981
MS University of Dayton
BA Wittenberg University
AS Kettering College of Medical Arts
RT(R) (CT)
Professor, Radiologic Sciences and Imaging, 1991
Clinical Coordinator, 1996

LAURIE BROMAGEN, 2004
MS University of Maryland
BS Wright State University
Assistant Professor, Arts and Sciences, 2009

STEPHANIE BUTKUS, 2004
RN, CPNP
MS Wright State University
BSN Texas Christian University
Assistant Professor, Nursing, 2004

GEORGE G. BURTON, MD, 1983
MD Loma Linda University
MS Loma Linda University
Professor, 1983
Medical Director, Respiratory Care, 1983

BEVERLY J. COBB, 1989
RN
PhD Andrews University
MS Loma Linda University
BS Andrews University
Dean for Assessment and Learning Support, 2008
Director, Division of Nursing, 2007

NANCY E. COLLETTI, 2000
MS State University of New York
BS State University of New York
RRT, R.C.I.S., C.P.F.T.
Associate Professor, Respiratory Care, 2009

PAUL A. DELANGE, 1982
PhD University of Dayton
MS Miami University
BA Cedarville College
Professor, Biology, 1995
Chair, Arts and Sciences, 1996

ADELAIDE DURKIN, 2007
MSN Loma Linda University
BSN Centro Universitoria
Assistant Professor, Nursing, 2007

BEVERLY J. ERVIN, 1998
MSA Central Michigan University
BS Antioch University
RRT
Associate Professor and Director of Learning Commons, 2007

JILL EVANS, 1982
MA Andrews University
BA Andrews University
Professor, Arts and Sciences, 1995

ALISA FRENCH, 2006
MBA Wright State University
BS Wright State University
RRT-NPS, AC-C
Assistant Professor, Respiratory Care, 2006

CAROLYN GERSCH, 2001
RN
MSN University of Phoenix
BS Indiana University
AS Vincennes University
Associate Professor, Nursing, 2004

FRANK GOLICH, 2006
PhD Miami University
BS Illinois Institute of Technology
Associate Professor, Chemistry, 2006

JENNILOU GROTEVANT, 2003
MALS University of Iowa
BA Indiana University
Associate Professor, Learning Commons, 2003
Academic support coordinator, 2007

JOYCE A. GRUBE, 1998
MS Ohio State University
BS Ohio State University
RDMS
Chair, Medical Sonography, 2002

JILL-RENAE GULCZINSKI, 2006
MS-PAC George Washington University
BS State University of New York
Assistant Professor, Physician Assistant, 2006

NICOLE HEIMGARTNER, 2004
RN
MSN University of Phoenix
BSN Spalding University
Assistant Professor, Nursing, 2004

ROBERT HOOVER, 1996
MA University of Central Florida
BS University of Central Florida
AS Kettering College of Medical Arts
RTCR
Associate Professor, Radiology, 2007

LISA HUBER, 2004
RN
MS Walden University
BSN University of Cincinnati
AS Kettering College of Medical Arts
Assistant Professor, 2008

AMY JAUCH, 2008
RN
MSN Indiana Wesleyan University
BS Indiana Wesleyan University
AAS Central Texas College
Instructor, Nursing, 2008

DAVID LIM, 2009
MD Loma Linda University
Medical Director, Physician Assistant Program, 2009

JIM LONDIS, 2005
PhD Boston University
MA Andrews University
BA Atlantic Union College
Professor, Arts and Sciences, 2005

BETH A. MAXWELL, 1999
BS University of Dayton
AS Kettering College of Medical Arts
RVT, RDCS, RDMS (AB/OB)
Assistant Professor, Medical Sonography, 2005

D. VAIL McGUIRE, 1988
PhD Miami University
MA Wright State University
BA Wittenberg University
Professor, Arts and Sciences, 2008

SHARON R. MILLARD, 2000
RN
PhD University of Texas at Austin
MS Loma Linda University
BS Loma Linda University
AS Pacific Union College
Professor, Chair, BSN Completion, 2000

RACHEL MOUTOUX, 2008
BS Kettering College of Medical Arts
AS Kettering College of Medical Arts
Instructor, Medical Sonography, 2008

BENJAMIN NAVIA, 2006
PhD Loma Linda University
MS Andrews University
BS Pontifical Catholic University of Puerto Rico
Associate Professor, Arts and Sciences, 2009

WILLIAM G. NELSON, 2008
EdD Ball State University
MEd Worcester State College
BA Atlantic Union College
Dean for Academic Affairs, 2008

JANE NESBIT, 2004
MA Ohio State University
BS Columbia Union College
Associate Professor, Arts and Sciences, 2008

PATRICIA NICOSIA, 2000
MS Neumann College
BA Immaculata University
Associate Professor, Arts and Sciences, 2002

CYNTHIA PARKER, 2000
RN
MS Andrews University
MSPH Walden University
BSN Andrews University
AS Sinclair Community College
Associate Professor, Nursing, 2004

KELVIN PAULSEN, 2006
BS Kettering College of Medical Arts
AS Kettering College of Medical Arts
RVT, RDMS
Instructor, Medical Sonography, 2006

DAVID PRICE, 2005
MS Central Michigan University
BS Park College
AS Park College
Assistant Professor, Arts and Sciences, 2005

L. SUSAN PRICE, 1991
PhD University of Dayton
MSEd University of Dayton
BS Park College
AS Central Ohio Technical College
AS Kettering College of Medical Arts
RDMS, RVT
Professor, Health Care Professional Studies, 2009

MARSHA L. PURTEE, 1988
RN
MS Andrews University
BSEd Wright State University
Associate Professor, Nursing, 1995

RANDA K. QUALE, 1993
MS Wright State University
BS Dana College
Associate Professor, Arts and Sciences, 2006

PAULA K. REAMS, 1987
RN, LMT
PhD University of Dayton
MS Wright State University
BSN University of Cincinnati
Professor, Nursing, 2006
Chair, Health Professions, 2007

CHERIE R. REBAR, 2005
RN, FNP
MSN University of Phoenix
MBA University of Phoenix
BME Morehead State University
AS Kettering College of Medical Arts
FNP certificate University of Massachusetts
Associate Professor, Nursing, 2008
Associate Director, Division of Nursing, 2009

ROBERT REEDER, 2008
BS Ohio State University
BS Ohio State University
MA Wright State University
Assistant Professor, Arts and Sciences, 2008

MILDRED B. ROACH, 1998
MS University of Maryland
BSN St. Louis University, Philippines
PA-C
Clinical Coordinator, Physician Assistant, 2002
Associate Professor, Physician Assistant, 2006

MARGARET RODENBURG, 2004
PhD University of Nebraska
BS Dana College
Professor, Arts and Sciences, 2004

WILLIAM RODENBURG, 2004
PhD University of Nebraska
MS University of Nebraska
BS Dana College
Professor, Arts and Sciences, 2004

C. THOMAS RULE, 1979
MA Ohio State University
BS Southern College
Professor, Arts and Sciences, 1995

KATHLEEN SALGADO, 2001
MLS Kent State University
BS University of Dayton
Associate Professor, Learning Commons, 2006

DANIEL L. SCHOUN, 1999
MS Andrews University
BS Andrews University
Assistant Professor, Arts and Sciences, 1999

CHARLES SCRIVEN, 2000
PhD Graduate Theological Union
MDiv Andrews University
BA Walla Walla College
President, 2001

DENISE SEKERAK, 2006
RN
MS Wright State University
BSN Miami University
AS Kettering College of Medical Arts
Associate Professor, Nursing, 2007

JEB SHEIDLER, 2007
MPAS University of Nebraska
BA Miami University
AS Kettering College of Medical Arts
Assistant Professor, Physician Assistant, 2007

TERESA SIMMONS, 1985
MLIS Kent State University
BS Regents College
AS Kettering College of Medical Arts
Assistant Professor, Learning Commons, 2004

ROBERT J. (JOE) SPEARS, 2007
MPAS University of Nebraska Medical Center
BS George Washington University
PA-C
Assistant Professor, Physician Assistant, 2007

TARYN TALBOTT, 2008
MS University of Phoenix
BS Kettering College of Medical Arts
AS Kettering College of Medical Arts
Assistant Professor, 2008

SARAH TAULBEE, 2004
RN
MS Ball State University
BSN Kettering College of Medical Arts
AS Kettering College of Medical Arts
Assistant Professor, Nursing, 2009

JOAN K. ULLOTH, 1983
RN
PhD Andrews University
MSN Loyola University
BSN Southern College
AS Southern College
Professor, Nursing, 1999

DAVID A. VANDENBURGH, 2007
DMin Fuller Theological Seminary
MDiv Andrews University
BS Union College
Associate Professor, 2007

KATHLEEN T. VORHOLT, 1989
RN, CFNP
MSN Indiana University
MSN Wright State University
BSN University of Cincinnati
Professor, Nursing, 1995

REBEKAH M. WANG, 2007
MD Loma Linda University School of Medicine
BA Andrews University
Assistant Professor, Physician Assistant 2007

DARYLL WARD, 2002
PhD University of Chicago
MDiv, Andrews University, Tubingen University
BA Andrews University
AM University of Chicago
Associate Professor, 2006

CAROL J. WARNER, 1980
RN
MS Andrews University
BS Southern Adventist University
AS Kettering College of Medical Arts
Professor, Nursing, 1992

ESTELLA WETZEL, 2005
RN
MSN University of Phoenix
BSN Kettering College of Medical Arts
AS Kettering College of Medical Arts
Assistant Professor, Nursing, 2008

LAURA WILLIS, 2006
RN
MSN Indiana Wesleyan University
BSN Kettering College of Medical Arts
AS Cincinnati State Technical and Community College
Assistant Professor, Nursing, 2009
Coordinator, Service Learning Honors Program, 2009

R. TIMOTHY WILLSEY, 1977
MEd University of Cincinnati
BS Andrews University
Professor, Physical Education, 1987

CLIVE WILSON, 2005
MDiv Andrews University
BS Teesside University
Assistant Professor, Arts and Sciences, 2007

SUSAN M. WULFF, 1997
MS Kirksville College
BS Kettering College of Medical Arts
AS Kettering College of Medical Arts
PA-C
Associate Professor and Chair, Physician Assistant, 2002

ADJUNCT FACULTY, LECTURERS, CLINICAL INSTRUCTORS
Eddie Allen, MS
Robin Allison, RT
Art Altman, MD
Jeremias Andrews, MD
Gene Apple, AAS
Vera Arnold, BSN, RN
Brian Bailey, RT
Connie Bates RT (R)
Dave Bechtol, RRT
Rochelle Beneke, RT(R) (MR)
Bruce Binder, MD
Brenda Blackwell, RT (R)
Deni Bock, RT
Jeanne Bohrer, MD
Michael Bowen, MA, RN, PA-C
Jessa Brady, RT
Judy Braun, BSN, RN
Giselle Bretz, MD
Michele Brooks, RT
Rob Brown, MD
Jan Bruns, BSN, RN
Sheryl Bullman, BSN, RN
Tracy Burdge, RT(R)
Marieta Cabonce, BSN, RN
Kathy Cameron, BS
Cindy Campbell, MSN, RN
Paul Campbell, RT
Angela Cassano, PharmD, BCBS
Sonya Cheatwood, RT
Peg Cizadlo, MS, RN
Roy Coggeshall, RT (R)
Scott Colvin, RT (R) (CT)
Jane Combs, BSN, RN
Dana Cooper, RT
Susan Couch, BS, RN
Cathy Cox, RT
Kathy Craft, BSN, RN
Kyle Crowe, RT (R)
Melissa Curtis RT (R)
Charles Dalton, BS, RT(R)
Kara Davis, RT
Melissa Davis, RT
Cindy Day, BSN, RN
Dianne Ditmer, RN, PhD
Scott Doak, MD
John Donnelly, MD
Lori Draut, RT
Sharon Dully, RT (R)
Tara Dumouchelle, BSN, RN
Judy Durrough, RT (R)
Jerry Edens, RRT
Elbie Foote, RRT
Jennifer Fetter, RT
Nicole Flora, RT
James Frost, MD
Kim Fullen, RT (R)
Elaine Gaigermier, BS, RT(R)(N)
Sandra Gebhart, RT
John German, MD
William Gillen, RT(R)

Liz Golba, RRT, RPFT
Judith Green, MD
Nancy Grillot, MSN, RN, FNP
Anne Grogan-Ryan, MSN, RN
Cynthia Hale, RT
Glenn Hamilton, MD
Kelly Harrison, BSN, RN
D. Jill Hause, RT(R)
Rick Helton, RT(R)
Catherine Hertel, RT(R)(M)
Susan Hertert
Robert Hogue, RT(R)
Deborah Holley, RT(R)
Andrea Denise Irvin, RRT
Debra Jacobs, BSN, RN
Heather Janney, RT(R)D
Linda Jenkins, RT (R)
Nancy Jones, BSN, RN
Kim Joo, BSN, RN
Tom Jostworth, BS
Greven Kamp
Shirley Kamp, RT (R)
Farrah Landes, RT
Scott Leddy, RT (R)
James Lewis, MBA
Dana Liss, BSN, RN
Lorrie Makofka, MSN, RN
Elaine Markon, MS, (CNMT)
Mike Mattheis, RT
Beverley McLean, BSN, RN
Carla McCullough, RT(R)
Janis McDaniel, RT (R)
Tina McMillin, BSN
Molly Mellon, MSN, RN
Lona Meschner, RT (R)
Teresa Meyer, MS
Debbie Milby, CRT
Connie Mitchell, RN, BS
Darla Moore, BSN, RN
Donna Moore, MSN, RN
Rosiland Morris, RT
Dawn Myers, BSN, RN
Anneris Navia, EdD
Jeffrey Neef, BS, PA-C
Joseph Nicosia, MDiv, MS
Mark Norton, RT
Cynthia Olsen, MD
Trisha Osborn, MBA
Karen Osman, RT
Jackie Palmer, PhD
Kim Parker, BSN, RN
Lynda Patterson, RT
Joyce Pennington, BSN, RN
Joel Perlic, RT
Anna Peters, RT
Hyla Peterson, RT (R)
Sherry Phelps, RT (R)
Marsha Pippenger, MA
Rebecca Pryor, RT (R)
Roxanne Quinlan, RT (R)
Rebecca Ranly, RT
Nickolas Raptosh, RT
Nancy Reinhardt, MD
Matthew Reker, RT (R)
Roger Rickel, RRT
Terry Roche, RT
Sue Rudd, RDCS
Debra Ruff, RT
Vicki Ruppert, BSN, RN
Dennis Sadowski, RT(R)
Sherry Salyers, RT (R)
Natalie Saunders, RT
Crystal Saxon, BSN, RN
Connie Schinn, RT(R)
Mary Schudrowitz, MSN, RN, CNA
Michael Schwebler, MBA, RVT
Julie Scott, BSN, RN
Karen Sewell, RT
Michelle Shahan, RT (R)
Mindy Shelley, RT(R)
Julia Shock, RT (R) (CV)
Brenda Sipes, BSN, RN
Glenna Sizemore, RT (R)
Daphne Smith, RT
Sherry Spires, BSN, RN
Richa Stevens, BS, MPH, RN
Debra Stump, MSN, RN
Lalitha Swamy, MD
Lauren Sweet, BSN, RN
Cathy Swick, RT (R)
Lisa Taylor, RT
Mark Taylor, RRT
Tracy Taylor, BSN, RN
Tammy Thompson, MSN, RN
Sherri Trapp, RT
Jude Venanzi, MS, RN
Dawn Vice, RT
Brian Wallen, RT
Annette Watts, MSN, RN
Lynette Weisenborn, BSN, RN

Mary Ann Wiebeck, RT
Jennifer Wilson, MSN, RN
Doug Wilson, RT
Teri Nikolai Wilson, MS, RRT, RPFT
Cynthia Yu, PharmD
Michelle Zummo, BSN, RN

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