The mission of the College of Pharmacy and Health Sciences is to produce competent, caring and compassionate health care professionals that exemplify a commitment to a Christian life of service. The college is focused on promoting academic excellence and educating individuals for careers in health care delivery. The college provides a variety of undergraduate, graduate and professional degrees dedicated to the delivery of patient care and well-being. The College of Pharmacy and Health Sciences teaches students to live a life of Christian service and is committed to preparing students to serve mankind.

The undergraduate portion of the College of Pharmacy and Health Sciences is comprised of the School of Nursing and the School of Health Sciences. The School of Nursing offers a Bachelor of Science in Nursing (BSN) degree. This program prepares the student for a career in the health care field as a registered nurse upon successful completion of the National Council Licensure Examination (NCLEX). Class work will occur on Lipscomb's campus, and the clinical work will take place in a variety of settings. It is an exciting time for the School of Nursing as it grows and continues to fill a need for our society. The School of Health Sciences is comprised of the Department of Kinesiology and the Department of Nutrition. Both programs are designed to enrich students’ lives while teaching them the care of others.

The College of Pharmacy and Graduate Studies in Exercise and Nutrition Science comprise the graduate programs for the College of Pharmacy and Health Sciences. The College of Pharmacy is steeped in the traditions of public service, focused on health care delivery to the public, and committed to the principles of Christian service. The College of Pharmacy curriculum is a four-year doctoral program requiring a minimum of 66 semester credits in pre-pharmacy courses. The Graduate Studies in Exercise and Nutrition Science is a 32-36 hour program combining the disciplines of exercise science and nutrition. Students graduate with a M.S. in Exercise and Nutrition Science.

Off-site learning experiences (i.e. clinical, practicum, internship, etc.) are required in many courses of study at Lipscomb. Successful completion of these experiential courses is required for graduation and/or licensure. Students should be aware that many experiential sites require satisfactory documentation of personal identification in the form of driver's licenses, social security cards, passports, drug screening and background checks. Students should make sure that they are aware of and can meet all documentation requirements well in advance of the timeframe for admission into the respective program and placement into these sites. Failure to provide required documentation for successful entry into these experiential courses will result in failure to complete the desired program of study.

For additional information on any of these programs, please call 615-966-7160.

### College of Pharmacy and Health Science Programs

#### Undergraduate Studies
- Nursing
  - Bachelor of Science in Nursing

#### School of Health Sciences
- Department of Kinesiology
  - Bachelor of Science in Exercise Science
  - Health and Physical Education Teaching, K-12
- Department of Nutrition
  - Bachelor of Science in Dietetics
  - Bachelor of Science in Food Systems Management

#### Graduate Studies
- School of Health Sciences
  - Master of Science in Exercise and Nutrition Science

#### Professional Studies
- Pharmacy
  - Doctor of Pharmacy

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**College of Pharmacy** .................................................. 200

**School of Nursing** .................................................. 202

**School of Health Sciences**

- Department of Kinesiology ............................................. 207
- Department of Nutrition ................................................ 211
The Lipscomb University College of Pharmacy is steeped in the traditions of public service, focused on health care delivery to the public, especially those that are underserved, and committed to the principles of Christian service. The Accreditation Council on Pharmacy Education (ACPE) accredits Doctor of Pharmacy programs offered by colleges and schools of pharmacy in the United States and selected non-U.S. sites. For a Doctor of Pharmacy program offered by a new college or school of pharmacy, ACPE accreditation generally involves three steps: precandidate accreditation status, candidate accreditation status and full accreditation status. (Detailed descriptions of these levels of accreditation can be found on the ACPE website www.acpe-accredit.org.)

Candidate status is awarded to a Doctor of Pharmacy program that has students enrolled, but has not yet had a graduating class. The Doctor of Pharmacy program of the Lipscomb University College of Pharmacy was awarded candidate accreditation status during the June 24-28, 2009 meeting of the ACPE Board of Directors. ACPE is scheduled to perform a site visit March 7-8, 2011. The continuation of candidate status will be decided upon at the June 2011 ACPE Board of Directors meeting. If the program continues to develop as planned, full accreditation of the Doctor of Pharmacy program will be considered by the board following the initial graduation of students from the program in 2012.

The College of Pharmacy will enroll 75 student pharmacists per class each year for a cohort of 300 students within four years.

The Lipscomb University College of Pharmacy curriculum is a four-year doctoral program involving three years of integrated scientific and clinical coursework along with introductory practice experiences followed by a year of advanced practice experiences. The program will prepare “generalists” in pharmacy practice. Student pharmacists will graduate from the college with advanced knowledge and skills applicable for a variety of practice settings in medication therapy management; community, hospital, long term care and other specialty practices; health care management; health outcomes research; leadership; and basic science research.

To provide the proper foundation for students entering the College of Pharmacy doctoral program there must be a minimum of two years of pre-pharmacy work completed which consists of at least 66 semester credits in pre-pharmacy courses. The pre-pharmacy curriculum is outlined below.

Lipscomb University College of Pharmacy
Pre-Pharmacy Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Minimum Semester Credit Hours</th>
</tr>
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<tbody>
<tr>
<td>General Chemistry with laboratories</td>
<td>8</td>
</tr>
<tr>
<td>Organic Chemistry with laboratories</td>
<td>8</td>
</tr>
<tr>
<td>Physics with laboratories</td>
<td>4</td>
</tr>
<tr>
<td>Biology with laboratories</td>
<td>8</td>
</tr>
<tr>
<td>Calculus*</td>
<td>3</td>
</tr>
<tr>
<td>Statistics</td>
<td>3</td>
</tr>
<tr>
<td>English Composition I (or Lipscomb Seminar) &amp; II</td>
<td>6</td>
</tr>
<tr>
<td>Speech Communications</td>
<td>3</td>
</tr>
<tr>
<td>Micro or Macro Economics</td>
<td>3</td>
</tr>
<tr>
<td>Electives - humanities</td>
<td>6</td>
</tr>
<tr>
<td>Electives - social science</td>
<td>6</td>
</tr>
<tr>
<td>Additional electives</td>
<td>8</td>
</tr>
</tbody>
</table>

**TOTAL Hours (Minimum)** 66

*Calculus for Business majors is not accepted.
Pre-Pharmacy

The following suggested proposed courses of study are designed to prepare a student for admission to the Lipscomb University College of Pharmacy. Please discuss a course of study with your adviser to meet individual requirements.

For students prepared to start with Math 1314 Calculus I:

<table>
<thead>
<tr>
<th>Course</th>
<th>F</th>
<th>S</th>
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</thead>
<tbody>
<tr>
<td>Lipscomb Seminar</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Bible 1073, 1083</td>
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<td>3</td>
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<td>Chemistry 1113, 1123</td>
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<td>Chemistry 1211, 1221</td>
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<td>Math 1314</td>
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<tr>
<td>Biology 1134</td>
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<td>4</td>
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<tr>
<td>General Edu. Course/Elective</td>
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<td>2</td>
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<tr>
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For students prepared to start with Math 1113 Algebra or Math 1115 Pre-Calculus:

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>Lipscomb Seminar</td>
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<tr>
<td>Bible 1073, 1083</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Chemistry 1113, 1123</td>
<td>3</td>
<td>3</td>
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<tr>
<td>Chemistry 1211, 1221</td>
<td>1</td>
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<tr>
<td>English 1123</td>
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<td>3</td>
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<tr>
<td>Biology 1134</td>
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</table>

Above courses AND:

<table>
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<tr>
<th>Course</th>
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<tbody>
<tr>
<td>Math 1113, 1123</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Communication</td>
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OR

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>Math 1115</td>
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<td></td>
</tr>
<tr>
<td>Communication 1003</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>15</td>
<td>17</td>
</tr>
</tbody>
</table>

Please visit our website at http://pharmacy.lipscomb.edu for the most up to date information regarding the College of Pharmacy. Students may also contact the College of Pharmacy by e-mail at pharmacy@lipscomb.edu.
Nursing

Sherri Stevens, Director of Nursing Education
Sydney Clayton, Assistant Professor
Mary Hesselrode, Instructor
Jill Stafford, Assistant Professor
Sherry Wright, Instructor

Lipscomb University offers a Bachelor of Science in Nursing (B.S.N.) degree. The nursing program at Lipscomb University is comprised of four semesters of prerequisite courses that are foundational to the upper division nursing courses taught the following four semesters. After the student completes the four semesters of prerequisite courses, he/she must then formally apply to the nursing program and complete four semesters of classroom, lab and clinical education specific to nursing. Upon successful completion of the prerequisite and upper division coursework, the student will be awarded a B.S.N. degree from Lipscomb University. Students who complete this program of study will have experienced multiple clinical placements prior to graduation. This degree provides students with training in nursing education strongly complimented by extensive study in the humanities and social sciences. Thus, students are well-prepared to function as a nurse and also have the necessary foundation to pursue masters and doctoral studies in nursing.

Nursing Program Objectives

Graduates of the Lipscomb University B.S.N. program will be able to:

1. Synthesize knowledge from nursing, the humanities, and the biophysical and social sciences into the practice of professional nursing.

2. Demonstrate skills in critical thinking, decision making, information management and use of the nursing process with individuals, families and groups experiencing complex health problems.

3. Evaluate the usefulness of and apply research findings to professional nursing practice.

4. Teach and counsel individuals, families, communities and other groups about health, illness and health-seeking behaviors.

5. Provide health care to culturally diverse populations in a variety of environments, both independently and in collaboration with other health care team members.

6. Demonstrate leadership qualities in addressing professional nursing and health issues.

7. Demonstrate accountability for decisions about nursing practice.

8. Demonstrate awareness of the historical and current aspects of economic, political, legal and ethical issues related to health care in society.

9. Demonstrate awareness of nursing roles within the health care system.

Essential Competencies for Nursing Practice

Practice as a registered nurse requires many competencies, such as the functional abilities listed below:

- Ability to see, hear, touch, smell and distinguish colors.
- Ability to speak and write with accuracy, clarity and efficiency.
- Manual dexterity, gross and fine movements.
- Ability to learn, think critically, analyze, assess, solve problems and reach judgment.
- Emotional stability and ability to accept responsibility and accountability.

All students enrolled in the B.S.N. program must satisfactorily demonstrate these competencies in the didactic, laboratory, seminar and clinical courses throughout their program of studies.

Admission/Graduation Policies

Students who are interested in the nursing program at Lipscomb University must meet the same criteria for admission to Lipscomb. Upon admission to the university, students may declare a pre-nursing major and begin the coursework. Students must complete the prescribed prerequisite courses that are foundational to the program before they can be admitted to the upper division nursing program. Admission to the upper division nursing program is based on the following factors.

1. Applicants must have a minimum 2.8 undergraduate grade point average. Preference will be given to applicants with a GPA of 3.0 and above.

2. Applications to the nursing program must be completed and submitted by December 31 each year.
3. Students are required to submit documentation of required immunizations to the nursing program prior to the beginning of the program and the beginning of each subsequent year. Students are not permitted into clinical agencies without proof and documentation of the requirements. See the Nursing Handbook for a list of requirements.

4. A clear criminal background check is required by clinical agencies.

5. Students must meet eligibility requirements for licensure in Tennessee. Graduation requirements for a B.S.N. include the completion of all required courses for the nursing major for a total of 132 semester hours. A minimum acceptable grade point average for graduation is 2.8 and a “D,” “F,” or “WF” is an unacceptable grade in any course required for the nursing degree.

**Professional Opportunities**

After completing the prescribed curriculum, the prelicensure student is eligible to apply to the State Board of Nursing to take the National Council Licensure Examination (NCLEX) for the privilege of becoming a registered nurse.

**Transfer Credit**

Representatives of the university will meet individually with students seeking to transfer into the nursing program. Required sciences must have been taken within five years prior to admission, and students must have received a grade of “B” or higher. Official transcripts of all college credit must be submitted to the registrar’s office.

**Requirements for Major**

**Nursing Major**

B.S.N. degree program

Total hours required— 132

Specific courses required—

- Lipscomb courses
  - Biology 2424, 2434, 2444
  - Chemistry 1013 or 1024
  - Nutrition 2613
  - Mathematics 2183 or Psychology 2503
  - Nursing 3013, 3024, 3033, 3045, 3056, 3063, 3074, 3084, 3093, 4016, 4026, 4033, 4042, 4054, 46nV

*Note: Requirements for a science minor are included.

*Meets requirement for Bible 3213, 3433, 4213

**Course Descriptions**

**Nursing (NURS)**

**3013 Health Assessment (3)**
An introduction to the basic skills utilized in data collection and physical assessment. The focus is on interviewing skills and systematic physical examination in assessing the physiology and psychosociocultural health status of patients and various age groups. Campus laboratory provides the opportunity for application of theoretical knowledge and performance of health assessments with healthy individuals. Prerequisites: Biology 2434, 2444, and 3214. Lecture, 2 hours; Lab, 2 hours.

**3024 Mental Health Nursing (4)**
A study of theories, concepts and responses related to mental health and illness. Research based theories, concepts and the nursing process are emphasized using critical thinking skills to provide holistic nursing care. Students enroll in clinical.

**3033 Pharmacology for Nursing (3)**
Focuses on the major drug classifications, principles of drug actions/interactions and nursing implications. An introduction to pharmacologic knowledge, clinical foundations for drug use as a treatment modality, and the role of the nurse in drug therapy are presented. Current trends in pharmacologic therapy will be discussed. Lecture, 3 hours; Lab, 2 hours.

**3045 Foundations of Professional Nursing (5)**
An introduction to nursing concepts, theories and skills which are basic to the practice of professional nursing. Students also enroll in lab and clinical. Prerequisites: Biology 2434, 2444, and 3214.

**3056 Comprehensive Adult Health Nursing I (6)**
A study of theories, skills and responses of adults in health and illness. Research based theories, concepts and the nursing process are emphasized using critical thinking skills to provide holistic nursing care. Students will also enroll in lab and clinical. Prerequisites: Nursing 3013 and 3045.

**3063 Evidenced-Based Practice and Nursing Theory (3)**
A study of theoretical knowledge and skills used in the nursing process as they relate to evidenced-based practice. Critical thinking, critical reading and critiquing processes will be utilized to explore research findings and apply them to nursing practice. Lecture, 3 hours.

**3074 Family Nursing Infant to Adolescent (4)**
A study of theory and skills used in the nursing process related to the child and young family. Students will also enroll in clinical. Prerequisites: Nursing 3013 and 3045. Lecture, 3 hours plus additional clinical hours.

**3084 Family Nursing and Women’s Health (4)**
A study of theories, concepts and responses related to childbearing individuals and their families. Students will also enroll in clinical. Prerequisites: Nursing 3013 and 3045. Lecture, 3 hours plus additional clinical hours.
3093 Pathophysiology Concepts of Disease (3)
A study of concepts and diseases common to general practice of nursing. Critical thinking, research findings and scientific knowledge are applied to analyze clinical nursing implications and patient outcomes. Prerequisites: Biology 2434, 2444 and 3214. Lecture, 3 hours.

4016 Comprehensive Adult Health Nursing II (6)
Provides a theoretical basis for responding to chronic, acute and complex health patterns as well as specific pathophysiological processes. The focus of the course is application of the nursing process to meet physiological and psychosocial needs of adults in various degrees of wellness and from varying cultural backgrounds. Students also enroll in clinical. Prerequisites: Nursing 3013, 3045 and 3056. Lecture, 3 hours plus additional clinical hours.

4026 Advanced Medical Surgical Nursing (6)
Provides a knowledge base for working with critically ill patients across the life span for varying cultural backgrounds requiring complex care. The course incorporates application of the nursing process and use of critical thinking skills to provide complex therapeutic interventions for individuals and groups of patients. In tertiary care settings students will apply advanced nursing skills, standards of ethical professional nursing practice, and Christian values of caring, faith and service to promote health or end of life issues. Students will enroll in clinical. Prerequisites: Nursing 3045, 3056 and 4016. Lecture, 3 hours plus additional clinical hours.

4033 Nursing Leadership and Management (3)
Presents leadership and management principles related to nursing practice in the health care system. Primary, secondary and tertiary prevention strategies and skills necessary for the management of appropriate and effective nursing care are explored and analyzed during the course and clinical. Students also enroll in clinical. Prerequisites: Nursing 3045, 3056 and 4016. Lecture, 3 hours plus additional clinical hours.

4042 Senior Preparation (2)
Designed to maximize success on the NCLEX, the national licensing examination required for entry into professional practice. It is further designed to assess the student's preparation for testing.

4054 Community Health Nursing (4)
A study of the theoretical knowledge and skills used in the nursing process related to individuals, families and the community as a patient. In community based settings students use standards of professional nursing practice to assist patients of all developmental levels with acute and chronic health concerns. Prerequisites: Nursing 3045, 3056 and 4016.

401V Independent Study in Nursing (1-6)
This course may be taken only with the approval of the Director of the Nursing Program. Selected topics within nursing education are offered. This course is offered only to upper division nursing majors. Course work requires permission.

46nV Nursing Elective

Note: The following courses are offered to graduating class of 2012 only.

3421 Nursing Externship (1)
This course is an elective clinical practice of planned and supervised clinical experiences. Seminar and independent research will be utilized to meet course requirements for the work-study experience. Students will spend approximately 288 hours (36 hours per week) in the clinical affiliate on day, evening, night and weekend shift and 10 hours in seminar (total=288 hours) working with a RN preceptor. Prerequisites: Nursing 3152, 3252, 3354, and 3455. Students who meet the following requirements must be chosen by a selection committee and approved by the Director of the Nursing Program to enroll in course: must be a current LU nursing student, complete all didactic courses with a minimum grade of “C”, a minimum grade of “B” in clinical courses, a minimum cumulative GPA of 3.0, current BCLS, have current health records requirements.

3455 Fundamentals of Clinical Practice (5)
This course is the first of a sequence of three clinical practice courses designed to provide the student with the opportunity to learn and practice the skills of assessment, patient care and care planning in a didactic classroom setting and a simulated laboratory and then in a clinical area for a variety of client populations across the life span (newborn, pediatric, adolescent, adult, older adult, and child-bearing families). A variety of health care settings will be utilized for practice. At the end of the course, the student, with minimal faculty assistance and guidance, will be able to analyze data, develop a basic plan of care, safely and accurately implement selected basic nursing interventions, and evaluate the plan's effectiveness. Corequisites: Nursing 3152, 3252, 3354, 3552.

4162 Professional Nursing Seminar (2)
This course addresses the role of the professional nurse. The student will have the opportunity to explore the dimensions and responsibilities of the professional nursing role by applying legal/ethical concepts and critical thinking skills to selected case studies involving patients in a variety of settings. Prerequisites: Nursing 3152, 3252, 3455. Corequisites: Nursing 4365, 4464.

4173 Foundations of Professional Nursing II - Research (3)
This course is the second of a two course sequence addressing professional nursing. Students will evaluate existing nursing theories and models and apply them to practice. Students will apply appropriate research findings into practice, analyze current developments in nursing, and critique the impact of nursing care on clinical outcomes. Prerequisites: Nursing 3152.
Management Practicum (1)
This clinical course is intended to assist students in the integration of theory and practice as they approach the completion of the nursing major. Students will choose a clinical area for advanced clinical experience under faculty guidance. Emphasis will be placed on synthesis of previous and concurrent learning as students simulate the role of an entry level professional nurse. Clinical goals include development of independence in nursing practice, skill in clinical decision making, and application of nursing leadership and management theory. Prerequisite: Nursing 4482.

Health Care Systems (3)
This course addresses health care systems and their related issues. Course content focuses on leadership and decision making theory, team building, communication and management skills. The course also provides information related to contemporary trends in the organization and delivery of health care to individuals, families, and populations. The impact of managed care and financial pressures on health care providers is discussed along with outcomes management, informatics, financial management, and economic principles. Prerequisite: Nursing 3252.

Human Experience of Health and Illness Across the Lifespan II (5)
This is the second of three didactic courses examining the human experience of health and illness across the lifespan—from infancy through senescence, including the childbearing cycle. The framework incorporates the following concepts and their influence on health and response to illness; growth and development, mental health, gender, lifestyle, value systems, spirituality, ethnicity, environment, and psychosocial, economic, and cultural issues. The impact of these factors on individuals, families, and aggregates will be explored. Selected health problems involving the neurologic (including selected mental health disorders with appropriate treatment modalities and settings), muscular/skeletal, gastrointestinal, sensory (ear, eye, nose), and reproductive (including maternity focus) systems will be presented. The epidemiology, pathophysiology, medical management (nonpharmacologic, and surgical), and nursing management will be addressed. Health promotion, including primary, secondary, and tertiary, anticipatory guidance, and patient education will be discussed. Pre/corequisites: Nursing 3152, 3354.

Human Experience of Health and Illness Across the Lifespan III (4)
This is the third of three didactic courses examining the human experience of health and illness across the lifespan—from infancy through senescence, including the childbearing cycle—with an emphasis on increasingly complex and/or chronic health problems. The course provides students with theoretical basis to apply principles of chronic illness, including assessment and intervention skills, to at risk populations. Prerequisite: Nursing 3354, 4365. Corequisite: Nursing 4162

Integration of Theoretical and Clinical Aspects of Nursing I (4)
This course is the second of three clinical practice courses. It is designed to provide the student with the opportunity to integrate theory and practice the skills of assessment, patient care, and care planning in a clinical area for diverse client populations across the lifespan (newborn, pediatric, adolescent, adult, older adult, and child-bearing families). A variety of health care settings will be utilized for practice. At the end of the course, the student will be able to analyze data, develop a basic plan of care, safely and accurately implement selected nursing interventions, and evaluate the plan's effectiveness for physiologic and psychosocial health needs. Prerequisites: Nursing 3152, 3252, 3354, 3455, 3552. Corequisites: Nursing 4162, 4283, 4365.

Integration of Theoretical and Clinical Aspects of Nursing II (2)
This course is the final rotation of the second in the sequence of three clinical practice courses. This course is designed to provide the student with the opportunity to learn and practice the skills of assessment, patient care, and care planning in a clinical area for diverse complex client populations across the lifespan (newborn, pediatric, adolescent, adult, older adult, and child-bearing families). A variety of health care settings will be utilized for practice. At the end of the course, the student will be able to analyze data, develop a basic plan of care, safely and accurately implement selected nursing interventions, and evaluate the plan's effectiveness for physiologic and psychosocial health needs of the complex clients, their families, and the health needs of a community. Prerequisites: Nursing 3152, 3252, 3354, 3455, 3552, 4162, 4211, 4365, 4464; Corequisites: Nursing 4173, 4283, 4374.

Integration of Theoretical and Clinical Aspects of Nursing III (2)
This course is the third of a sequence of three clinical practice courses. This course is designed to provide the student with the opportunity to learn and practice the skills of assessment, patient care, and care planning in a clinical area for diverse complex client populations. A variety of health care settings will be utilized for practice. At the end of the course, the student will be able to analyze data, develop a basic plan of care, safely and accurately implement selected nursing interventions, and evaluate the plan's effectiveness for physiologic and psychosocial health needs of the complex clients, their families, and the health needs of a community. Prerequisites: Nursing 4173, 4365, 4464, 4552; Corequisites: Nursing 4283, 4374, 4472.

Basic Pharmacology II (2)
This is the second of two didactic courses addressing pharmacology in nursing. The course will build on the knowledge base of the student related to major drug classifications and their respective prototypes that are commonly encountered in drug therapy.
School of Health Sciences
**Department of Kinesiology**

### Distinctives of the Kinesiology Department

Exercise science is an interdisciplinary degree program designed to prepare students for work opportunities or graduate/professional school. Students must complete a clinical/field experience in the summer of their senior year as part of their degree program. Nashville provides ample settings for practical experience, regardless of the student’s specific academic interest. In previous years, students have gained valuable experience in local hospitals, clinics, rehabilitation centers, health and fitness facilities, and YMCAs.

The kinesiology department has an exercise science lab to help broaden students’ professional experiences. The lab provides an environment for students to engage in undergraduate research or gain valuable practical experience (equipment includes: metabolic cart, electrocardiography machines, body composition, treadmills, bikes, blood pressure cuffs and other measurement devices.)

The health and physical education program is designed to prepare students for careers as teachers in public and private school settings. These students gain valuable experiences by classroom observations and student teaching. There are abundant opportunities to grow professionally through the state professional organization (TAHPERD) and participation in local programs of excellence (Demonstration Schools). Upon graduation, most students enter the teaching profession.

### Career Opportunities

#### Exercise Science
- Fitness professional in corporate/hospital setting
- Personal trainer, strength and fitness coach
- Graduate school in exercise and nutrition science, exercise physiology, cardiac rehabilitation, athletic training
- Health science (physical therapy, occupational therapy, therapeutic recreation)

#### Health and Physical Education (teaching, K-12)
- Teaching elementary or secondary health and physical education
- Coaching
- Graduate school in physical education

### Requirements for Majors

#### Exercise Science Major
B.S. degree program only
Total hours required— 68

Specific courses required—
- Athletic Training 3002
- Biology 1134, 1144, 3514, 3524
- Exercise Science 2533, 3002, 3363, 4113, 4123, 4133, 4152, 4224
- Health 1303, 3302
- Nutrition 2613
- Management 3503
- Marketing 3503
- Physical Education 2203, 2402, 4323, 4502

*Note: All students majoring in exercise science must achieve a “C” or above in all department courses required for the exercise science major.*
Health and Physical Education Teaching Major (K-12)
B.S. degree program only

I. General education required of secondary and K-12 teacher education students (see page 158)
II. Professional education (see page 158)
III. Subject matter specialization
   - Biology 2213
   - Exercise Science 2533, 3002, 3363, 4113, 4152
   - Health 1303, 3302, 4342
   - Physical Education 1181, 2001, 2203, 2402, 2742, 3343, 3381, 3383, 4323, 4502
   - One activity course (lifetime sport) selected from Physical Education 1031, 1111, 1161, 1311, or 1nnV
   - One elective activity course from Physical Education 1001-2001 not already taken
   - Psychology 3513
   - Sociology 2103

Note: All students majoring in health and physical education teaching must achieve a “C” or above in all department courses required for the health and physical education teaching major. Health and physical education teaching majors have a built-in minor in education and are not required to take another minor.

Requirements for Minors

Coaching Minor
Total hours required — 21
Specific courses required —
   - Athletic Training 3002
   - Exercise Science 2533, 3002, 4113
   - Health 3302
   - Physical Education 2222, 2402, 3452, 4223

Exercise Science Minor
Total hours required — 21
Specific courses required —
   - Athletic Training 3002
   - Biology 2213 or Biology 3514 and 3524
   - Exercise Science 2533, 4113, 4133, 4224
   - Nutrition 2613

Health Minor
Total hours required — 18
Specific courses required —
   - Health 1303, 3302
   - Nutrition 2613
   - Psychology 3513
Elective courses include (7 hours chosen from the following):
   - Health 4342
   - Psychology 2313, 2423, 3453
   - Sociology 1123, 2103

Course Descriptions

Athletic Training (AT)
3002 Prevention and Care of Athletic Injuries (2) SP
A comprehensive study of the methods of preventing and caring for injuries incurred in an athletic, exercise science or physical education program. Emphasis is placed upon the practical aspects of care and treatment.

Exercise Science (EX)
2533 Kinesiology (3) F, SU
A study of the science of human motion. Emphasis is upon anatomical analysis of body movement. This course embraces such areas as physics for mechanical and gravitational laws; anatomy for structures of bone, muscle, and nerve; and physiology for the action of muscle and nerve. Prerequisite: Biology 3514 and 3524 or Biology 2213 recommended.
3002 Mechanics of Movement (2) SP
A study of the practical application of muscular movement and motor patterns to exercise and sport. Prerequisite: Exercise Science 2533.
3363 Statistical Analysis of Human Performance (3) F
This course is designed to help students learn elementary statistical methods and applications of these methods in a physical education, exercise science or physical therapy setting. The course content will cover basic descriptive and
inferential statistical analyses, with an emphasis on the correct application of analyses. The course also involves measurement concepts in research for all types of human performance. Students will be introduced to the SPSS computer application. Prerequisites: Either Mathematics 1043, 1053, 1113, 1123 or 1314.

**4113 Exercise Physiology (3) F**
A study of the physiologic adaptations during exercise and sport performance. Topics include nutrition and sports performance, metabolism and energy pathways, pulmonary, ventilatory and cardiovascular regulations during exercise, muscle function during exercise performance and the effects of exercise on body composition. Prerequisites: Exercise Science 4113.

**4123 Exercise Physiology Lab (3) SP**
A laboratory class designed to assess the topics covered during Exercise Physiology. Lab topics include graded exercise testing (GXT), resting and exercise electrocardiography, strength and power assessment and other clinical exercise tests. Prerequisite: Exercise Science 4113.

**4133 Exercise Evaluation and Prescription (3) SP**
A study of health and fitness evaluation and prescription objectives. This course is designed to meet the KSA's for the ACSM HFS certification exam. Prerequisite: Exercise Science 4113.

**4143 Special Topics in Exercise Science (3) SP**
This course focuses on special areas in exercise science. Topics include exercise response under extreme physical stress, exercise and environmental conditions, exercise and children, exercise and the geriatric population, ergogenic aids and sports performance, and exercise in other special populations. Prerequisite: Exercise Science 4113.

**4152 Principles of Teaching Conditioning Exercise (2) SP**
This course will introduce students to a variety of methods of teaching and leading aerobic and resistance training exercise in a group and/or individual setting. Each student will be instructed on and given practical experience in teaching and leading several types of exercise, including: aerobics, water exercise, strength/toning and strength/resistance exercise. Prerequisites: Exercise Science 2533, 4113. This course may satisfy the SALT Tier II requirement.

**4224 Externship in Exercise Science (4) SU**
The student will select a wellness center, fitness center or clinical site for practical experience. Prerequisites: Exercise Science 4113, 4133 and senior standing.

**480V Independent Study and/or Research in Exercise Science (1-4) F, SP, SU**
This course is designed to give students an opportunity to participate with faculty on an independent project in exercise science or physical education. Students should select an appropriate project and under the guidance of a faculty member, complete the proposed project. The project can be either laboratory or library oriented. A paper is usually required at the completion of the course. Repeatable for credit (maximum credit six hours). Prerequisite: permission of academic chair.

**Health (HL)**

**1303 Healthful Living (3) F, SP**
An examination and application of the facts and principles of the science of health and nutrition as they pertain to personal, family and community welfare.

**3302 First Aid and Emergency Care (2) F, SP, SU**
A course designed to provide the student with knowledge and skills to meet the needs of most situations requiring emergency first aid care, with emphasis on personal safety and accident prevention. Basic Life Support (BLS) and Standard First Aid courses completion certificate will be given.

**4342 Teaching Health and Wellness (2) SP**
Offered even-numbered years
A course consisting of history, philosophy, current trends, basic issues and principles underlying health education. On the basis of these principles, a critical appraisal is made of the health curriculum at the various grade levels, health teaching methods and units for teaching in health.

**Physical Education Activity Courses (PE)**
(Physical Education 1001-2001 satisfy the general education physical education activity requirement.)

**1001 Physical Fitness (1) F, SP**
A course designed to emphasize conditioning activities, fitness testing and self-evaluation.

**1021 Volleyball (1) F, SP**
Instruction in the fundamental skills and basic knowledge of volleyball.

**1031 Golf (1) F**
Instruction in the fundamental skills and basic knowledge of golf. Fee required.

**1091 Softball (1) F**
Instruction in the fundamental skills and basic knowledge of softball.

**1111 Badminton Fundamentals (1) F, SP**
Instruction in the fundamental skills and basic knowledge of badminton.

**1121 Jogging (1) F, SP, SU**
Instruction in the proper way to improve physical fitness through walking, jogging, running and stretching exercises.

**1151 Weight Training (1) F, SP, SU**
Instruction in the fundamental skills and basic knowledge of weight training.

**1161 Racquetball (1) F, SP, SU**
Instruction in the fundamental skills and basic knowledge of racquetball.

**1181 Rhythm and Dance for Schools (1) SP**
Instruction in rhythms and dance typically taught in a school setting.

**1221 Aerobics (1) F, SP, SU**
Instruction and participation in floor, low impact, and bench aerobics.

**1311 Tennis Fundamentals (1) F, SP, SU**
Instruction in the fundamental skills and basic knowledge of tennis.
InnV  Selected Activities in Physical Education (1-2) F, SP, SU
This course will vary in content each semester. Possible topics include: disc golf, self-defense, SCUBA, backpacking, snow skiing, fitness yoga, Golf for Business and Life and other possible offerings. May be taken more than once for credit, but the same topic cannot be repeated for credit. A special fee may apply, depending on the experience. Some topics have a prerequisite.

2001  Lifetime Fitness (1) F, SP, SU
A course designed to make students more aware of healthy lifestyle habits and help them make wise fitness/wellness decisions about their current and future lifestyle habits. Each student will participate in a fitness/nutrition evaluation and establish goals for an exercise program during the course.

Physical Education Courses (PE)

2203  Foundations in Kinesiology (3) F
A general introduction to the field of kinesiology, designed to give the student an orientation into the historical background, nature and opportunities available in the field.

2222  Introduction to Coaching (2) F
Offered odd-numbered years on demand
This course is designed to introduce students to the concepts of coaching. It will give students an overview of the coaching profession. Topics include: developing a coaching philosophy, incorporating sport science into coaching, the psychology of coaching and managing athletes in today's society.

2402  Concepts of Motor Learning (2) F
A study of the psychological, physiological and kinesiological acquisition of physical skills. This course also provides an in-depth look at proper procedures for teaching simple and complex physical skills.

2742  Teaching Sport Skills (2) F
Offered even-numbered years
This course is designed to introduce students to a variety of individual and dual sports, team sports and various activities that are developmentally appropriate for middle and secondary physical education students. The content will cover the basic skills, rules, strategies and history of various activities.

3312  Camp Counseling (2) SP
The philosophy and objectives of an organized camping program are covered. An overnight camping trip and observations of recreational facilities are required in this course.

3323  Health, Physical Education, and Wellness for Children (3) F, SU
The physical education and wellness section of this course is designed to help students understand developmentally appropriate physical education for children in grades K-6. Major topics include: goals and objectives, human growth and development, curriculum (movement education, games and sports, educational gymnastics, rhythms, physical fitness and wellness), organization and planning, materials, teaching strategies and assessment. The health section will involve a study of the organization and administrative details relative to the conduct of a school health program with emphasis on health services, healthful school living and health instruction.

3343  Teaching Secondary Physical Education (3) SP
Offered odd-numbered years
This course is designed to help students prepare to teach developmentally appropriate physical education in the middle and secondary school aged student. Major topics include: goals and objectives, human growth and development, adapted P.E. for special needs, history, organization and planning, teaching strategies and techniques, materials, curriculum and evaluation. Prerequisite: Physical Education 2742.

3381  Teaching Elementary Physical Education Lab (1) F
Offered odd-numbered years
This course is designed to give physical education majors the opportunity to observe and participate in developmentally appropriate physical education classes in a variety of settings and a variety of grade levels to help prepare them for their own teaching experience.

3383  Teaching Elementary Physical Education (3) F
Offered odd-numbered years
This course is designed to help students prepare to teach developmentally appropriate physical education at elementary and middle school aged children. Major topics include: goals and objectives, human growth and development, adapted P.E. for special needs, history, organization and planning, teaching strategies and techniques, materials, curriculum (movement education, games and sports, educational gymnastics, rhythms, physical fitness and wellness) and evaluation.

3452  Psychology of Coaching (2) F
Offered even-numbered years on demand
Psychological concepts as they relate to coaching individual, dual, and team sports.

4223  Field Experience in Coaching (3) SP
Offered odd-numbered years on demand
This course is designed to give students a coaching experience with an experienced coach. Requirements include logging 120 hours in two different sports, attending practice sessions, article reviews on the two sports, keeping a journal of learning experiences and other requirements assigned by the coach or instructor. Prerequisite: Physical Education 2222, 3452 or permission of instructor.

4323  Administration of Exercise Related Programs (3) F
A course dealing with the plans of organization, supervision, administrative policies, budget and finance, legal aspects, staff, physical plant, equipment and facilities, scheduling programs of physical education and the problems and procedures in conducting intramural and interscholastic athletic contests.

4502  Seminar in Kinesiology (2) SP
This course provides a review of the major concepts for those students in the department. The student will demonstrate a fundamental understanding of core competencies important to the discipline. To be taken in the student's last spring semester. Prerequisites: Exercise Science 2533, 3363, 4113, Physical Education 2203 and 4323.
The mission of the Department of Nutrition is to assist students with the ability to communicate effectively, to think critically and to develop the breadth and depth of knowledge needed by its graduates for participation in careers in the field of nutrition. The primary purpose of the Department of Nutrition is to offer a strong, general Bachelor of Science degree in Nutrition from an accredited didactic program in dietetics or in Food Systems Management. This is done in the context of a private, Christian, liberal arts education. The overall focus of the department is to train individuals who can serve in a wide variety of roles, from medical nutrition therapy to public health to health care food service management.

The knowledge base of the discipline of nutrition includes concepts from the study of food and human nutrition, biology, chemistry, human development and social interaction, and resource management. The knowledge base of the discipline of food systems management includes concepts from the study of food and human nutrition, food safety, financial and human resource management, marketing, and legal aspects of food service. The overall goal of the program is to assist dietetics majors in obtaining placement in a dietetic internship (DI) program and to assist food systems management majors in finding employment in the food service industry. Students who complete a major in dietetics and are matched to a DI program will gain the supervised practice necessary to be eligible to write the Registration Examination for Dietitians.

**Distinctives of the Nutrition Department**

**ADA Accredited Didactic Program**

Lipscomb has a didactic program in dietetics (DPD) that is accredited by the American Dietetic Association. Students who seek to become registered dietitians must complete a 1200-hour supervised practice experience in an ADA-accredited dietetic internship program beyond graduation from Lipscomb. The undergraduate program's acceptance rate into dietetic internships is above 90%, much higher than the national average. Students in the didactic program study normal nutrition at all stages of life, nutrition in the treatment of disease and the biochemistry of nutrition. Students gain experience in the field at an undergraduate level in nutrition education for all ages, clinical nutrition and food systems management. An automatic minor in distributive science is built into the nutrition major. Details are provided by the director of the didactic program in dietetics at Lipscomb.

**Food Systems Management**

The concentration in food systems management combines the study of food and nutrition with the study of management for students interested in restaurant management and the culinary arts. Students study food, the management of financial and human resources, and legal aspects of business. Students have the opportunity to gain experience in the field, learning about human resource management, purchasing, inventory, and event planning and management. Students in this concentration earn a minor in business and have the necessary background to succeed in both culinary training and graduate school in business management.

**Undergraduate Certificate Program in Dietetics**

The undergraduate certificate program in dietetics provides the coursework necessary for gaining the foundation and skills needed in a dietetic internship program. Unlike the traditional didactic program, this program provides only the major courses and does not grant a second baccalaureate degree. The program is designed to meet the needs of students who already have a bachelor's degree, and provides the undergraduate coursework necessary to receive a certificate (verification statement) from an accredited DPD program. The verification statement grants the eligibility to enroll in an accredited dietetic internship program, which is necessary to complete before taking the Registration Examination for Dietitians.

Students are welcome to transfer hours into the program. However, a minimum of 18 hours must be completed at Lipscomb University. After a transcript review, students will be given a list of courses that remain to be completed at Lipscomb.
ADA Accredited Dietetic Internship Program

Lipscomb is the only college among the Christian colleges to house an accredited dietetic internship (DI) Program, and currently has initial accreditation status from the Commission on Accreditation for Dietetics Education (a part of the American Dietetic Association.) The program began in 2002 and is a post-baccalaureate, supervised practice program in which students complete more than 1200 hours of supervised practice and complete a minimum of 8 hours of graduate coursework. Interns complete rotations in a wide variety of settings, including the clinical, community, and food service areas. Interns attend the annual Food and Nutrition Conference and Expo, Nashville District Dietetic Association (NDDA) and Tennessee Dietetic Association (TDA) meetings, TDA’s annual Day on the Hill conference, and an RD Exam review workshop. Upon completion of the internship, students are eligible to write the Registration Examination for Dietitians. Lipscomb’s first time pass-rate on the exam is higher than 80%, a requirement to maintain accreditation.

Career Opportunities

Students who choose a major in dietetics and food systems management at Lipscomb have numerous career opportunities in this field, including:

Career Opportunities in Dietetics

• Community nutrition
• Clinical nutrition
• Food journalism
• Food marketing
• Food systems management
• Education
• Wellness centers
• Sports nutrition

Career Opportunities in Food Systems Management

• Food systems management
• Hospitality industry
• Institutional management
• Food marketing
• Culinary school
• Food journalism
• Research and consultation

Requirements for Major

Dietetics Major
B.S. degree program only
Total hours required— 88
Specific courses required—
  Accounting 2503
  Biology 2321, 2424, 2434, 2444
  Chemistry 1013, 1023, 1034
  Exercise Science 4113
  Nutrition 1011, 1213, 2613, 3213, 3223, 3603, 3633, 4043, 4092, 4213, 4223, 4233, 4503, 4513, 4613
  Management 3503, 4453
  Mathematics 2183
  Philosophy 3533
  Psychology 1113
  Sociology 1123

Note: This major meets all competencies required by the American Dietetic Association for eligibility to apply for a dietetic internship. A minor in distributive science is built into this program.

Note: All courses required for this major must be completed with a grade of “C” or higher or be repeated.

Food Systems Management Concentration
B.S. degree program only
Total concentration hours required— 67
Specific courses required—
  Accounting 2503, 2513
  Biology 2213, 2424
  Chemistry 1013, 1023
  Communication 2703
  Economics 2503, 2513
  Management 3503, 3613, 3573, 3503, 3633, 4453
  Marketing 3503, 3573
  Nutrition 1011, 1213, 2613, 3213, 4043, 4092, 4213, 4223
  Psychology 3323

Note: A minor in distributive business is satisfied with this program.

Requirements for Undergraduate Certificate Program

Undergraduate Certificate Program
Total hours required— 85
Specific courses required—
  Accounting 2503
  Biology 2321, 2424, 2434, 2444
  Chemistry 1013, 1023, 1034
  Exercise Science 4113
  Nutrition 1213, 2613, 3213, 3223, 3603, 3633, 4043, 4213, 4223, 4233, 4503, 4513, 4613
  Management 3503, 4453
  Mathematics 2183
  Philosophy 3533
  Psychology 1113
  Sociology 1123
Requirements for Minor

Foods Minor
Total hours required—18
Specific courses required—
Chemistry 1013
Nutrition 1213, 2613, 3213, 4213, 4223

Nutrition Minor
Total hours required—18
Specific courses required—
Nutrition 1213, 2613, 3603, 3633 or 4613, 4503, 4513

Course Description

Nutrition (NUTR)

1011 Professional Orientation (1) F
A study of the disciplines of nutrition and foods as well as career opportunities within the related areas of specialization. Required of all majors; to be completed prior to declaration of major in the department.

1213 Basic Foods (3) F, SU
Fundamental principles of food selection and preparation. Lecture, 2 hours; Laboratory, 3 hours.

2613 Principles of Nutrition (3) F, SP
Nutritive value of foods and the factors influencing the body’s requirements throughout the lifespan.

3213 Food Science and Production (3) SP
Emphasis on the scientific aspect of the study of foods; multicultural aspect of food selection and production; and planning, production and service of meals. Individual experimentation using sensory techniques to evaluate the acceptability of food; individual planning, preparation and presentation of meals taking into consideration nutritional and cultural requirements, budget restraints, timing of preparation, and methods of service. Prerequisite: Nutrition 1213 and Chemistry 1013 with a grade of “C” or higher. Lecture, 2 hours; Laboratory, 3 hours.

3223 Nutrition Education and Health Promotion (3) SP
Application of nutrition principles to nutrition education and health promotion, including weight management, sports nutrition, eating disorders and disease prevention. The course includes program development, assessment and evaluation. An emphasis on methods of teaching, principles of effective communication, and motivation are covered.

3603 Community Nutrition (3) F
A study of the nutritional needs of the people in the community and how to meet the needs. Includes program planning, implementation, evaluation and field experience. Prerequisite: Nutrition 2613. This course may satisfy the SALT Tier II requirement.

3633 Nutrition Across the Lifespan (3) F
Presents the major special nutrition issues common at different period of the life cycle including pregnancy, infants, children, adolescents and the elderly. Prerequisite: Nutrition 2613 or consent of instructor. This course may satisfy the SALT Tier II requirement.

37nV Special Topics (1, 2, 3)
Topics of special interest to students and faculty which do not fit one of the current classifications. Students may repeat this course when course numbers are different. These courses are advanced and are intended for students genuinely interested in their content. Permission of the professor may be required. Specific titles will be announced in the course schedule.

4043 Internship in Dietetics (3) SU
Supervised field work in institutions or agencies that provide nutrition services to individuals or families in the clinical, community or food service areas. The student observes, works and contributes to the typical operation of all three settings. Prearranged and supervised experience must be completed during one term, with regularly scheduled meetings with the instructor and/or supervisor. To be taken in the junior or senior year, after completing a minimum of nine upper-division hours in the concentration. May be repeated for up to 6 hours credit. Prerequisite: Nutrition 4513. This course may satisfy the SALT Tier II requirement.

4092 Senior Seminar (2) SP
Comprehensive survey of current trends and projects in nutrition and food systems. Prerequisites: Declared major in dietetics or food systems management, Nutrition 1011 and senior standing.
410V Special Topics (1-3) F, SP, SU
Topics of special interest to students and faculty which do not fit one of the current classes. Students may repeat this course when course topics are different. These courses are advanced and are intended for students genuinely interested in their content. Permission of instructor may be required. Specific titles will be announced in the course schedule.

420V Independent Study (1-3) F, SP, SU
Offered on demand
Advanced study or research in a specific area of nutrition or foods. Prerequisites: Courses in the field in which independent study is to be done and with the approval of the academic chair. Open to juniors and seniors only. This course may satisfy the SALT Tier II requirement.

4213 Food Systems Management I (3) F
Principles of quantity food purchasing, preparation and production, as well as equipment selection and cost control.

4223 Food Systems Management II (3) SP
Resource management as applied to food service. Analysis of design production, service problems and food safety requirements related to quality of food prepared, stored and served in volume. Prerequisite: Nutrition 4213. Corequisite: Nutrition 4233.

4233 Quantity Food Production, Safety and Sanitation (3) SP
Allows students to apply the foundations learned in Nutrition 1213, 3213 and 4213 to the quantity production and service of foods in an on-campus food production operation. Focus will be on quantity food production experience through application of principles for determining needs; procuring, producing and storing foods in quantity with the understanding of institutional equipment selection; use and maintenance and the practice of proper safety and sanitation measures. ServSafe certification from the National Restaurant Association is gained by the student upon successful completion of the course and passing of the ServSafe examination. Prerequisite: Nutrition 4213. Corequisite: Nutrition 4223.

4503 Medical Nutrition Therapy I (3) F
Therapeutic nutrition based on modification of the nutrients in a normal diet for prevention or correction of various cardiac, hepatic, pancreatic and gastro-intestinal disorders. Prerequisites: Nutrition 2613, Biology 2434, 2444, and 2321 or equivalent.

4513 Medical Nutrition Therapy II (3) SP
Therapeutic nutrition based on modification of the nutrients in a normal diet for prevention or correction of various diseases: renal, cancer, diabetes, metabolic stress and inborn errors of metabolism. Prerequisites: Nutrition 4503 or equivalent.

4613 Nutritional Biochemistry (3) SP
A senior level course discussing the biochemistry of digestion, absorption and metabolism of foods and specific nutrients. Special emphasis will be given to the interrelationship of metabolic pathways and the impact of nutritional biochemistry on health and disease states. Prerequisites: Nutrition 2613 and 4503, Chemistry 1034, with a grade of “C” or higher.