602 **Primary Care Ambulatory Clerkship**

Fall, Spring, Summer. 1 to 36 credits. student may earn a maximum of 36 credits enrollments for this course. Interdepartmental with Osteopathic Medicine; Internal Medicine; Pediatrics; Family and Psychiatry; Community Medicine. Administered by Department of Osteopathic Medicine. RB: Successful completion of the preclerkship requirements in College of Osteopathic Medicine Units I and II.

A 24-week ambulatory care continuity experience involving 12 weeks in a multidisciplinary environment (family medicine, pediatrics, and internal medicine), 4 weeks in family medicine and 8 weeks in case of the control medicine are set of the control medi weeks in specialty areas (internal medicine, surgery, pediatrics, and obstetrics and gynecology). Didactic sessions are scheduled concurrently.

620 **Directed Studies**

Fall, Spring, Summer. 1 to 30 credits. A student may earn a maximum of 48 credits in all enrollments for this course. R: Open only to graduate-professional students in the College of Osteopathic Medicine upon completion of Units I and II. SA: OM 620, OM 620

Individual or group work on special problems in medicine.

651 **Obstetrics and Gynecology Clerkship**

Fall, Spring, Summer. 1 to 9 credits. A student may earn a maximum of 9 credits in all enrollments for this course. R: Open only to graduate-professional students in the College of Osteopathic Medicine upon completion of Units I and II. SA: OM 651, OM 651

Obstetric patient evaluation and management: motor skills, aptitudes, evaluation of postpartum patient and management of gynecologic problems.

Surgery Clerkship

Fall, Spring, Summer. 1 to 12 credits. A student may earn a maximum of 12 credits in all enrollments for this course. R: Open only to graduate-professional students in the College of Osteopathic Medicine upon completion of Units I and II. SA: OM 653, OM 653

Surgical diagnosis, management, and treatment. Structure developed to achieve proficiency in motor skills, aptitudes, comprehension of concepts and principles, patient evaluation, diagnosis, management, therapy.

Anesthesiology Clerkship 654

Fall, Spring, Summer. 1 to 4 credits. A student may earn a maximum of 4 credits in all enrollments for this course. R: Open only to graduate-professional students in the College of Osteopathic Medicine upon completion of Units I and II. SA: OM 654, OM 654

skills, concepts and principles, patient evaluation, management and therapy.

Orthopedic Clerkship

Fall, Spring, Summer. 1 to 20 credits. A student may earn a maximum of 30 credits in all enrollments for this course. R: Open only to graduate-professional students in the College of Osteopathic Medicine upon completion of Units I and II. SA: OM 656, OM 656

Program developed to achieve proficiency in motor skills, aptitudes, comprehension of concepts and patient principles, evaluation, diagnosis, management, and therapy.

658 Otorhinolaryngology Clerkship

Fall, Spring, Summer. 1 to 20 credits. A student may earn a maximum of 30 credits in all enrollments for this course. R: Open only to graduate-professional students in the College of Osteopathic Medicine upon completion of Units I and II. SA: OM 658,

Develop proficiency in motor skills, aptitudes, comprehension of concepts and principles, patient evaluation, diagnosis, management, and therapy.

OFFICE OF THE **PROVOST**

PRO

Office of the Provost

Freshman Seminar

Fall, Spring. 0 to 1 credits. A student may earn a maximum of 2 credits in all enrollments for this course. R: Open only to

freshmen. Approval of department. Introduction to the academic life of the University. Special topics proposed by faculty to engage the interests of new students.

PACKAGING

PKG

School of Packaging College of Agriculture and Natural Resources

Principles of Packaging

Fall, Spring, Summer. 3(3-0) SA: PKG 210 Packaging systems, materials and forms and their relationship to the needs and wants of society.

Packaging with Glass and Metal

Fall, Spring. 3(3-0) P:M: (CEM 141 or CEM 151 or LBS 171) and (PHY 231 or PHY 183 or PHY 183A or PHY 183B or PHY 193H or LBS 271) and (PKG 101 or concurrently) SA: PKG 320, PKG 325

Physical and chemical properties of glass and metals and their applications to packaging.

322

Packaging with Paper and Paperboard
Fall, Spring. 4(3-2) P:M: (PKG 221 or concurrently and PKG 101) and (MTH 124 or MTH 132 or LBS 118 or MTH 152H) and (CEM 143 or CEM 251 or CEM 351) and (STT 200 or STT 201 or STT 315 or STT 351) R: Open only to sophomores or juniors or seniors or graduate students in the School of Packaging. SA: PKG 325

Physical and chemical properties, manufacture, conversion, and use of wood, paper, paperboard, and related components in packaging. Design, use, and evaluation of packages.

323 **Packaging with Plastics**

Fall, Spring. 4(3-2) P:M: (PKG 221 or concurrently and PKG 101) and (CEM 143 or CEM 251 or CEM 351) and (STT 200 or STT 201 or STT 315 or STT 351) and (MTH 124 or MTH 132 or LBS 118 or MTH 152H) R: Open only to sophomores or juniors or seniors or graduate students in the School of Packaging, SA: PKG 320

Physical and chemical properties of plastics and their relationship to selection, design, manufacture. performance, and evaluation of packages.

330

Package Printing
Fall. 3(3-0) P:M: (PKG 221) R: Open only to sophomores or juniors or seniors or graduate students in the School of Packaging.

Methods of printing packages including copy preparation, design, electronic imaging, aesthetics, camera use, and effects of package materials. Production of printed packages including quality control, economics, and environmental considerations.

Packaging and the Environment

Spring. 3(3-0) P:M: Completion of Tier I writing requirement. RB: (CEM 141 or CEM 151 or LBS 164) R: Not open to freshmen or sophomores.

Effects of packaging on environmental quality. Solid waste. Air and water quality. Laws, economics and energy. Resource use and conservation.

Distribution Packaging DynamicsFall, Spring. 3(3-0) P.M. (PKG 322 and PKG 323) R: Open only to sophomores or juniors or seniors or graduate students in the School of Packaging. SA: PKG 310

Identification and measurement of hazards in physical distribution. Methods of protection against climate, shock, vibration, and compression.

415 **Packaging Decision Systems**

Fall, Spring. 3(2-2) P:M: (MTH 116 or LBS 117 or MTH 114 or MTH 124 or MTH 132 or LBS 118 or MTH 152H) RB: (CSE 101 or CSE 131) R: Open only to sophomores or juniors or seniors or graduate students in

the School of Packaging.

Application of computers to analyze and solve problems in the management, specification, production, and testing of packaging systems.

432 **Packaging Processes**

Fall, Spring. 4(3-2) P:M: (PKG 322 and PKG 323) and (PHY 232 or PHY 232B or PHY 232C or LBS 267 or PHY 184) R: Open only to sophomores or juniors or seniors or graduate students in the School of Packaging.

Integrated study of packaging and production operations, quality control, and organization and control of machines. Interrelationship of products, packaging, machinery layout and efficiency, and quality issues.

440 **Robotics and Automotive Packaging**

Fall. 3(3-0) P:M: (MTH 124 or MTH 132 or LBS 118 or MTH 152H)

Robotic systems: configurations, components, drive mechanisms, control and feedback, safety. Line inspection, vision systems, guided vehicle and storage retrieval systems, reusable and expendable packaging, container cleaning and identification and