LIBERTY UNIVERSITY
COLLEGE OF OSTEOPATHIC MEDICINE

CATALOG
2013-2014

Mission Statement

Liberty University College of Osteopathic Medicine (LUCOM) exists to educate osteopathic physicians in a Christian environment. LUCOM prepares physicians who dedicate themselves to excellence in the practice of osteopathic medicine through service toward their fellow man, lifelong learning, and the advancement of medical knowledge. Instilling the Christian values of integrity and professionalism, LUCOM trains physicians who will provide ethical, compassionate, competent, and patient-centered osteopathic medical care.

LUCOM Values

- scholarship
- teamwork
- leadership
- service
- professionalism
- integrity
- commitment to incarnational Christianity
- diversity
- ethical treatment of people

LUCOM Goals

1. To recruit and graduate osteopathic medical students who have a servant's heart and are committed to providing care to underserved and underrepresented patients in Virginia, the Southeastern United States, the United States of America, and the globe.

    A. To recruit a diverse student body that has a desire to serve disadvantaged urban and rural underserved populations.

    B. To place an emphasis on recruitment of students from Virginia and the Southeastern United States who share our mission, vision and values and are likely to practice in the region and help advance its health and economic status.

2. To honor and preserve the history and philosophy along with the art and science of osteopathic medicine through the teaching of historical principles and practices and the incorporation of up-to-date scientific knowledge, research, clinical, and biomedical sciences.

3. To provide an osteopathic medical education that is holistic, evidence based, community focused, and patient centered with excellence as its expected standard.

4. To teach students by design, example, and mentorship the treatment of the patient as an integrated whole; incorporating the mind, body, and spirit.

5. To develop graduates who are qualified to enter any medical discipline upon graduation yet dominantly enter primary care, preventive, and community based practices in our service area. This will be accomplished through the design of the curriculum, the type and location

of the clinical educational opportunities provided, and the leadership of the faculty role models that are provided by the COM.

6. To advance the careers, knowledge, skills, and personal lives of the faculty and staff of the COM through support for scholarly activity, research, faculty development, a positive environment, and respect.

7. To contribute to the advancement of medical knowledge and advance the quality of health care for society through educational, scientific, and clinical research, promotion of effective health policy, and other scholarly activity.

8. To be a contributing member of the greater Liberty University, Lynchburg, and Virginia communities by contributions to educational, professional, societal affairs and through works of service.

9. To support and advance osteopathic and other professional medical associations through leadership, support, contributions of service, development of policies, expansion of knowledge, and collaborative efforts.

10. To develop clinical education opportunities in rural and underserved areas of Virginia, local as well as distant regions of the United States and globally, and to provide quality clinical educational opportunities for LUCOM students and residents.

11. To develop clinical opportunities in rural and underserved areas of Virginia that will provide expanded access for patients' healthcare through the efforts of LUCOM faculty, students, and residents.

12. To develop and maintain national and international medical outreach and mission programs to train clinicians to serve in underserved areas of Virginia, the United States, and the developing world.

13. To collaborate with our affiliated hospitals and clinical partners to develop graduate medical education programs for osteopathic and other health professions graduates, provide educational opportunities for health care professionals at the same time the programs provide healthcare and educational services to our region.

Discrimination

It is the policy of Liberty University and all of its affiliated colleges and organizations to not engage in discrimination or harassment against any person because of race, color, religion or creed, sex, gender, sexual orientation, national or ethnic origin, nondisqualifying disability, age, ancestry, marital status, veteran status, political beliefs or affiliations, and to comply with all federal and state nondiscrimination, equal opportunity and affirmative action laws, orders and regulation, including compliance with Title VII, Title VI, Title, III, Title II, Rehab Act, ADA, Title IX.

This policy on nondiscrimination applies to admissions, enrollment, student retention, scholarships and loan programs, participation in university activities, employment and access to, participation in, and treatment in all university centers, programs, and activities.

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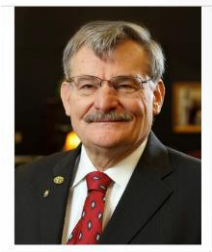

Welcome to Liberty University College of Osteopathic Medicine. Our faculty, staff, and students embrace all those who possess a servant's heart, a scientist's curiosity, and the desire to improve the lives of others through the practice of osteopathic medicine.

The faculty, staff, and administration of Liberty University College of Osteopathic Medicine are committed to honoring and advancing the culture and philosophy of Liberty University as a Christian institution along with osteopathic philosophy and heritage. We believe in the body's inherent ability for wellness and a patient centered approach to the practice of medicine that embraces the body, mind and spirit.

As educators and medical professionals, we strive to advance medical knowledge, the science and art of the practice of medicine, health and wellness, access to quality medical care, and the promotion of health policy that advances the health of our nation and the world.

We recruit and educate talented individuals who possess a commitment to service to become osteopathic physicians. We are dedicated to producing physicians who are knowledgeable, skilled, and competent, while remaining founded in professionalism, ethics and Christian principles.

We have as our goal, the graduation of students who strive for excellence in the practice of medicine and who are prepared to succeed in any discipline or graduate medical education program while maintaining an emphasis on preventive medicine, wellness, primary care, and community based practices. The college strives to provide our students with the skills required to remain lifelong learners, the desire to contribute to the advancement of medical knowledge, and the passion to be of service to their patients throughout their professional careers.

Recognizing the needs of underserved populations and the outreach missionary precepts of many of our students and faculty, we are committed to ensuring that our graduates have the foundation of knowledge, clinical skills, and competencies that will enable them to meet the needs of patients across the globe.

The desire and goal of becoming an osteopathic physician is at all times educationally and personally challenging and demanding; it can be daunting and appear impossible. Let me assure you, it is not. If you have at your core the servant's heart that we have described, if you possess the strong commitment and passion to advance the lives of others that we seek, as well as the motivation, work ethic, and personal responsibility that the curriculum and profession demand, the personal and professional rewards that you will receive far exceed the cost. You are what we seek for Liberty and what we desire for our patients and our nation. You will find kindred spirits and life-long partners here at Liberty University College of Osteopathic Medicine.

Ronnie B. Martin, Pharm D., D.O., FACOFP-*dist*
Dean, Liberty University College of Osteopathic Medicine

LIBERTY UNIVERSITY
COLLEGE OF OSTEOPATHIC MEDICINE

Introduction

The faculty, staff, and administration of Liberty University College of Osteopathic Medicine are committed to the osteopathic philosophy and heritage, serving the needs of our students, faculty and patients today as well as into the future, and advancing both the science and art of the practice of osteopathic medicine.

Working together, we recruit and educate talented individuals committed to becoming osteopathic physicians. We have as a goal the graduation of students who are prepared to succeed in any graduate medical education program they decide to pursue. In addition, we are committed to ensuring that our graduates have the foundation of knowledge, skills, and competencies that will enable them to meet the needs of the wide diversity of patients they will encounter in their professional careers. We are committed to producing physicians who are knowledgeable, skilled and competent, but also professional and ethical. The college is dedicated to producing physicians with the skills needed to remain lifelong learners, the desire to contribute to the advancement of medical knowledge, and the passion to be of service to their patients throughout their professional careers.

The College of Osteopathic Medicine (COM) prepares to accomplish these goals by:

- Providing experienced and dedicated professionals and faculty who demonstrate excellence in their knowledge, skill, and experience in the practice of medicine, professionalism, and ethics in their personal conduct and dedication for the education of medical students, to serve as the educators, mentors, and role models for our students.
- Providing the facilities and resources necessary to ensure that its students have access to, and the opportunity to acquire a state-of-the-art medical education in a positive learning environment.
- Providing the resources and support for research and scholarly activity that aligns the needs of our communities, students, and faculty.
- Providing opportunities for clinical experience under the supervision and guidance of talented, knowledgeable, dedicated, credentialed faculty that will allow our students to acquire the clinical knowledge, skills, and competencies required, while integrating these components within the core of knowledge acquired during the student's preclinical education.

LUCOM's dedication to a Continuous Quality Assessment and Quality Improvement Process serves to advance its mission and vision, benefit the education of its students, and assess the growth and development of its faculty and staff.

LUCOM is committed to seeking out and carefully evaluating the opinions and recommendations of our students, faculty, staff, and community and professional partners and to integrate them into our programs.

LUCOM is committed to our mission statement and reaching the goals established by the vision and values adopted by the Liberty University Board of Trustees and the College of Osteopathic Medicine.

An Osteopathic Physician

Two types of physicians have unrestricted licenses and may practice medicine in all 50 states. They are the Doctor of Osteopathic Medicine (D.O.) and the Doctor of Allopathic Medicine (M.D.). While both types of physicians are qualified, competent, and trained in all aspects of patient care, D.O.s offer an approach to medical care that emphasizes holistic and patient-centered treatment with an emphasis on wellness, prevention of disease, and disability.

Osteopathic physicians are distinguished by an emphasis on holistic, patient centered primary care, by using osteopathic manipulative medicine as indicated and when beneficial, and by their tradition of caring for patients in underserved rural and urban areas. Osteopathic physicians respect the relationship between physical structure and organic function and view the human body as an interdependent unit rather than an assortment of separate parts and systems.

All medical and surgical specialties are represented within the osteopathic medical profession. However, the training of primary care, community based physicians, and the desire to reach rural, minority, geriatric, and indigent populations make the osteopathic medical profession unique.

We at Liberty University College of Osteopathic Medicine are dedicated to our stated mission of producing vitally needed primary care physicians with a goal of placing 50 percent of our graduates in community-based medical practices in the state and region. We are committed to providing an education for our students that will prepare them to enter any resident program and advance the health of their patients in all patient care settings.

College of Osteopathic Medicine Accreditation

Liberty University College of Osteopathic Medicine has received provisional accreditation from its programmatic accreditor, the American Osteopathic Association Commission on Osteopathic College Accreditation (AOA-COCA). The college will be eligible for full accreditation before graduating its first class of osteopathic physicians in 2018.

The AOA is recognized by the U.S. Department of Education and the Government of Post-Secondary Accreditation as the accrediting agency for colleges educating osteopathic physicians and surgeons.

Administration

Dean
Ronnie B. Martin, PharmD., D.O., FACOFP-*dist*

Associate Dean for Clinical Affairs
Eric Gish, D.O.

Associate Dean for Biomedical Sciences and Research
Timothy Leonard, M.D., Ph.D.

Associate Dean for Academic Affairs
Joseph Smoley, Ph.D.

Director of Admissions and Student Services
R. James Cook

Director of Administration and Finance
Meesha Hickson

Director of Accreditation, Affiliations, Credentialing and Compliance
Sherri L. Martin

Department Chairs

Chair, Department of Osteopathic Manipulative Medicine/Osteopathic Principles and Practices
James Kribs, DO

Chair, Division of Internal Medicine
Carl R. Hoegerl, D.O.

Chair, Department of Anatomical Sciences
R. James Swanson, Ph.D.

Chair, Department of Integrative Physiology and Pharmacology
Kenneth Dormer, Ph.D.

Chair, Department of Molecular and Cellular Sciences
Jody Brewer, Ph.D.

Chair, Division of Neurosciences
Jason Eric Wells, Ph.D.

Requirements for Admission:

While most student who matriculate into LUCOM will have a bachelor's degree or higher, at a minimum, each applicant that matriculates must have completed 90 hours or three-fourths of the required credits for a degree from a college or university accredited by a regional accrediting body or individually recognized by Liberty University College of Osteopathic Medicine as meeting the standards it requires in order to be considered for an interview. In addition, the student must complete all of the required courses as established by LUCOM before matriculation.

Students must have obtained not less than a 3.0 GPA overall and 3.0 GPA in sciences to be considered for admission unless an exception for cause is granted by the LUCOM Dean. Competition dictates that most students will have GPA's > 3.5 and science GPA's > 3.4, respectively, which reflect greater opportunity for success with the curriculum and national board examinations. The upper division grades in the sciences are heavily utilized by the faculty in admission decisions.

Applicants must have a cumulative score of at least 22 on the MCAT and have no score less than 6 to be considered for admissions unless a waiver is granted by the LUCOM Dean. The student should obtain a minimum of 8 on verbal reasoning to be considered for admission unless he/she can establish English as second language or demonstrate extenuating circumstances. Preference for admission consideration is a MCAT > 25. MCAT scores < 3 years old may be submitted for consideration. An average of the highest scores on multiple MCAT examinations is not applicable for admission consideration.

The minimum required undergraduate courses for matriculation are:

- Biological Sciences: One year with laboratory (8-10 semester hours/12-15 quarter hours);
- Physics: One semester with laboratory (4-5 semester hours/ 6-10 quarter hours); second semester is recommended;
- Inorganic Chemistry: One year with laboratory (8-10 semester hours/12-15 quarter hours);
- Organic Chemistry: One year with laboratory (8-10 semester hours/12-15 quarter hours);
- Biochemistry or Cellular Biology: One course with laboratory (4-5 semester hours/6-8 quarter hours) *Two semesters of biochemistry or completion of both courses are highly recommended.
- *****Statistics: One course (3-4 semester hours/4-6 quarter hours) *****Candidates may be offered admission who have not previously taken a course in statistics. In such an incidence, the candidate must complete the requirement prior to matriculation through a residential course or through the online Statistics in Medicine computer-based course provided by LUCOM.
- Four (4) additional science hours are required (Faculty recommend courses in Anatomy, Physiology, Biochemistry, Immunology, Microbiology, or Genetics to enhance the student's success in medical school) and;
- English: Two courses (6-10 semester hours/8-15 quarter hours).

Recommended courses to prepare for the osteopathic medical curriculum include additional humanities such as literature, philosophy or theology; communication skills such as speech, debate, or drama; additional science courses such as genetics, human physiology, human anatomy, immunology, epidemiology, etc.

The applicant should demonstrate a humanistic and service mentality consistent with that of LUCOM as demonstrated by action and involvement in outreach and service events.

Preference is given to students from rural and underserved environments that are more likely to advance the mission and goals of the COM, especially those from the Central, Western and Southern regions of Virginia. Each applicant's personal values should be compatible with the Christian mission and environment of Liberty University.

Applicants are required to meet the Technical Standards for admission and continued enrollment and must affirm that he or she meets the standards. Any falsification or misinformation regarding the ability to meet technical standards is reason for dismissal.

Applicants must submit all required paperwork per deadlines. If paperwork is not submitted as required, an offer of admission may be retracted.

AACOMAS Application Process

LUCOM will participate with other osteopathic colleges in a centralized application processing service called the American Association of Colleges of Osteopathic Medicine Application Service (AACOMAS) once it is granted provisional accreditation. An application may be submitted online at: www.aacom.org. or may be obtained by contacting:

AACOMAS
5550 Friendship Boulevard, Suite 310
Chevy Chase, MD 20815-7231
(301) 968-4190

To initiate the application process, applicants must apply directly to AACOMAS.

Applicants who have taken course work and/or have earned a degree from a foreign institution must also submit to AACOMAS a World Education Service (WES) evaluation of their transcripts.

Applications Deadline

LUCOM has received Provisional Accreditation from COCA and applications are being accepted. Going forward from 2014, applications will be accepted annually beginning in June of each year.

The official AACOMAS application is available online at www.aacom.org. The deadline for LUCOM applicants is April 1st but is subject to change annually. Applicants should consult the LUCOM website for updates.

The last day for applicants to submit their Secondary Application and supporting materials is April 15st, 2014.

Applications should be submitted prior to the end of December to have a realistic chance of gaining admission for the next academic year.

LUCOM Secondary Application Process

Applicants who meet all admission requirements (via the AACOMAS application process) will be invited to submit the Secondary Application and supporting documents.

Secondary Application

The secondary application for the admissions section for prospective students will be made available to those students who, after initial screening to ensure that minimum standards are met, are felt to advance the mission, vision and goals of LUCOM.

Applicants meeting these minimum requirements will receive an email containing login information for the secondary application. The secondary application is returned electronically along with the payment of a non-refundable application fee of $50, completion of the waiver/non-waiver statement, and submission of three required letters of recommendation.

Three evaluation forms and/or letters of recommendation not written by a relative (by blood or through marriage) are required to complete the application for admission. One evaluation must be from an osteopathic physician (D.O.). A letter from an allopathic physician (M.D.) **in lieu** of a recommendation from an osteopathic physician is not accepted; however, a letter(s) of recommendation from an allopathic physician(s) **in addition** to your evaluation form/letter of recommendation from an osteopathic physician is acceptable. One of the other required evaluations must be from a premedical advisory committee or science faculty member familiar with the academic work of the applicant. LUCOM welcomes additional letters of support or recommendation from those who are acquainted with the student's academic or professional ability. All letters of recommendation must be originals on professional or college/university letterhead, signed by the evaluator/author and mailed directly to the LUCOM Office of Admissions.

Candidates will be required to acknowledge by signature their ability and willingness to comply with the college's technical standards, policies on attendance, dress code, requirements for participation in osteopathic teaching and education, LUCOM student professional and academic conduct and policies, and the University code of behavioral conduct and return the signed document with the secondary application.

Interview Selection Process

To be considered for an interview, an applicant must meet all the preceding admissions requirements and technical standards for admissions, have a complete file, including the AACOMAS application, a secondary application, a form/letter of recommendation from an osteopathic physician, a recommendation form/letter from a premedical or prehealth committee, the waiver/non-waiver statement, and the processing fee.

After the Office of Admissions receives these materials, the applicant's file is reviewed to determine eligibility for an interview, based on the established criteria of the Admissions Committee. If it is found to meet the standards and mission of the COM, an invitation may be extended to interview. Submission of a secondary application is not a guarantee of an interview.

Interviewing candidates are required to read and sign an acknowledgement that they:

- Meet the technical standards (any questions pertaining to whether a standard is met must be addressed with the Director of Admissions and Student Services);
- Have read and comply with the statement for students of LUCOM regarding physical exposure in classroom activities;
- Have read and comply with LUCOM's attendance and dress code policy; and
- Have read and comply with LUCOM's code of student conduct/academic responsibility and code of behavioral conduct.

Each applicant who interviews with LUCOM will be reviewed by the Admissions Committee. An interview is not a guarantee of admission to the college. An admissions decision, based on academic performance, professional experience, and interview, will be provided to the applicant usually within two weeks of the interview date.

Intentional misrepresentation or omission of information on any form relevant to admissions or records will subject the student to retraction of admission offer or dismissal. LUCOM reserves the right to deny admission to any applicant for any reason it deems sufficient. Matriculation will be denied to applicants who have failed to maintain a good record of scholastic performance and/or good record of personal conduct between the time of their acceptance and their matriculation at LUCOM.

At the conclusion of the interviews, the interviewers forward their recommendation to the Admissions Committee. The Admissions Committee may make any of the following recommendations to the Dean: to accept, to deny, or to place the applicant on an alternate or hold list.

All offers of admission are conditional until such time as the applicant has undergone a criminal background check, drug screen, and physical examination to ensure they meet the technical standards established by the COM, meet the physical, immunization and immunization titers requirements as verified by the COM.

Matriculation Process

Accepted applicants must fulfill the conditions set forth in the matriculation agreement including:

- Payment of two non-refundable deposits totaling $2000. LUCOM follows the guidelines set forth by the American Association of Colleges of Osteopathic Medicine (AACOM) relative to deposit due dates. Deposits will be applied to tuition.
- Completion of all prerequisite coursework.
- Successful passage of a drug screen and background check. This screening must meet the COM standards, be conducted by an agency approved by the COM, and occur prior to the date specified in the matriculation agreement.
- Completion of required medical documentation sent to the Student Health Coordinator, Office of Clinical Education, prior to the date specified in the matriculation agreement.
- Submission of a wavier demonstrating proof of medical insurance coverage.

- Submission of official transcripts from all colleges and universities attended. In the event of course work, completed at foreign institutions, the applicant must submit official detailed course by course evaluations completed by an approved agency. These agencies include:
    - World Education Services, Inc. (212)966-6311; http://www.wes.org
    - AACRAO (202)296-3359; http//www.acrao.org/credential/individual.htm
    - Educational Credential Evaluators, Inc. (414)289-3400; www.ece.org
    - Josef Silny & Associates, Inc. (305)273-1616; http//www.jsilny.com
- Any other requirements set forth in the matriculation agreement.

Request for Deferment

Accepted applicants may request a one year deferment for compelling reasons. Requests are to be submitted in writing to the Office of Admissions. If approved, an additional $2,000 deposit will be required by January 2nd of the year the applicant will matriculate. The entire $4,000 of deposit money will be applied to the applicant's tuition.

Transfer Applicants

LUCOM accepts transfer applicants in rare circumstances only from students who are transferring from a LCME or AOA accredited college of medicine. Transfers must be passing all subjects at the time of transfer and be in good standing with their current college of medicine. The student must provide a written statement outlining reasons for the request for transfer to the LUCOM Dean, and must be eligible for continuing or readmission at the current college of medicine. They must have a letter of recommendation from the Dean, Vice Dean or Senior Associate Deans of the prior college attended. Decisions regarding transfer are made by the LUCOM Dean and will be based on factors including academic record, circumstances leading to the transfer request, available space, and admission standards.

All students must complete at a minimum the last two years of training at LUCOM, successfully fulfill all requirements of the LUCOM curriculum, including demonstration of competency in the philosophy and application of osteopathic principles and practice, and receive the recommendation of the faculty through the Student Progress Committee for graduation.

Liberty University College of Osteopathic Medicine transcripts will reflect the cumulative credit hours transferred from the previous medical school. Information regarding grades or class rank from the previous school will not be reflected on the LUCOM transcript. Students who transfer into Liberty University College of Osteopathic Medicine will not receive a class rank.

International Student Applicants

Applicants who will require F-1 Visa should contact the Office of Admissions and Student Services for requirements at the time of application.

Tuition, Fees and Deposits:

Tuition and fees are set each year by the Liberty University Board of Trustees for the College of Osteopathic Medicine and are subject to change. Tuition and fee updates are posted on the college website student section. www.liberty.edu/lucom

Average Annual Tuition for 2014-2015 $40,000.00

Students on altered degree plans that are required to repeat individual courses or rotations but not the entire academic trimester or year will have tuition charged based on credit hours required. Courses during the OMS-I and OMS-II years will be billed at a rate of $800/credit hour and clinical course during OMS-III and OMS-IV years will be billed at a rate of $600/credit hour.

Admission Deposit $2,000.00

Two payments, the first of $500.00 is due December 15 if the student was accepted before November 15 or within 30 days of date of acceptance if after November 15. The second portion of the deposit, $1,500.00, is due 30 days after the first if the student is accepted before February 15. For students accepted after February 15, the entire deposit is due 30 days after acceptance to the college. The deposits are non-refundable and are applied to the first trimester's tuition and fees. Failure to make the deposits on time or make other arrangements with the office of admissions will result in forfeiture of the student's seat in the class.

Fees: Annual unless noted

Secondary Application Fee (one time)	$ 50.00
First Year Computer Fee	$1,250.00
Technology Fee Year 1-4	$ 750.00
Laboratory Fee Year 1-3	$ 500.00
Graduation Fee (senior year only)	$ 750.00
LU Student Activity Fee	$ 705.00
LUCOM Student Activity Fee	$ 300.00
Student Health Fee	$ 100.00
Parking and Auto Registration	$ 75.00
Malpractice Insurance Fee	$ 250.00

Financial Aid

The purpose of the Student Financial Assistance Program at Liberty University College of Osteopathic Medicine is to help as many qualified students as possible to complete their medical

education. As a participant in the Title IV, USDE federally guaranteed loan programs, LUCOM works with students to meet the cost of their education while a student at the COM. Students may finance their education with scholarships, federal loans, private student loans, military health profession scholarships, or other federal and state programs. Students may also apply for one of the loan forgiveness programs available through a variety of government and non-profit agencies once they begin their medical education or practice.

All new students receiving any form of financial aid must meet with a financial aid counselor or attend a meeting provided by the Office of Financial Aid within sixty days of the beginning of their first trimester as a student at LUCOM. Students must attend an annual financial aid meeting or meet individually with a financial aid counselor annually. All students with any form of financial aid must meet with a financial aid counselor during a three month period prior to graduation.

Financial aid will not be disbursed to anyone until he or she has been fully admitted as a student and all admission requirements have been met and approved by the administration.

More specifics of the financial aid program are available in the Liberty University Student Handbook and in a separate bulletin for students of the COM.

Refund Policy:

Fall & Spring Trimesters

Students who withdraw from all courses during a trimester are entitled to a tuition refund based on their date of withdrawal. There is no refund for withdrawal from a single course. Please note that Admission Deposits and all fees are non-refundable.

- 100% - During or prior to the first week of classes
- 50% - During weeks two through five
- 25% - During weeks six through nine
- 0% - After week nine

Summer Trimester

Students who withdraw from all courses during a trimester are entitled to a tuition refund based on their date of withdrawal. There is no refund for withdrawal from a single course. Please note that Admission Deposits and all fees are non-refundable.

- 100% - During or prior to the first week of classes
- 50% - During weeks two through four
- 25% - During weeks five through eight
- 0% - After week eight

Health and Disability Insurance

All LUCOM students are required to obtain and maintain health and disability insurance coverage that meets the standards established and published by the COM annually to protect the

student from catastrophic loss secondary to illness or injury. Proof of insurance must be submitted for each student annually before registration and before the beginning of class or rotations not less than 30 days before the start of the academic year. Students must provide proof of insurance prior to matriculation. Any medical costs incurred by students as a result of needle sticks, exposure to infectious diseases or materials, while in training, are the responsibility of the student and his/her health insurance carrier. Failure of the student to maintain health insurance that meets the standards will result in disciplinary action for the student up to and including dismissal from the COM.

Student Health Requirements

Student health forms (physical exam and immunization records) are due in the Office of Clinical Education by March 1st for those students admitted on or before December 31st, no later than May 1st for those admitted after the first of each year but before March 15th. Students accepted after March 15th have up to 45 days, but not later than first day of orientation, to submit the required physical exam and immunization forms to the office.

Forms are to be returned to:

Student Health Coordinator
Office of Clinical Education
Liberty University College of Osteopathic Medicine
1971 University Drive
Lynchburg, VA 24502

It is important that each student verify that all forms are filled out completely and that they are dated and signed by the physician. Incomplete or unsigned forms will not be accepted. The form will be returned to the student. Such action does not change the due date for the documents and failure to meet the required deadlines could result in the rescinding of LUCOM acceptance.

Any requests for extension of the deadline should be addressed to the Office of Clinical Education at lucomstudenthealth@liberty.edu.

IMPORTANT: ***LUCOM does not automatically waive immunizations or student health requirements. LUCOM is not responsible to secure or approve educational opportunities that are not in compliance with immunization policies.***

Required laboratory evaluations and immunizations are subject to review and change annually based on recommendations from the Centers for Disease Control (CDC), the United States Prevention Task Force (USPTF) and other public health agencies. Students will be notified of any changes and will be required to comply with any mandated changes upon receipt of notice from LUCOM.

Current LUCOM Requirements:

History and Physical examination: Each student must have a comprehensive history and physical examination performed by a licensed allopathic or osteopathic physician after acceptance and before matriculation into the COM. The examination must be completed within the timeline detailed above. This examination must establish and the examining physician must

verify that the student health status is adequate to meet the demands of the curriculum; that they are clinically free of contagious disease that would pose a risk to patients and that the student satisfies the health and technical requirements for admission, education, and graduation detailed in the student handbook. A signed copy of the physician's medical record of the H & P along with documentation of immunizations and lab reports demonstrating immunity and titers when applicable must be returned by the physician to the COM.

Immunization Requirements:

TB Skin Test:

- ***An Annual Test is required of all students***
- ***It is the student's responsibility to obtain the test from a health care provider and report the results in writing to LUCOM***

Each student must supply to the COM written documentation of the date of the test placement, date of interpretation, and the results. In replacement for obtaining a new TB skin test, the student may supply documentation of a PPD skin test previously performed within 6 months of the date of matriculation.

- **Students with a history of a positive PPD skin test (> 10mm induration) should not repeat the test.**
- **Students with a history of a positive PPD will be required to submit the results of a chest study (X-Ray) which documents absence of active disease.**
- **Students with new positive PPD results or those with a positive chest x-ray must follow up with the health department or their personal physician and present documentation of completion of treatment by a physician or an ongoing treatment plan and compliance for consideration of admission.**

A history of immunization with BCG as a child or adult (>5 years previously) does not remove the requirement for PPD testing and appropriate follow up.

- **Students with a positive PPD and negative CXR will be required to submit annually a questionnaire filled out after examination by a physician and following current CDC guidelines**

Diphtheria, Pertussis and Tetanus Toxoid:

- **The student must submit written documentation of completion of the initial immunization series with DTP or TDaP.**
- **The receipt of a booster within the past 10 years with TDaP.**
- **The date of each immunization is required to be documented.**

Measles, Mumps, Rubella (MMR):

- **The student must have written documentation of receiving three (3) Rubeola, Rubella and Mumps (MMR) vaccine(s). (Individual or combination immunizations).**
- **The date of each immunization is required to be documented.**
- **The student must have titers that demonstrate immunity to measles, mumps, and rubella or immunization boosters may be required.**
- **Students with prior documentation of immune status may submit that documentation in place of new titers.**

Polio (OPV/IPV):

- **The student must have written documentation of receiving an initial series of three (3) IPV or OPV immunizations plus at least one booster immunization.**
- **The date of each immunization is required to be documented.**

Varicella:

- **The student must have written documentation of receiving two (2) Varicella immunizations.**
- **The date of each immunization is required to be documented.**
- **The student must have titers that demonstrates immunity to Varicella.**
- **Students with prior documentation of immune status may submit that documentation in place of new titers.**

Hepatitis B:

- **The student must have written documentation of receiving three (3) hepatitis B injections.**
- **The date of each immunization is required to be documented.**
- **The student must have documentation of laboratory titers that demonstrates immunity to hepatitis B.**
- **Students with prior documentation of immune status may submit that documentation in place of new titers.**
- **Students who have received the initial series of Hepatitis B vaccine and do not seroconvert to demonstrate immunity will be required to repeat the <u>complete series of three immunizations</u>.**

If a student does not seroconvert and demonstrate immunity 8 weeks after completion of a second series of immunizations, they will be considered at risk for acquiring HBV. The student will meet with the Associate Dean for Clinical Affairs. Current recommendations and additional education on universal precautions, risk avoidance, and treatment options if exposed to HBV will be provided to the student. The student will sign documentation of informed consent to continue their education, acknowledging the medical risk and receipt of this information, but they will not be required to continue additional HBV immunizations.

Influenza:

- **Annual influenza immunization is required by LUCOM.**

This immunization is recommended for all health care workers annually and is required by LUCOM for all health care workers and students.

Additional immunizations:

If mandated by state or federal health care agencies or affiliated clinical partners of LUCOM, additional immunizations may be required of LUCOM students.

Recommended Immunizations:

Meningococcal (Hib): Recommended for all health care workers.

Human Papillomavirus (HPV): Recommended for all health care workers.

Typhoid Fever: Recommended for those students who anticipate completing elective rotations in tropical climates or who plan to participate in medical outreach experiences while a student at the COM.

Yellow Fever: Recommended for those students who anticipate completing elective rotations in tropical climates or who plan to participate in medical outreach experiences while a student at the COM.

Hepatitis A: Recommended for those students who anticipate completing elective rotations in underserved, tropical, or third world locations or who plan to participate in medical outreach experiences while a student at the COM.

Documentation Of Immunity:

- **Students will not be allowed any patient care activities until all required immunizations have been administered and proof of immunity is established, including but not limited to early clinical experiences, health care outreach events, international outreach trips, clinical rotations, etc.**
- **Failure to begin clinical experiences as scheduled in the curriculum does not entitle the student to make up the missed experiences, could result in failure of the course, academic probation, or dismissal from the COM.**

Regulatory, legislative, institutional, administrative authorities require that LUCOM students demonstrate immunization, immunity, or protection from multiple contagious diseases before being allowed to perform clinical rotations in the institutions utilized by the COM for the education of its students. LUCOM requires that all students, prior to beginning any clinical education or experience present proof of immunity or protection against acquiring or spreading the following infections or micro-organisms: Varicella, Measles, Mumps, Rubella, and Hepatitis B.

Academic Conduct and Personal Code of Honor

Academic Conduct and Personal Code of Honor polices are consistent with Liberty University and its graduate programs and are described in the LUCOM Student Handbook.

Background Check, Drug, and Alcohol Screening:

All students are required to submit to a Criminal Background Check as described by the following policy:

Doctor of Osteopathic Medicine Program applicants are requested to self-disclose any misdemeanors or felony convictions, other than minor traffic violations, including deferred adjudications, during the application process. The student should have the understanding that non-disclosure/falsification will in most cases lead to dismissal and disclosure may prevent enrollment if the incident would prevent the student from completing the requirements of the curriculum, including all required clinical rotations and examinations or would prevent the student from gaining an unrestricted license to practice medicine in one or more states after graduation.

In response to requirements in the professional practice environment stating that professionals and facilities providing care to patients must minimize the risk to patients that may be presented by persons with prior criminal activity, or those that engage in the use of potential substances of abuse, both legal and illegal, a drug screen and criminal background check must be completed on all accepted applicants prior to matriculation at the COM. Acceptance into the college, even though an invitation may be extended prior to completion of the background check and drug screen, is conditional until the results are returned and accepted as meeting the standards by the COM.

Substance abuse screening is mandatory at most healthcare facilities prior to participating in patient care either as a learner or a staff member. A negative substance abuse screening test is required before matriculation into the osteopathic medicine program, and again before advancement to OMS-III and OMS-IV years. Repeated screening tests may be required as determined by Liberty University College of Osteopathic Medicine or the clinical training sites.

Clinical education sites may require LUCOM to provide them with a copy of the results of any background evaluation or substance abuse test performed on students prior to and for the duration of their placement at the site. Clinical education sites may set their own standards in regard to whom they will admit based on the results of the substance abuse screening or require additional screening. Students who are not willing to allow the release of the required personal information may not be able to be placed at an affiliated clinical education site, and thus cannot meet the requirements to continue their education and fulfill the curriculum requirements for graduation.

Procedure

1. A substance abuse screening test and criminal background check will be completed on all applicants offered admission to LUCOM prior to matriculation.

2. The letter sent by the COM to each accepted applicant, as well as to selected wait-listed applicants, will include information about these requirements with the contingency that the final decision regarding matriculation will be made after institutional review of the accepted applicant’s substance abuse screening test report and criminal background check.

3. Appropriate authorization, with pertinent identifying information necessary to initiate the test, will be received from each accepted applicant prior to initiating either a criminal background check or a substance abuse screening test.

4. LUCOM will contract with one or more outside vendors for the performance of the tests. Such tests will be conducted in accordance with the Americans with Disabilities Act and other applicable laws.

5. If the test results are positive for unreported criminal activity or substances of abuse, the LUCOM Admissions Committee will review the information and the application to determine if the results will interfere with the student completing all of the requirements of the curriculum or interfere with the student obtaining graduate medical education or an unrestricted medical license to practice after graduation. Depending on the decision of the Admissions Committee, the student's acceptance can be rescinded or advancement to clinical year delayed based on these results.

6. All criminal background checks and substance abuse screening tests results will be maintained in a secure location to assure confidentiality. Routine access to the information will be limited to a staff member in the Office of Admissions and Student Services, the Director of Admissions and Student Services, the LUCOM Dean, and Liberty University College of Osteopathic Medicine General Counsel.

   The student is responsible for obtaining and paying for the examinations from one of the agencies approved by the COM. The list of agencies is supplied to each accepted student as a component of their acceptance packets and information.

Discrimination

It is the policy of Liberty University and all of its affiliated colleges and organizations to not engage in discrimination or harassment against any person because of race, color, religion or creed, gender, sex, national or ethnic origin, non-disqualifying disability, age, ancestry, marital status, sexual orientation, veteran status, political beliefs or affiliations, and to comply with all federal and state nondiscrimination, equal opportunity and affirmative action laws, orders and regulation, including remaining compliant and consistent with Title VII, Title VI, Title, III, Title II, Rehab Act, ADA, Title IX.

This policy on nondiscrimination applies to admissions, enrollment, student retention, scholarships, and loan programs, participation in university activities, employment and access to, participation in and treatment in all university centers, programs, and activities.

Technical Standards for Admission to LUCOM

The requirements to succeed at LUCOM are those necessary to successfully complete the curriculum and to practice osteopathic medicine with full practice rights. Students must be able to function in a variety of learning and clinical settings and quickly, accurately, and consistently learn and process data.

Osteopathic physicians utilize touching as part of the osteopathic approach to treatment. As part of the educational process, LUCOM students must be able to tolerate being touched and to touch others of both sexes in order to acquire the skills necessary for palpation and examination. This palpation is performed in a professional and appropriate manner. Acquiring the skills to palpate and examine patients requires a student to examine partially or completely disrobed patients of both genders and is mandatory for successful completion of the curriculum at LUCOM. In physical diagnosis and osteopathic manipulative medicine laboratory experiences, as well as other clinical laboratories where skills are acquired, students are required to participate in the examination of fellow students of both genders who may be partially disrobed.

Students will need to wear attire such as shorts and to partially disrobe for certain laboratory experiences. These are requirements for all students, regardless of cultural beliefs, in order for the student to acquire the skills necessary to practice medicine. Students who have any concern should discuss them with the Office of Admissions and Student Services prior to applying.

LUCOM is committed to making accommodations for students whose handicaps allow them to accomplish a successful career as an osteopathic physician. Reasonable accommodations do occur; the student, however, is required to function with independence and personally demonstrate all the skills described that LUCOM holds as mandatory for the safe and effective practice of osteopathic medicine.

While LUCOM is committed to making the accommodations that make a student successful, LUCOM is also committed to patient safety and assuring a safe and effective environment that does not place patients, students, or others at risk. Each technical standard has been chosen from standards osteopathic physicians deem necessary for the safe and effective practice of osteopathic medicine. Applicants who do not meet the technical standards should not apply to LUCOM.

In addition to the above, an applicant, as a student and candidate for the Doctor of Osteopathic (D.O.) degree must have abilities and skills in five areas: observation; communication; motor; conceptual; integrative and quantitative; and behavioral and social. Reasonable accommodations will be made as required by law; however, the candidate must be able to meet all technical standards with or without reasonable accommodation. The use of a trained intermediary means that a candidate's judgment must be mediated by someone else's power of selection and observation and is not a permissible accommodation.

I. Observation

The student must be able to visually observe laboratory demonstrations, microscopic tissue with the aid of the microscope, and computer based pictures used in laboratory demonstrations. The student must be able to visually and accurately observe the physical signs associated with a patient in order to make a diagnosis and management. The use of a trained intermediary in such cases would compromise performance, as it would be mediated by another individual's power of selection, observation, skill, and experience. Observation requires the functional use of vision and somatic sensations and is enhanced by the sense of smell and hearing.

II. Communication

The student must be able to communicate effectively in English as the curriculum and clinical experiences are offered in English. Students are encouraged to learn other languages for medical communication; however, all curriculum and assessment is given in English. LUCOM requires the functional ability to speak, hear, and observe patients in order to elicit accurate medical information. The student must be able both to describe changes in mood, activity, posture, and other physical characteristics and to perceive nonverbal communication. The student must be able to communicate effectively and efficiently in verbal and in written form. The student must be able to communicate effectively and efficiently in verbal and written form with the patient and with all members of the health care team in order to successfully complete the curriculum.

III. Motor

Students must have sufficient motor function to elicit information from patients by palpation, percussion, and other diagnostic measures. The student must have sufficient motor function to carry out maneuvers of general and emergency care and osteopathic manipulation. Examples of emergent motor functions are cardiopulmonary resuscitation, administration of intravenous fluids and intravenous medications, management of an obstructed airway, hemorrhage control, closure by suturing of wounds, and obstetrical deliveries. In addition, the delivery of osteopathic manipulation requires the use of extremities in palpation, positioning, and carrying out maneuvers of manipulation. These actions require fine and gross motor and sensory function, as well as the senses of touch and adequate vision for inspection.

IV. Intellectual

Students must have the ability to reason, calculate, analyze, measure, and synthesize information. The student must be able to comprehend, memorize, synthesize, and recall a large amount of information without assistance, to successfully complete the curriculum. The student must be able to comprehend three-dimensional relationships and to understand spatial relationships to succeed in school and to administer medical care. The student must be able to gain knowledge through all types of learning materials that the LUCOM curriculum offers and must be able to perform pattern identification, memorization, recall information, and to identify and discriminate important information, to problem solve, and to calculate and make decisions in timed situations and in the presence of noise and distraction. The above intellectual abilities are necessary, as students and graduates will be expected and required to perform pattern identification, immediate recall of memorized material, identification and discrimination to elicit important information, problem solving, and decision-making as to emergent diagnosis and treatment of patients. Students must be able to recall important information for diagnosis and to calculate therapeutic management of emergent conditions. This type of demonstrated intellectual ability must be performed in a rapid and time-efficient manner in order not to place patients in emergent conditions at risk. It is common for emergent situations to occur in the presence of visually distracting and noisy environments. Such emergent situations include, but are not limited to, cardiopulmonary compromise, cardiopulmonary resuscitation, obstetrical and neonatal emergencies, trauma presentations, poisonings and toxic exposures, shock, and hemorrhage.

V. Behavioral and Social Attributes

The student must have the emotional health needed for full use of his/her intellectual capabilities at all times. The emotional health required for effective communication and for professional,

mature, sensitive, and compassionate patient/physician or patient/student relationships must be present. Students must be able to function effectively under stress and with physically taxing workloads. Students must have the emotional health to be able to function without the aid of medications that are known to affect intellectual abilities and judgment. The student must have the emotional stability and motivation to deliver patient care and to make emergent decisions at all times. The ability to adapt to changing environments and stressful situations and to display compassion and integrity, while maintaining the necessary intellectual capacity to care for patients is one that is observed during the interview process and throughout the progress in medical school. An ability to demonstrate the emotional health necessary for the delivery of quality and safe medical care is mandatory throughout medical school. LUCOM considers addiction or the participation in substance abuse as a risk for unsafe medical care.

If an applicant has a question as to his/her ability to meet the minimal technical standards listed, the applicant is required to notify the Office of Admissions and Student Services in advance of applying so that reasonable testing may occur. Applicants must identify to the Office of Admissions and Student Services all areas where there is question in meeting these technical standards.

CURRICULUM

Course of Study

The normal course of study to gain a Doctor of Osteopathic Medicine (D.O.) degree from LUCOM consists of four years of progressive integrated education. Two years are held predominately on campus and the second two years are held predominately at clinical sites that are collaborative partners of LUCOM.

The College of Osteopathic Medicine has a dedicated faculty; established affiliations with medical centers, hospitals, and healthcare systems; a structured and supported rural/underserved medicine program; and a mission to educate the finest osteopathic physicians possible.

Students are assigned to one of our core educational centers to ensure continuity and coordination of clinical education within our vast and growing clinical training network. Our innovative curriculum is designed to fulfill our mission of training students who are competent and ready to enter graduate medical education and training with an emphasis on preparing students to become primary care physicians.

The design of the curriculum is based on successful integrated academic models. It emphasizes interdisciplinary collaboration, guiding students to develop a holistic, and more importantly, an osteopathic approach to medicine. We continually correlate basic scientific information and methodology with fundamental clinical application. Students are exposed to clinical settings in their first year, which gives them the opportunity to prepare for the “real world” of medicine.

This clinical exposure expands in the second year and the students have increased opportunity to interact with standardized patients on campus as well as be involved, under physician supervision, with real patients in the office and hospital setting.

A notable aspect of the clinical program is a required month long rotation in an underserved practice setting. In rural clinics and hospitals throughout the state of Virginia and across the United States, our students participate in providing healthcare to medically underserved and indigent patients. Our students learn to treat various patients whose lifestyles, practices, and attitudes toward health care differ from those seen in more traditional training sites. This enriching educational experience is one that cannot be taught in the classroom. Physicians do not work in a vacuum, but rather in a healthcare team, and LUCOM promotes interdisciplinary cooperation whenever possible in the classroom and in all of its clinical settings.

Pre-Clinical Curriculum:

Overview

For the first two years of the osteopathic medical education, LUCOM utilizes a blended, spiral curriculum that features a variety of learning modalities to prepare its students to meet the competencies established by the AOA and COCA, acquire the knowledge and skills expected of a graduate osteopathic physician and develop the tools required to become a life-long learner and contributor to the expansion of medical knowledge and patient health. The curriculum seeks to provide the opportunity for students to develop the level of professional and ethical standards and behaviors expected of osteopathic physicians in addition to the medical knowledge and skills required of a graduate osteopathic physician. Early clinical experiences are provided during the first two years of medical school in order to integrate the student into the professional atmosphere and to attempt to maintain the humanistic qualities that the COM expects students to bring into the program. An emphasis on active learning and graduated student responsibility for their education and professional development is fostered through a variety of learning experiences, including classroom presentations and application exercises, laboratory sessions, small group and team-based learning activities, near-peer instruction, the use of standardized patients and patient simulators, clinical experiences and guided and self-directed independent study. The entirety of the educational experience at LUCOM aims to encourage students to develop a pattern of individual responsibility and capacity for life-long learning and growth as competent, patient centered, holistic excellent osteopathic physicians.

The integrated spiral nature of the pre-clinical curriculum consists of three longitudinal "strands" of learning: (1) osteopathic principles, practice, and manipulative treatment (OPPMT), (2) patient-centered medicine (PCM), and (3) biomedical basis of health, disease, and intervention (BBHDI). Each of these three strands runs throughout the first two years of the curriculum, and the contemporaneous learning in each of these strands is integrated, interrelated, and complementary – similar to the double helical nature of strands of DNA within chromosomes. LUCOM desires to create a culture of informed inquiry. The most valuable learning experiences are motivated by a rational recognition of the "need to know and grow." The development of problem solving skills, the application of inductive and deductive reasoning and a thoughtful, intentional process of clinical reasoning, which is introduced early in each of the three strands, is woven throughout the remainder of the preclinical curriculum using all three strands.

Strand 1: Osteopathic Principles, Practice, and Manipulative Treatment (OPPMT)

The courses regarding osteopathic principles, practice, and treatment may be viewed as one longitudinal curriculum spanning over four years divided into trimesters and subdivided into four phases. All OPP/OMM courses include didactic presentations, demonstrations, practical laboratory experiences and hands-on clinical opportunities utilizing other students as well as real and standardized patients to establish the student's knowledge and ability to recognize and utilize the relationship between structure and function that is integral to Osteopathic Medicine. The student must meet all of the health and technical requirements described elsewhere in this manual to be successful in the study and practice of Osteopathic Medicine.

During the first two years, each student will examine, through observation and palpation, in controlled settings, a variety of other students and individuals representing the diversity of genders and body types they will encounter in clinical practice to stimulate their development of the diagnostic and palpatory skills needed as an Osteopathic physician. Being palpated by other students is necessary for the student to obtain a proper understanding of correct technique and acquire an understanding from the patient's perspective. Additionally, this provides an educational environment enabling the students to provide feedback to their training partners as part of the cooperative, active learning environment required by the COM, thus enhancing the palpatory skills of all students.

The osteopathic medical profession uses five practice principles and a variety of treatment models. Through the skills development process, the student learns the art and skills of manipulative treatment pertaining to these models. Psychomotor skills are developed by repeated practice. Reading and observation, while beneficial, do not develop the skills required to perform palpatory diagnosis and manipulative treatment. Each student is required to actively participate in all skills development laboratory sessions and all testing encounters. These skills are refined by treating and being treated by a cadre of students and other individuals of both genders and with varying body types and require the student to both visualize and touch other individuals. Involvement ensures that the student has the opportunity to acquire the required skills and provides their peers the same opportunities and rights. Each trimester concentrates on the osteopathic approach for prevention and wellness along with teaching the student how to diagnosis and treat acute and chronic disease related to the systems they are studying. The student will be expected to acquire the knowledge of structure and function, wellness and disease that is applicable to the practice of the profession. They are expected to develop and be able to demonstrate competency in the observation, palpation, diagnostic and treatment of patients with both normal and abnormal conditions at a level required by a graduate osteopathic physician.

It should be noted that the pre-clinical curriculum is synchronized with the first three phases of the Biomedical Basis of Health, Disease, and Intervention (BBHDI) and Principles of Clinical Medicine courses.

During the first year beginning early during the first trimester, the student will be initially exposed to the history of the profession, vocabulary, osteopathic principles, and tissue palpation skills development (Phase One). This will form the foundational knowledge upon which all additional osteopathic studies will be built. After the student has demonstrated a sound knowledge of the foundational principles, the student will then begin their instruction in the biomechanical diagnosis and functional anatomy of the human body. Likewise, the student will advance their palpation skills to be able to diagnose and treat the human system from a

biomechanical perspective as the student advances through the body systems for their first time in osteopathic medical training (Phase Two).

During the OMS-II year, the student is once again exposed to the various systems of the human body. However, at this time, the students will build upon their biomechanical knowledge gained during the first year and learn how to apply these skills to influence the body from a physiologic perspective. The educational goal of the second year is to teach the student how to support the homeostatic process of the body, remove obstructions to health and help foster an environment which is optimal for the healing and self-regulating processes of the body to recover from disease. Further, the student will begin to understand that there are multiple ways to influence homeostasis and healing within the patient and manipulation, when integrated with all other standard methods of disease management, may play a role in helping to provide the patient with the best chance for recovery (Phase Three).

Lastly, through hands-on review lab sessions, online modules, and face to face contact with faculty and preceptors, students will be expected to carry, review and apply their knowledge and treatment skills during their third and fourth years of training. Students will be expected (with the exception of their psychiatry rotation) to treat and log a minimum of five patients and perform at least ten osteopathic structural examinations during each of their core rotations (Phase 4). Further explanation of this process is outlined in the clinical years' curriculum in the Liberty University College of Osteopathic Medicine Clinical Training Manual For OMS-III and OMS-IV Students.

Strand 2: Patient-Centered Medicine (PCM)

These courses are taught longitudinally during each trimester the first two years and are correlated with and complement the information presented during the BBHDI and Osteopathic Principles and Practices Courses.

The courses are designed to provide educational experiences that promote the development of the students into medical professionals, physicians rather than repositories of knowledge. The courses will require the development of active learning skills, the ability to inquire and communicate effectively with patients to acquire medical and historical information to guide patient care, the development of the skills required to work in health care teams and collaborative settings, and maturation of the skills required to become life-long learners. Key throughout the courses is the requirement for the development of the clinical medical skills related to the systems being studied and demonstration of the ability to interpret, evaluate, and apply both knowledge and clinical skills to improve patient outcomes.

Beginning with the first trimester, the student will be introduced to issues of diversity and culture, professionalism, ethics, law, and regulations effecting medical practice. Included is an overview of the legal system in the United States and the Commonwealth of Virginia, including medical licensure and practice, issues of malpractice, patient rights including but not limited to informed consent, privacy, self-determination, and issues of regulatory and governmental oversight of the practice of medicine.

An important component of the student's education is the role of faith and community values and how they affect them individually and the diverse patient populations they will encounter. The students will learn to evaluate the psychosocial, economic, cultural, spiritual, and physiological issues affecting the patient.

The student is introduced to processes to advance prevention of disease and injury, the application of public health principles, the development and application of health policy, and processes for health promotion and wellness. The course examines the development and application of health policy issues including scope of practice, distribution of and access to health care professionals, graduate medical education, the role of government in healthcare, and payment for medical care, (Medicare, Medicaid, Tri-Care, managed care, HMO's and third party insurance, etc.). It examines issues surrounding providing care for the uninsured and underserved populations and the role that community health centers and health departments play in public and personal health.

The courses place an emphasis on the development of clinical decision making and clinical skills along with the ability to evaluate and apply information for the advancement of patient outcomes.

The course will explore the challenges of recognition and treatment for what are often called the modern plagues: substance abuse, domestic violence, bioterrorism, disaster medicine, health system economic challenges, chronic disease management, and the threats of new epidemics. The course will examine the unique needs of rural as well as urban medicine, the roles of military medical care, correctional medicine, and global medicine challenges.

A segment of the course looks at issues surrounding death and dying, palliative care, and end of life, the rights and responsibilities of both the patient and the physician.

The student will be expected to develop and demonstrate skills and competencies in areas of interviewing and communicating with patients and colleagues, demonstrate diagnostic and therapeutic reasoning, and problem solving skills. The student will be taught the diagnostic and therapeutic procedures and skills required of an osteopathic graduate prepared to enter graduate medical education. The student will demonstrate competencies required to function in different systems of health care, collaborative, and team based settings.

The student, as a component of this strand, will have the opportunity to participate in early clinical experiences including experiences with standardized patients and in the simulation laboratories, experiences in physician offices, community health centers, health departments, and hospitals during each of the second through sixth trimesters.

The courses' curriculum correlates with the Biomedical and Osteopathic Strand courses and requires both passive and active learning in the classroom, in the physical diagnosis and procedures laboratory, in small group settings and in clinical settings. It includes both the formative and summative utilization of simulator cases; computer assisted clinical cases, early clinical exposure, and standardized patient encounters.

Geriatrics:

As an emphasis of the LUCOM curriculum, this component of the strand looks at the special needs of this rapidly growing population: the active older adult as well as the needs of the patient with chronic disease and their often more demanding psycho-social needs. Each student will have geriatric patients assigned to him/her at the start of the second trimester, and they will have responsibilities for the continuous evaluation, interaction, and monitoring of these patients on a monthly or more frequent basis throughout the remaining of the first two years of their preclinical education. They will be expected to assist the patients with their psychosocial requirements as well as their physiological or pathological needs. It is expected that the students will develop additional professionalism skills as a result of this ongoing relationship.

Service:

Each LUCOM student has service requirements that are a component of this course. These are completed by participation during health screenings, service at charity clinics, local, national and international medical outreach events, and other service events during each trimester. In addition to individual requirements, each student organization on campus must complete a service project each year to remain recognized as an official organization on the campus of LUCOM.

The Capstone Course

This course is designed to ensure that the medical student is prepared to begin full-time clinical education and have the opportunity for success during OMS-III core rotations. It occurs at the end of the OMS-II year and is a segment of the Patient-Centered Medicine Courses.

A key component of the capstone course is the high stakes Objective Structured Clinical Examination and Clinical Skills Examination that each student must successfully complete in order to establish that they have acquired the competencies expected by the faculty, the osteopathic profession, and the public prior to beginning their clinical education. This evaluation will cover material that the student has been responsible to have learned over the first two years of their education during the clinical medicine, biomedical, and Osteopathic Principles and Practices portions of the course. It utilizes oral, written, and computer based evaluations, standardized patients, computer-assisted case based scenario, and simulator evaluations of knowledge and clinical skills.

The orientation to the clinical medicine and medical legal portions of the course will go over all policies and procedures related to the student's upcoming clinical education, including schedules, examinations, administrative requirements and documentation, evaluations, etc. There will be coverage of issues such as working as a member of the health care team and cultural diversity, professionalism, sexual harassment, medical-legal responsibilities, laws and regulations affecting clinical practice and medical student education, as well as legal rights and responsibilities for medical students. The course will provide a review of the principles of documentation, billing and coding in the clinical setting. The course will allow for records review to ensure that each student has meet all the requirements for health insurance, immunizations, physical examinations, drug screens or background checks, etc. required by the clinical partners of the COM.

Included as a component are educational courses in Basic Life Support, Advanced Cardiac Life Support, and Pediatric Advanced Life Support that each student must successfully complete to begin clinical rotations.

Included also are the required courses on OSHA, HIPPA, CLEA, and other regulatory and legal requirements that the student must be competent in to be allowed in clinical settings.

The final component of Clinical Medicine curriculum is a structured board review in preparation for COMLEX Level 1. The student is required at the completion of the review to achieve an administrative established score on COMSAE to successfully complete the requirements of the curriculum and as an evaluation of the student's preparation for COMLEX and USMLE examination. Upon producing a satisfactory score, the student will be released to take the national board examinations and progress to clinical education.

Strand 3: Biomedical Basis of Health, Disease, and Intervention (BBHDI)

There are four phases of the BBHDI strand of learning that run longitudinally through the preclinical curriculum. There are four turns (or "passes") in the preclinical curricular spiral, with each turn representing a pass through an expanding breadth and depth of information and clinical application. The first turn of the spiral occurs in Phase One and focuses on foundational information and understanding. The second turn occurs in Phase Two, which emphasizes the normal structure and function that defines states of health and wellness and approaches to health promotion in individuals and populations. The third turn occurs in Phase Three, where the emphasis is on recognition of disease and the application of clinical understanding that leads to rational patient-centered approaches to prevention, diagnosis, and treatment of disease. The fourth and final turn takes place in Phase Four, where students are provided an opportunity for summation and synthesis of the understanding and application of information that has grown throughout the preceding phases.

Year-One

Phase One (BBHDI-1) comprises the first six weeks of the curriculum in the first year of osteopathic medical education. BBDHI-1 consists of a single course: Biomedical Foundations of Osteopathic Medicine (BFOM). Students are introduced to fundamental principles, concepts, and mechanisms important to the biological consideration of health and disease. Traditional biomedical science disciplines of molecular and cellular biology, genetics and developmental biology, histology and anatomy, neuroscience, physiology, microbiology and immunology, pathology, and pharmacology are considered in an integrated, interdisciplinary fashion. This course focuses on general principles and mechanisms that are fundamental and common to the biomedical considerations of health and disease processes. The BFOM course provides the foundation upon which the remainder of the BBHDI curriculum and learning is built throughout the preclinical years of education.

Phase Two (BBHDI-2) extends through the remainder of the OMS-I year and consists of a series of six courses organized predominantly by body regions/system, and a final course that introduces and develops concepts and principles of public health,

epidemiology, and clinical research. A study of traditional medical science disciplines (molecular and cellular biology, genetics, biochemistry, developmental biology and embryology, histology, anatomy, physiology, microbiology and immunology, pathology, and pharmacology) are integrated into the system-based courses. This phase emphasizes normal structure-function relationships and the principles, mechanisms, and processes of the human body that are important for the maintenance and promotion of health in individuals as well as populations. In the context of abnormal structure-function relationships, basic principles and mechanisms of disease processes and the rationale for approaches to intervention are introduced as well. The final course, Population Based Medicine, offers an overview and understanding of principles and practice of public health, classical and clinical epidemiology, general types of clinical research studies, and the biostatistical considerations that are relevant to being able to read, interpret, and apply clinical research information in the context of evidence-based medical practice.

Year-Two

Phase Three (BBHDI-3) begins at the start of the second year of medical school and includes a "second pass" through the same body regions/systems that were examined during OMS-I. With this second pass, there is intentional review, with emphasis on recall, application, expansion, and synthesis of understanding and skills. In these OMS-II system-based courses, a greater focus is placed on understanding the epidemiology, risks, pathogenesis and pathophysiology of disease, as well as rational approaches to diagnostic evaluations and interventions aimed at advancing patient health and wellness. An emphasis is placed on developing sound clinical reasoning in generating appropriate differential diagnoses, working diagnoses, and the rationale for patient management plans.

One of the innovative aspects of the LUCOM curriculum involves student cadaveric dissection beginning with Phase Three, rather than following the tradition of beginning gross anatomy student dissection activity at the onset of the curriculum. Throughout the system courses during OMS-I, students study human gross anatomy by examining prosected human cadavers and preserved specimens, models, and digital images. In their second year, having already acquired a working understanding of human anatomy and the importance of three-dimensional structure-function relationships, students engage in human cadaveric dissection throughout the Phase Three system courses. Human cadavers are a precious gift in medical education, and we endeavor to value them by deriving the greatest learning benefit possible. We believe there are a number of important advantages to the LUCOM approach. In the second year, students begin their human cadaveric dissection experience with a sound knowledge and appreciation of human anatomy, allowing them to more efficiently and meaningfully learn from their dissection. Invariably, there is much pathology that can be appreciated and investigated through cadaveric dissection. By dissecting cadavers in their second year, students are better able to recognize pathology and benefit from a more thorough consideration of clinical-pathologic correlations. Cadaveric dissection in OMS-II provides a better juxtaposition of the clinical-pathologic principles students learn through class activities with genuine examples that can be seen and explored via the cadaveric dissection experience. LUCOM also uses the second-year dissection of cadavers as an opportunity

to provide valuable near-peer teaching experiences. Because of the alignment of the two passes through the system-organized courses, second-year students are completing regional cadaveric dissection while the first-year students are studying the same relevant body system. OMS-I students can visit the gross anatomy cadaver lab and OMS-II students are able to present their dissections to their first-year colleagues. In this way, second-year students, under the supervision of the gross anatomy faculty, can become teachers and demonstrate and explain relevant three-dimensional anatomic and structure-function relationships as well as demonstrate and explain relevant clinical-pathologic correlations. Additionally, as first-year students examine the cadaveric dissection of their second-year "near-peers," they are given a valuable glimpse into the future of what they will be doing themselves the following year.

Phase Four (BBHDI-4) occurs near the end of the OMS-II year and includes a more in-depth study of conditions commonly found associated with women's health, pediatrics and geriatrics. These three courses provide an opportunity to compare and contrast important processes, clinical syndromes and considerations across a life-stage continuum of the human experience of health and disease.

The final two weeks of Phase Four are devoted to the Patient Centered Medicine Capstone course directed by the Patient Centered Medicine faculty and provides summation experiences for the application of professional, ethical, biomedical and clinical knowledge and skills with preparation for the clinical phase of the students' education. Students will be required to demonstrate the knowledge, skills, competency, and outcomes that were expected to have been acquired throughout the pre-clinical curriculum at a level that demonstrates they are prepared to enter the clinical education phase of their training.

Clinical Curriculum:

The OMS-III year is based at one of LUCOM core clinical sites and each student follows a COM directed curriculum that includes patient care as well as didactics, independent learning assignments, interactive computer case-based learning, simulation scenarios, and monthly, hands-on OMM labs to ensure that the foundational competencies for each discipline are provided for each student. The students will complete 10 core clinical rotations, occurring both in the hospital and in community settings. Each rotation has designated learning objectives for the accompanying curriculum, integrated osteopathic learning objectives and requirements, as well as an end-of-rotation evaluation. Each student has dedicated time during the year for review and board preparation with a curriculum established by the COM. Each student must successfully pass the end of OMS-III clinical examination to move to the OMS-IV year, in addition to COMSAE and COMLEX requirements established by the COM.

Hospital Core:

This five block course during the OMS-III year, supervised by COM appointed faculty at one of the COM affiliated core hospitals is integral to the development of physicians and is designed to allow the student to convert facts and information accumulated during their preclinical years into application of that knowledge for the benefit of the patient, develop confidence in themselves as

professionals as well as expose areas of need for further learning. Included are rotations in internal medicine and medical subspecialties, general surgery and surgical subspecialties, obstetrics and women's health. During rotations, while the students are not primarily responsible for the care or outcome of the patient, the patient remains the primary concern of all members of the health care team, including the student. Students are challenged to demonstrate to the faculty that they have acquired and can utilize a foundation of basic clinical skills, medical knowledge, and competencies that has them prepared to move into graduate medical education.

Core Community Rotations:

Based in a community and outpatient setting, this portion of the core education of the OMS-III student is designed to expose the student to the practice of medicine originating outside of the hospital and academic settings. With an emphasis on public health, preventive medicine, wellness, primary and secondary care of acute and chronic illness, and emphasizing a holistic approach to the patient, the student will have opportunity to follow the physician from the clinic to the hospital and back, providing an opportunity to participate in the total care of the patient regardless of where the care originated. All students will spend two blocks during their OMS-III year with a family physician in office based practices. In addition, they will have one block of pediatrics, one block of psychiatry/behavioral health, and one block of community and underserved health care. Some students may be allowed to perform their underserved health rotation at a medical outreach site in or outside of the United States. Some students may have a portion of their rotation during family medicine, psychiatry, and pediatrics rotations on hospital services.

Procedures for OMS-III Students:

OMS-III students that are within four hours driving time from the campus will return to campus the last Friday/Saturday of each block for end-of-rotation examinations, meetings with administration and faculty advisors, OMM review and laboratory experiences and other educational sessions unless released in advance by the Office of the Clinical Dean. Students whose core site is more than 4 hours from the main campus will obtain the experiences and fulfill the educational requirements at a regional core site under the direction of college appointed faculty and staff.

Clinical students are to follow the work schedule and calendar governing the clinical service they are assigned to each block and not strictly the COM calendar. For the sake of continuity, quality clinical education and patient care requirements, the student may be required to work on holidays or other days differing from postings on general COM calendar. The normal work week while on clinical service is 72 hours. Students normally will not be assigned to work more than 12 hours each day nor more than 12 out of 14 days unless patient care conditions dictate otherwise. Students are to have two consecutive days off every two weeks, but they are not required to be weekend days.

See the Clinical Medicine Handbook for a more detailed description of each of the clinical rotations, objectives, evaluations and expected outcomes.

OMS-IV Sub-Internship:

The OMS-IV year provides for four required rotations at designated core clinical sites, one selective rotation, and four electives. During core rotations, each student has integrated osteopathic principles and practices requirements in addition to the requirement for OMM application. All students must pass both components of COMLEX Level 2 (CE and PE) in addition to all clinical rotations (both faculty evaluations and end of rotations examinations when given) to be eligible for graduation.

Each student must take and pass two blocks of an approved hospital-based medicine selective and one block of an approved hospital-based surgical selective in addition to one block of emergency medicine during the OMS-IV year to fulfill the requirements of the curriculum and to advance their preparation for residency responsibilities.

The student's selective may be with a COM faculty member at one of the LUCOM core hospitals or may be taken at a hospital with an osteopathic residency program that is approved by the COM.

Medical selective options include: Hospitalist service, Cardiology, Nephrology, Gastroenterology, Critical Care Medicine, Neurology, Pulmonology, Endocrinology, and Infectious Disease.

Surgery selective options include: Orthopedics, Trauma Surgery, General Surgery, Vascular Surgery, Transplant Surgery, Neurological Surgery, Urological Surgery, Gynecological Surgery and Oncological Surgery.

Each student, during the OMS-IV year, must take a one block selective in an underserved area with COM appointed faculty and at a site approved by the COM. Sites approved include Critical Access or Rural Hospitals, FQHC in rural or urban areas that provide service to underserved populations, correctional facilities, Native American facilities, etc. The student may be allowed to use this selective month to complete their underserved rotation at an international COM approved site with permission of the Office of Clinical Education.

Electives:

Each student has four blocks during the OMS-IV year to complete electives of their choice. A student may not take more than two blocks of rotations at the same site or with the same preceptor in the same discipline. An elective rotation may be completed by the student with COM appointed faculty, at COM approved sites or at other sites arranged by the student if the policy and procedures established in the clinical manual are followed.

The clinical curriculum course descriptions and syllabus, objectives, requirements, and rotations schedules are updated yearly and are included in the Clinical Manual that is posted online for the students of the COM.

Combined Degree Development

In cooperation with the Business College, the Public Health Program, College of Religion,

Biology and Chemistry Department, the Engineering College, and the College of Law, Liberty University College of Osteopathic Medicine is working toward the development of programs that will provide additional professional opportunities for students. Anticipated to be progressively developed beginning with the 2015-2016 academic year, the programs will allow osteopathic medical students to pursue additional professional development while fulfilling the requirements for their D.O. degree. The programs, when developed, will allow the interested student to complete concurrent education online, or alternatively fulfill part of the requirements online during their first three years of osteopathic medical education program, then devote one year of intensive study away from the medical curriculum to fulfilling the requirements for a Master's program after the OMS-III year is completed. The student would return to full time status in the COM for their OMS-IV year to complete the requirements of the osteopathic medical curriculum. At graduation, the student would receive recognition and awarding of both degrees. Five year programs in development include but are not limited to D.O.-M.B.A., D.O.-M.P.H. (multiple areas of focus including global health, epidemiology and health policy), D.O.-M.Sc. (emphasis on professional education), D.O.-M.A. of Ministry, D.O.-Masters of Medical Informatics, and D.O.-Masters of Health Law. Please follow our web-site and specific bulletins for details of the programs as they are developed.

American Osteopathic Association Core Competencies:

Using the seven core competency domains published by the American Osteopathic Association as a guide, the college has incorporated competency training and assessment into its curriculum throughout the four-year course of study for the Doctor of Osteopathic Medicine degree program at a level appropriate for a medical student preparing to enter GME. The competencies taught and evaluated as well as the level of performance expected from the student are addressed in the syllabus for each of the courses.

Knowledge of osteopathic philosophy and practice: Both cognitive and psychomotor skill sets are trained and assessed in this competency domain. Classroom-based learning occurs throughout years one and two. Laboratories for training in clinical and manipulative medicine skills are conducted through years one and two. Requirements for the incorporation and application of osteopathic principles are incorporated in clinical rotation syllabi, reading, case-based modules, and through the hands-on workshops that are provided during end-of-rotation testing days at core sites. The principles of structure and function, the clinical osteopathic examination, the diagnosis and treatment of somatic dysfunction, viscerosomatic, and somatovisceral dysfunction are integrated throughout the curriculum through coordination of OMM/OPP with Principles of Clinical Medicine and Biomedical Foundations and Systems. Knowledge and skills are assessed through written examinations in years one and two, observation and evaluation of performance during laboratory sessions and structured evaluations of diagnostic and treatment knowledge and skills during the OPP courses. Clinical competence in this domain is evaluated by faculty at core rotation sites during years three and four as well as performance at hands-on labs, symposium, and evaluations at the end of each core rotation. Overall, competency in osteopathic manipulative medicine is assessed by laboratory practical examinations, through assessments utilizing standardized patients, and OSCEs during years one, two and three along with demonstration during the required OMM laboratory sessions during the

core rotations of OMS-III and OMS-IV. This competence is further tested by the NBOME (COMLEX) with passage of Levels 1, 2-CE, and 2-PE required of all degree candidates.

Medical knowledge: The acquisition of medical knowledge is only one goal and product of the integrated spiral curriculum. Just as importantly to the competency of the students is their ability to utilize knowledge for the benefit of the patient: their understanding, interpretation, and application of knowledge for patient benefit. Each course has established learning objectives established by the faculty and the curriculum committee, including outcome objectives for the clinical rotations. These include humanistic and professional objectives as well as cognitive learning objectives during preclinical and clinical clerkship. Medical knowledge is assessed through written or computer module examinations during preclinical courses, through student presentations and participation during active learning, case-based or team learning sessions, by student scholarly research, papers, and presentations. It is measured by both the preclinical and clinical faculty through assessment of the quality and depth of student patient assessments, presentations, research and documentation of patient interviews, assessments and plans during clinical rotations as well as through the utilization and evaluation of performance on assigned case based modules, during practical examinations at the bedside as much as during clinical and osteopathic skills laboratories. Knowledge is measured by the students' performance individually and compared to peers during the end of rotation examinations at the completion of each core clinical rotation, their performance on each of the levels of COMLEX or USMLE. The assessment provided by peers on the student's performance during interactions in the class, lab, and clinical setting is also utilized along with self-assessment tools for each student.

Patient Care is taught through the clinical evaluation and care of patients, through active learning opportunities in small groups with case-based scenarios, in the standardized patient and simulation laboratories, medical outreach experiences, and then assessed through observational evaluation by the faculty and peers, written or computer provided case-based and educational modules and associated formative and substantive examinations, through student presentations and participation during case-based or team learning sessions, through student-generated patient assessments and notes during clinical rotations, during practical examinations in clinical and osteopathic skills laboratories, through the utilization of end-of-rotation examinations at the completion of each core clinical rotation, through performance on the various stages of COMLEX and/or USMLE and through direct faculty interaction. Students also participate in formal case write-ups, peer education requirements utilizing electronic, and oral presentations during clinical education.

Interpersonal and communication skills are critical for the doctor to translate into a physician, a healer of men rather than a repository of knowledge. The COM provides structured curriculum, simulation opportunities, group and active learning requirements, practical experiences, role models, and mentors designed to foster the ability of each student to interact with patients and peers in a manner that exhibits clarity and respect in the Patient-Centered Medicine course that extends over years one and two as well as in day-to-day interactions at the campus, during outreach events, and throughout the clinical curriculum. Students receive formal interview training and communication training, coupled with training in the psychology, sociology and diversity of patients during the pre-clinical years of the curriculum during their Patient-Centered Medicine courses.

Ethics and professionalism are emphasized as features of the curriculum and high standards of each are expected by the COM for all students.

An emphasis is placed on an understanding of population-based as well as individual healthcare issues, public health policy concerns and development, and the role the patient's diversity plays in their life and health care.

The art and requirements of the medical interview are part of the early curriculum for the students and the required skills are reinforced through clinical laboratory experiences, standardized patients encounters, case-based group interactions and team-based learning environments, along with early community clinic experiences. As students gain greater experience and skills during their supervised clinical experiences during OMS-III and IV years, so do the expected levels of performance increase.

These competencies are also assessed by observation by the faculty and other students during both professional and social settings occurring at the COM and problems and concerns dealt with through faculty and student governance structure. The actions and interactions with other students, staff and faculty are important assessments of the student's competency. Students are observed during small group, classroom, clinical laboratory, and outreach experiences beginning in year 1 and continuing into the core clinical rotations. OSCEs are conducted utilizing standardized patients and simulation which are recorded for both formative and summative evaluation and to promote self-improvement on the part of the student. Peer feedback as a part of this assessment is highly valuable in shaping and changing behavior as well as improving skills. Students are evaluated by their clinical faculty in this domain during OMS-III and OMS-IV clinical rotations. These competencies are further assessed during COMLEX Level 2-PE, during the high stakes at the end of the second year clinical OSCE and competency examinations and at the end of third year clinical competency examination conducted by the COM.

Knowledge of the professional and ethical standards expected of an osteopathic physician as well as public health issues affecting patients: Professionalism and ethics are presented during Patient Centered Medicine Courses, during small group educational sessions that are a component of the curriculum, as a component of clinical laboratories, simulation and standardized patient encounters.

While the competency is evaluated through written examinations including Standardized Patient and simulation scenario's, it is evaluated more importantly through the action of the student in active learning environments such as small groups and team-based learning events, by their compliance with the policies and procedures of the institution, the students' involvement in COM and University activities and organizations and professional organizations and associations. Further assessment is made through the students' contributions for the benefit of other students, demonstrations of their leadership, their actions and interactions with other professionals, students, staff, and faculty all are important assessments of the student's competency in this domain.

Each student is observed by the faculty and evaluated by their peers during clinical laboratory, simulation, small group, team-based learning, and outreach experiences beginning in year 1 and continuing into the core clinical rotations. OSCEs are conducted utilizing standardized patients and low and high-fidelity simulation which are recorded for both formative and subjective evaluation as well as self-improvement on the part of the student.

Students are evaluated for professionalism and ethics by their clinical faculty and other educators during OMS-III and OMS-IV clinical rotations. The competency is further assessed by COMLEX Level 2-PE, during the high stakes at the end of the second year clinical competency OSCE and at the end of the third year clinical competency examination conducted by the COM.

Practice-Based Learning and Improvement: Activities that promote reflective learning require scholarly research and application of knowledge. Such actions requiring evaluation of outcomes compared to standards and peers provide students with opportunities to gain competence through both pattern recognition, analysis of these outcomes, and the acquisition of new knowledge.

Few of the traditional formally constructed undergraduate clinical experiences provide sufficient repetitive exposure to similar presentations to fully reinforce this competence. In an effort to create such opportunities, the COM has adopted an early clinic program for all students that begin in the first trimester. Each student will have geriatric patients assigned to him/her at the start of the second trimester, and they will have responsibilities for the continuous care and monitoring of these patients on a monthly or more frequent basis throughout the remaining of the first two years of their education. They will also have a minimum of 6 early clinical experiences during the first two years of the curriculum and the opportunity to participate in other medical outreach events.

Each student is placed in clinical environments during the OMS-III and OMS-IV years that provides for outcome-based and evidence-based practice. These occur in both institutional and outpatient settings. During these rotations, they are exposed to quality of care reviews, patient safety programs, patient registries, and standards of care requirements. Their skill and knowledge is assessed through small group, case-based, and practical evaluations of patient care and outcomes occurring as a component of the Patient Centered Medicine curriculum, written examinations during preclinical course work that measure knowledge of standards of care, patient safety, patient registries, outcome and scientific based practices, as well as their knowledge of methods of research and analysis.

Student evaluations, presentations, and documentations during clinical rotations are evaluated and the students are given feedback by the faculty on how these evaluations and treatment plans meet established standards and could be expected to affect outcomes. The student will learn to utilize electronic assessment tools for the formulation of and narrowing of differential diagnosis and the appropriate diagnostic and evaluation. Subject examinations at the completion of each core clinical rotation, all levels of COMLEX and/or USMLE, along with direct faculty interaction, will provide the student with a guide to their progress along with performance during formal case write-ups and oral presentations. Knowledge and ability to utilize up-to-date information is also assessed during the high stakes end of second year clinical competency and end of third year clinical competency examination conducted by the COM.

System-Based Practice: Students are taught about patient health care challenges and opportunities surrounding both the United States and global medical systems and their effect on patient outcomes both as individuals and as populations during their Patient-Centered Medicine courses and symposium during the first two years of medical school at LUCOM.

Early clinical experiences provide for practical experience working inside differing systems during the student's time in private clinics and institutions, at Federally Qualified Healthcare Centers (FQHC), at rural and critical access hospitals, military institutions, and at public health departments in Virginia. Active learning during case-based learning opportunities, including interdisciplinary/interprofessional experiences during simulation, and standardized patient encounters all require the student to apply knowledge of variant systems in determining appropriate evaluation and treatment of the "patients". Clinical faculty provide practical insight into health care services in a complex interdisciplinary/interprofessional environment during core clinical rotations. Students also participate in formal case write-ups and oral presentations during both preclinical and clinical years that require them to address the issue.

The domain is taught and assessed through participation in small group discussion occurring as a component of the Patient Centered Medicine and Public Health curriculum, interactive learning opportunities with nursing students at Liberty University, through written examinations during preclinical years that measure knowledge of the operations of differing systems of care, knowledge of patient safety, and patient registry programs. Student patient evaluations, documentation, evaluation and treatment plans are evaluated by peers and faculty. The topics are covered during examinations at the completion of each core clinical rotation and the topic is included on COMLEX and USMLE evaluations. Students are assessed for this competency as well during the high stakes end of second year clinical competency and end of third year clinical competency examination conducted by the COM.

All students are required to successfully complete BLS, ACLS, and PALS as a component of their prep for clinical practice curriculum. Students are taught the basics of acute care of the sick and injured patient during clinical medicine and as a component of their systems courses. This knowledge is assessed on end-of-rotation examination, during Standardized Patient and Simulation events, and during small group and team learning discussions and presentations. Students are taught the process for research and information retrieval during clinical medicine and the prep for clinical practice course utilizing on-line resources such as Up-to-Date, Epocrates, MEDLINE, etc.

Academic Promotion

Promotion is defined as progression from one academic year to the next. A student must satisfactorily complete all courses' requirements for the preceding academic year in order to progress to the next and be considered making satisfactory academic progress.

The Student Progress Committee (SPC) shall annually review the progress of all COM students and recommend to the Dean those students who are eligible for promotion into the next academic year, as well as those recommended for graduation.

Student Grades

Grading for OMS I-IV medical students is based on a scale of 0 to 100. LUCOM requires a grade of 70 or above for passing of all courses, any grade below 70 is failing.

A	95-100 (4)
A-	90-94 (3.75)
B	85-89 (3.25)
B-	80-84 (3.0)
C	75-79 (2.75)
C-	70-74 (2.0)
F	0-69

Some courses are graded pass with honors/high pass/pass/fail/and satisfactory; or satisfactory/fail; as shown below:

H Pass with honors	90 or above
HP High pass	80-89
P Pass	70-79
S Satisfactory	70-100 (courses when no honors grade is offered)
F Fail below	70
R Repeated course -	retaken to remediate prior failure
X	Passed by remediation
I	Incomplete
FN	Failure for nonattendance
W	Withdrawal
WP	Withdrawal Passing
WF	Withdrawal Failing

*Letter grades are provided for reference only. LUCOM official grades are numerical grades only and not letter grades.

Academic Credit

Academic credit is granted for classes successfully completed at LUCOM based on contact hours as well as assigned responsibilities outside of class.

A minimum of 14 and a maximum of 16 hours of classroom contact, laboratory effort, or assigned independent effort are required for one credit in any course. Examination hours do not calculate in credit hours for the course.

For each two hours of lab, small group, simulation, or independent study assigned, one hour academic effort is granted.

Required study outside of the requirements of the curriculum is expected for academic success and is not included in the calculation of academic credit.

0-4 hours of contact	0.25 credit
5-10 hours of contact	0.5 credit
11-13 hours of contact	0.75 credit
14-16 hours of contact	1.0 credit

For clinical rotations, hours are counted in the same manner as laboratory sessions; 2 contact hours equal one hour of effort. Clinical rotations are designed to require 120-144 hours every two weeks or 240-288 hours during a four week block. As such, the student devotes 60-72 and 120-144 hours of effort and is granted five and ten credits respectively for each successfully completed rotation.

Courses successfully completed may be transferred for credit from other LCME or AOA accredited colleges on an individual basis if they meet the criteria and objectives established in the COM catalog and course syllabus. No student may graduate from LUCOM without completing all of the requirements of the curriculum as established by the faculty and administration, meeting all of the requirements for knowledge, skill, and competency in osteopathic philosophy, procedures, and techniques and completing at least the last two years of instruction at LUCOM.

Enrollment Classification	**Less than Half Time**	**½ Time**	**¾ Time**	**Full-Time**
Credit Hours per Trimester	1-2	3	4-5	=>6

Graduation Requirements

A student who has fulfilled all the academic requirements may be granted the degree Doctor of Osteopathic Medicine (D.O.) provided the student:

1. Has satisfactorily completed all of the curriculum and rotations requirements at an AOA-accredited college of osteopathic medicine including at a minimum the last two years of their education at LUCOM.

2. Has completed all academic requirements in no more than six years from the date of matriculation.

3. Has complied with all the curricular, legal, and financial requirements of the university.

4. Has attended the compulsory portions of senior week, including graduation rehearsal and the graduation ceremony, at which time the degree is conferred and he/she takes the osteopathic oath.

5. Has passed COMLEX Level I and both components of COMLEX Level 2 (CE and PE) of the examination administered by the National Board of Osteopathic Medical Examiners.

6. Has reached at least 21 years of age.

7. Has demonstrated the ethical, personal, and professional qualities deemed necessary by the LUCOM faculty for the practice of osteopathic medicine and gained the recommendation for graduation from the Student Progress Committee.

8. Has demonstrated suitability for the practice of osteopathic medicine to the administration and LUCOM faculty through action of the Student Progress Committee as evidenced by their conduct, ethical and professional behavior, demonstrations of medical knowledge and skills, displaying responsibility for patient care, and exhibiting integrity in the conduct of clinical and academic activities.

9. Has demonstrated compliance with the Code of Behavioral Conduct.

Degrees are not awarded solely upon the completion of any prescribed number of courses, credits, or upon passing a prescribed number of examinations. Granting of the degree requires in addition, that the LUCOM faculty believes the student has attained sufficient maturity of thought, ethical, and professional proficiency to serve the public as an osteopathic physician. Matriculation and enrollment does not guarantee the issuance of a degree without satisfactorily meeting the aforementioned curriculum and degree requirements.

Annual Report

LUCOM will compile and publish an annual report that incorporates formative and summative outcomes of student achievement, including but not limited to: graduation rates, transfer and attrition rates, COMLEX-1 and COMLEX-2 passage rates, obtainment, discipline, and location of postdoctoral programs by its graduates. To the degree that the information is obtainable from its graduates, the COM will also publish GME completion rates, AOA or ABMS board certification, and geographic area of practice of its graduates along with notable achievements of its graduates in its annual report. The report will help to correlate the COM's outcomes with its Mission, Values, and Goals.

Liberty University College of Osteopathic Medicine

Academic Calendar for 2014-2018

Orientation-I 29 July through 1 August, 2014

First Trimester 4 August through 5 December, 2014

Fall Break Noon 24 October, 2014 through 29, October, 2014

Thanksgiving 26 November through 28 November, 2014

Second Trimester 8 December, 2014 through 10 April, 2015

Christmas Break 15 December, 2014 through 4 January, 2015

Easter Break 6 April through 10 April, 2015

Third Trimester 13 April through 31 July, 2015*

*OMS-I Students have a four week elective period and two week academic breaks scheduled at the end of this trimester, providing six weeks that may be utilized for Officer Basic Training, a medical outreach elective, anatomy or research elective, etc. or which may be taken as vacation time.

Orientation-II 28 July through 31 July, 2015

First Trimester 3 August through 4 December, 2015

Fall Break Noon 16 October, 2015 through 21 October, 2015

Thanksgiving 25 November through 27 November, 2015

Second Trimester 7 December, 2015 through 8 April, 2016

Christmas Break 14 December, 2015 through 3 January, 2016

Easter Break 28 March through 1 April

Third Trimester 11 April through 29 July, 2016*

*OMS-I Students have a four week elective period and two week academic breaks scheduled at the end of this trimester, providing six weeks that may be utilized for Officer Basic Training, a medical outreach elective, anatomy or research elective, etc. or which may be taken as vacation time.

*OMS-II Students will have available a board review course during the 6 week period 20 June through 29 July and may utilize a component of the time for vacation, another elective including Officers Basic Training, medical outreach, research or scholarly activity elective.

Orientation-III 27 July through 30 July, 2016

First Trimester 1 August through 2 December, 2016

Fall Break Friday before & Monday through Wednesday, Week of OMED

Thanksgiving 23 November through 25 November, 2016

Second Trimester 5 December 2016 through 7 April, 2017

Christmas Break 12 December, 2016 through 2 January, 2017

Easter Break 17 through 21 April, 2017

Third Trimester 10 April through 28 July, 2017*

*OMS-I Students have a four week elective period and two week academic breaks scheduled at the end of this trimester, providing six weeks that may be utilized for Officer Basic Training, a medical outreach elective, anatomy or research elective, etc. or which may be taken as vacation time.

*OMS-II Students will have available a board review course during the 6 week period 20 June through 29 July and may utilize a component of the time for vacation, another elective including Officers Basic Training, medical outreach, research or scholarly activity elective.

*OMS-III Students have two blocks (8 weeks) of scholarly activity and board review scheduled at the end of this trimester a portion that may be utilized with permission of the Office of Clinical Education for additional audition rotations, officer training, medical outreach rotations, etc. on an individual basis.

Orientation-IV 1 August through 4 August, 2017

First Trimester 7 August through 8 December, 2017

Fall Break Friday before & Monday through Wednesday, Week of OMED

Thanksgiving 22 November through 24 November, 2017

Second Trimester 11 December, 2017 through 13 April, 2018

Christmas Break 11 December, 2017 through 2 January, 2018

Easter Break 2 April through 6 April, 2018

Third Trimester 16 April through 27 July, 2018*

*OMS-I Students have a four week elective period and two week

academic breaks scheduled at the end of this trimester, providing six weeks that may be utilized for Officer Basic Training, a medical outreach elective, anatomy or research elective, etc. or which may be taken as vacation time.

*OMS-II Students will have available a board review course during the 6 week period 20 June through 29 July and may utilize a component of the time for vacation, another elective including Officers Basic Training, medical outreach, research or scholarly activity elective.

*OMS-III Students have two blocks (8 weeks) of scholarly activity and board review scheduled at the end of this trimester a portion that may be utilized with permission of the Office of Clinical Education for additional audition rotations, officer training, medical outreach rotations, etc. on an individual basis.

*OMS-III Students have two blocks (8 weeks) of scholarly activity and board review scheduled at the end of this trimester that may be utilized with permission of the Office of Clinical Education for additional audition rotations, officer training, medical outreach rotations, etc. on an individual basis.

OMS-IV Students trimester ends on 13 April, 2018

First Graduation 12 May, 2018

Curriculum for Liberty University College of Osteopathic Medicine

Anticipates beginning Orientation prior to the first Monday in August.

Anticipates beginning Class for OMS-I and OMS-II the first Monday of August annually.

Anticipates beginning rotations for OMS-III and OMS-IV students in August.

OMS-I

First Trimester

Biomedical Foundations of Osteopathic Medicine	7 Credits
Osteopathic Principles, Practices, and Manipulative Treatment I	2 Credits
Patient-Centered Medicine I	2.5 Credits
Integument and Musculoskeletal System	6.75 Credits
Cardiovascular, Respiratory, and Hematologic Systems	6 Credits
Total of 24.25 Credits	

Second Trimester

Osteopathic Principles, Practice, and Manipulative Treatment II	2 Credits
Patient-Centered Medicine II	2.5 Credits
Humanities in Medicine I	3 Credits
Gastrointestinal System and Nutrition	4.75 Credits
Urinary System	4.75 Credits
Endocrine and Reproductive Systems	6.75 Credits
Total of 23.75 Credits	

Third Trimester

Osteopathic Principles, Practices, and Manipulative Medicine III	1.5 Credits
Patient-Centered Medicine III	2.5 Credits
Nervous System/Head and Neck	7 Credits
Population Based Medicine I	3 Credits
Elective *(Student may elect to take vacation instead of elective course)	4 Credits
Research, Anatomy, Medical Outreach, or Officer Basic Training	

Total of 14 Credits (*18 with Elective)	
OMS-I Total	62 Credits

OMS-II Year

First Trimester

Osteopathic Principles, Practices, and Manipulative Medicine IV	2 Credits
Patient-Centered Medicine IV	2.5 Credits
Hematology/Oncology	2.25 Credits
Orthopedics, Rheumatology & Dermatology	7.25 Credits
Cardiology and Pulmonology Course	5.75 Credits
Gastroenterology	3.75 Credits
Total of 23.5 credits	

Second Trimester

Humanities in Medicine II	3 Credits
Osteopathic Principles, Practices, and Manipulative Medicine V	2 Credits
Patient-Centered Medicine V	2.5 Credits
Neurology/Psychiatry/Otolaryngology	8.5 Credits
Nephrology and Urology	4.75 Credits
Endocrinology	3 Credits
Total of 23.75 Credits	

Third Trimester

Osteopathic Principles, Practices, and Manipulative Medicine VI	1.5 Credits
Patient-Centered Medicine VI	2.5 Credits
Women's Health	3.5 Credits
Pediatrics	3.5 Credits
Geriatrics and End of Life Course	2.5 Credits
Capstone Course	6 Credits
Board Review Course	4 Credits

Total of 23.5 Credits

OMS-II Total 70.75 Credits

OMS-III Year

Orientation to Clinical Medicine 4 Credits

4 week blocks beginning on Monday and ending on Friday. Last Friday of each rotation is set aside for end of rotation testing and OMM hands on experience.

2 Blocks of Family and Community Medicine 20 Credits

2 Blocks of Internal Medicine 20 Credits

2 Blocks of Surgery 20 Credits

1 Block of Women's Health/OB-GYN 10 Credits

1 Block of Pediatrics 10 Credits

1 Block of Psychiatry/Behavioral Health 10 Credits

1 Block of Underserved Care 10 Credits

2 Blocks of Scholarly Activity 20 Credits

1 Block of Vacation

Total OMS-III 124 Credits

OMS-IV Year

4 week blocks with end of rotation examination and OMM practical sessions for the core rotations

1 Block of Emergency Medicine 10 Credits

2 Blocks of Hospital IM Selective 20 Credits

1 Block of Hospital Surgery Selective 10 Credits

4 Blocks of Elective 40 Credits

Total for OMS-IV 80 Credits

TOTAL Credits Required for Graduation: 336.75 Credits

Approved IM Selectives:

Hospitalist Service, Cardiology, Pulmonology, Neurology, Nephrology, Critical Care Medicine, IM Service, Infectious Disease, Endocrinology, Oncology-Hematology, Gastroenterology

Approved Surgery Selectives:

General Surgery, Orthopedic Surgery, Gynecological Surgery, Urological Surgery, Oncology Surgery, Trauma Surgery, Transplant Surgery, Anesthesia

Students may not do more than two electives rotations with the same preceptor and may not do more than two electives at the same hospital in the same discipline.

Students may perform an international medicine rotation for up to two electives if experience meets the academic standards established by LUCOM (must have educational structure, be supervised by LUCOM faculty, at LUCOM credentialed location, associated with medical school licensed by LCME or AOA, associated with a medical school or medical school faculty member submitted and accepted by COM administration).

First Class Graduation May, 2018

Must participate in all activities of graduation week and participate in the graduation program of the University and the COM as a condition of receipt of diploma.

Students who can anticipate they will complete all requirements for graduation by 31 December of 2018 will be allowed to participate in graduation with class but will not receive diploma until all requirements are fulfilled.

Affiliated Clinical Teaching Hospitals

See the Clinical Handbook and online resources for descriptions and locations of hospitals, hospital services, faculty, and DME contact information. Current partners include:

Centra Health Systems—Lynchburg, Farmville, South Boston

Johnson Health Clinics—Lynchburg, Amherst, Bradford, Campbell

Life Point Hospital Systems-Danville, Martinsville

Halifax Regional Medical Center-South Boston

Special Academic Programs

Clinical Shadowing Program

The program exposes medical students to primary care in laboratory, simulation, and clinical settings early in their medical career. A long-term goal is to increase the number of graduates who will pursue careers in community-based practices with an emphasis on primary care and preventive medicine. Exposure to professional role models is a significant determinant of medical students' career choices, and an early clinical experience is an essential learning component for medical students to begin to correlate classroom knowledge with patient encounters.

Physician Mentor Program

Students are placed with physician mentors. Students may elect to switch mentors annually.

Students are required to switch primary care disciplines and mentors after their first year. In addition to providing a broad exposure to the role of a primary care physician, the physician mentor provides the student with the opportunity to perform patient histories and physical examinations within the limits of the student's ability, and educates the student by providing timely feedback and engaging in discussions and explanations of his or her decision making. There are many Virginia Osteopathic Medicine Association (VOMA) and Medical Society of Virginia primary care physician members who educate first- and/or second-year medical students in their private offices.

Geriatric Teaching Program

The College of Osteopathic Medicine has a strong commitment to teaching students, residents, and physicians about the needs and care of the diverse populations of geriatric patients especially in light of the rapidly growing numbers for this portion of our population and the burden of chronic disease they represent. The college requires that all students successfully complete a didactic geriatric and end-of-life course that is designed to address the medical needs of this population and addresses the goal of "successful aging", but also provides opportunities for the student to learn the proper clinical evaluation and treatment of geriatric patients during multiple rotations and training settings.

The geriatric experience is designed to foster humanist in medicine as well as to encourage active learning and the application of knowledge.

Students are assigned one or more geriatric patients to follow concurrently with the systems education portion of their education beginning the second trimester of their education. They are to see the patients at a minimum monthly for the next 18 months. They are responsible to become engaged with the patient medically as well as psychosocially. They are required to examine the patient monthly and report any changes to the patient's attending physician. During their clinical years, LUCOM students may participate in a four week geriatric rotation, often in a rural or underserved setting, where they care for elders under the supervision of a skilled geriatric physician.

Rural and Community Health Outreach Programs

The mission of LUCOM's Rural and Community Health Program is to improve the access to and the quality of primary healthcare service to medically underserved communities by linking the resources of the medical school and academic centers with community-based healthcare providers.

It strives to both inspire and encourage students to enter medical practice in primary care fields in underserved locations that will benefit these diverse populations. Individuals in these settings often have their health and wellness compromised by a lack of timely and appropriate access to primary health care. Through this program, the COM strives to develop effective and comprehensive training opportunities that will lead to improved access to quality primary health care for Virginia's medically underserved rural and inner-city urban communities.

Medical students are involved in service learning opportunities with physicians and faculty at community health centers, charity clinics, public health departments, homeless assistance centers, migrant farm worker clinics, health fairs and health screening events as well as during shadowing experience in local hospitals and nursing homes. The partner organizations principally provide healthcare and other needed services to medically underserved, minority, and at-risk populations. Community outreach efforts such as medical outreach trips to underserved locations in Virginia, the United States, and internationally qualify for credit if done under the supervision of LUCOM faculty and as a part of LUCOM outreach programs.

Osteopathic Principles and Practice Laboratories

The required and extensive development of the palpatory skills used for diagnosis and treatment is a significant distinction between the educational programs in osteopathic and allopathic medical schools. Stedman's Medical Dictionary defines palpation as "examination with the hands and fingers; touching, feeling, or perceiving by the sense of touch." Palpation in the osteopathic medical education context is the use of touch to examine the body. Palpatory skills are used in all areas of osteopathic medical practice and are especially important in the evaluation, diagnosis, and treatment of the musculoskeletal system.

The development of palpatory skills is taught in the first and second-year Osteopathic Principles and Practice (OPP) courses and reinforced and refined through clinical experience and practice both at supervised clinical settings during the OMS-I and OMS-II years as well as throughout the OMS-III and OMS-IV year's clinical rotations. Each LUCOM student is required to complete and document clinical experiences that incorporate OMM/OPP during their clinical rotations as a condition of graduation.

Successful completion of these courses requires active participation in all laboratory sessions, both as the student learning proper examination and treatment techniques, and as the teaching model for peers and other students. The student must meet all of the health and technical requirements described in this manual to be successful in the study and practice of osteopathic medicine.

During these years, each student will examine, through observation and palpation, in controlled settings, a variety of other students and individuals representing the diversity of genders and body types they will encounter in clinical practice. These examinations will be performed to stimulate their acquisition of the diagnostic and palpatory skills needed as an osteopathic physician.

Being palpated by other students is necessary for the student to obtain a proper understanding of correct techniques and acquire an understanding of the patient's perspective as well as enabling the students to provide feedback to other students as part of the cooperative, active learning environment required by the COM, thus enhancing the palpatory skills of all students.

The osteopathic medical profession uses a variety of treatment methods. Through the skills development process, the student learns both the art and science of manipulative treatment

utilizing the different methods of treatment commonly employed by a skilled osteopathic physician.

Psychomotor skills are developed by repeated practice. Reading and observation, while beneficial, do not develop the skills required to perform palpatory diagnosis and manipulative treatment. Therefore, each student is required to actively participate in all skills development laboratory sessions and all testing encounters. These skills are taught by treating and being treated by a cadre of students and other individuals of both genders and with varying body types, requiring the student to both visualize and touch other individuals and give all their peers the same opportunities and rights while demonstrating respect, dignity, and professionalism throughout the examination.

Osteopathic Post-Graduate Training Institute (OPTI)

In cooperation with its partner hospitals and clinics, private physicians and interested state agencies, the College of Osteopathic Medicine has joined Osteopathic Medical Network for Excellence in Education (OMNEE) in an attempt to advance Graduate Medical Education in the state and region. LUCOM is a participant in OMNEE's innovative program to provide consistent and quality clinical education and training for its students and graduates. OMNEE strives to increase opportunities for medical education for the students of LUCOM, students from other colleges of osteopathic medicine and other health care professionals, as well as to develop and promote excellence in postdoctoral medical training, including the development and continuous improvement of internships, residencies, fellowships, and continuing education programs.

OMNEE, an OPTI operating as a graduate medical education consortium, is a network of hospitals, clinical, and other health care institutions committed to providing undergraduate and post-graduate academic training and to promoting excellence in osteopathic medical education and research. In its first five years of operation, OMNEE has developed programs that have grown to provide over 340 approved GME positions. OMNEE's programs are located in the greater Appalachian area and include Traditional Rotating Internship, Dermatology, Family Practice, Family Medicine, Internal Medicine, and Neurosurgery. OMNEE also offers fellowship programs in Gastroenterology, Sports Medicine, and Geriatrics.

An OPTI is an alliance of affiliated clinical sites linked through electronic networks, teaching, research, and community health initiatives with a shared commitment to excellence in the education of today's students and tomorrow's physicians. The OPTI partners join forces to advance postgraduate clinical education, research initiatives, public health, and preventive medicine programs to benefit the patients that its members serve. OMNEE places an emphasis on providing care for the elderly, indigent, and minority patient populations and the development of primary medical care providers—which the partners define in a broad manner—from family medicine to women's health and gynecology, general and orthopedic surgery, emergency medicine physicians, and geriatricians.

Student Organizations

College of Osteopathic Medicine Student Government Association (SGA)

The student government is the official voice for all osteopathic medical students on the campus of LUCOM. The meetings are open to all students in the college, and the student government welcomes proposals and participation from the entire student body. Responsibilities of the student government include collecting and expressing student opinion, dispensing funds for student activities, acting as a liaison for the student body to the faculty and administration, promoting osteopathic medicine, supporting club and class activities, and working to improve the quality of life for all students at LUCOM.

The initial student government president, vice president and secretary/treasurer will be elected by secret ballot during the second month of the initial trimester of LUCOM. Until that time, the Office of Admissions and Student Services will provide services to the inaugural class. Thereafter, the following policy will be in effect.

The student government president and vice president are elected before the end of the spring trimester from the rising OMS-II or OMS-III class. The student government secretary and treasurer are elected before the end of the fall trimester from either the current OMS-I or OMS-II class. The previous secretary and treasurer, if not elected to a higher office, will serve until such elections are held. During these times, each class also elects two representatives to serve on the student government. These elected college student representatives along with the elected class officers make up the student senate. The elected student government president shall serve as chair of the student senate; the vice president shall serve in his/her absence. If both are not able to fulfill their responsibilities, they are followed in succession by the treasurer and then by the secretary of the student government

The student government president is the LUCOM representative on the Council of Student Government Presidents (CSGP) of the American Association of Colleges of Osteopathic Medicine (AACOM). CSGP is an organization composed of the student government presidents from each of the osteopathic medical schools.

Class Officers

Each class will elect a class president, vice-president, secretary/treasurer, and two class representatives to the student government during the second month of the academic year. All officers will serve as representatives for the student government.

All officers may serve for more than one year and may succeed themselves in office.

The officers elected for the OMS-III class shall serve as the officers for the class during the OMS-III and OMS-IV years and will be elected during last month of the OMS-II academic year.

Student Activity Groups

The Director for Admissions and Student Services must approve all extracurricular activities as well as recognize all on-campus and off-campus organizations that are identified with LUCOM. All newly proposed organizations and events which include risk to participants, events involving health care services, events which could potentially affect the image of the university must be further approved by the Dean. To apply for recognition, and to receive LUCOM funding, organizations must be an affiliate of a nationally recognized osteopathic professional society, have a mission that mirrors Liberty University's or provide unique service to the professional community or patients in the opinion of the administration of LUCOM.

There must be sufficient interest among the student body to support an organization, which shall be measured in part by requiring those proposing to charter any new organization to obtain the signature of > 20% of the total members of the OMS-I and OMS-II classes (the students on campus) supporting the establishment of the organization, indicating they would be interested in joining, or that they are supportive of the organization representing LUCOM students prior to presentation of the request for recognition to the Office of Admissions and Student Services. The constitution and by-laws for the organization must be submitted at the time of the request for recognition. Each club or organization must have a faculty sponsor that is approved by the Office of Admissions and Student Services prior to presentation of its request for recognition.

All activities and events that involve students, faculty, or staff of the COM must be appropriately scheduled to avoid conflicts with academic requirements and other professional events and must be approved not more than 90 or less than 10 business days in advance through the Office of Admissions and Student Services. Requests for permission for off-campus speakers, student activities, and other individual or group activities on campus should be made on forms provided by the Office of Admissions and Student Services at least 10 days in advance. No meeting announcements may be made until approval is received from the Office of Admissions and Student Services.

A variety of clubs and organizations are pre-approved on campus; a non-inclusive listing of organizations is below.

American College of Osteopathic Family Physicians (ACOFP)

The student chapter of the ACOFP's objective is to advance the study of family medicine in the field of osteopathic medicine and surgery. The organization works toward the advancement of family medicine and the family practitioner's role and scope of practice, the advancement of access to quality, patient centered, cost effective health care for the patient, and the principles of preventive and primary care. The chapter recognizes the fact that the family practitioner is the backbone of modern medical practice. The Virginia Society of the ACOFP is the state division of the national organization and maintains a direct liaison with the LUCOM chapter. Membership in this organization entitles students to benefits such as seminars, educational programs, and financial support to various family practice conferences.

Association of Military Osteopathic Physicians and Surgeons (AMOPS)

The student chapter of this national organization is open to all College of Osteopathic Medicine students in the military or public health service. The chapter serves as liaison between on-campus military students, those on rotations, military, alumni and organizations.

Association of Orthopedic Surgery and Sports Medicine

The objective of this organization is to promote and advance the discipline of orthopedic surgery and operative sports medicine and to instruct students who are interested in orthopedic surgery, sports medicine, and structural relationships to health and disease. Affiliated with the American College of Osteopathic Orthopedic Surgeons

Christian Medical Dental Association

The Christian Medical Dental Association is a national organization that began in 1931. The chapter is composed of osteopathic medical students and other health care professionals at Liberty University who are committed to living out their faith through their profession and the example of their lives while providing support for medical students and their families. Benefits of the club include local events as well as regional and national seminars, journals, and newsletters.

DOCARE Student Chapter

DOCARE, a national organization founded by concerned osteopathic physicians, is dedicated to providing medical care to underserved people in any geographical area of the world. Student participation is welcomed, and the LUCOM chapter offers exciting and unique opportunities to student physicians to participate in these medical missions across the globe.

Emergency Medicine Society

The Emergency Medicine Society is devoted to developing students' interests in emergency medicine. Since emergencies present themselves to the physician at any and all times, this club seeks to instill those precepts necessary for handling an emergency properly and appropriately. The parent organization is the American College of Osteopathic Emergency Physicians.

National Osteopathic Women Physician Association (NOWPA)/American Medical Women Association (AMWA)

The National Osteopathic Women Physician Association/ American Medical Women Association is a professional organization composed of female students. The purpose and objective of the organization is to further the study of women's interests and concerns in the field of medicine and to promote osteopathic medicine as a philosophy, a science, and an art.

Psi Sigma Alpha

Psi Sigma Alpha is the national osteopathic medical honor society established to uphold standards of professionalism and community service. Members of high professional and ethical standards in the top 10% of their class are eligible for membership on recommendation of the faculty and vote of the membership

Rural Medicine Association

The Rural Medicine Associations purpose is to promote student awareness of and participation in rural and underserved service opportunities to expand care for underserved populations. The organization provides information on programs designed to reward such service through loan payback programs, scholarships, stipends, etc.

Sigma Sigma Phi

Sigma Sigma Phi is the original national osteopathic scholastic honor and service society that, through its student affiliates, fosters student fellowship, scholarship, service to the college and the profession, and a commitment to the principles of osteopathic medicine.

Student Advocate Association (SAA)

The College of Osteopathic Medicine Chapter of SAA is organized for those who support the students at LUCOM and is chartered by the Advocates to the American Osteopathic Association (AAOA). The primary objective of the SAA is to further the goals of the college and the osteopathic profession, to support the students of LUCOM and those that support them, and to promote fellowship, goodwill, and unity within the school.

Student Association of Obstetrics and Gynecology

The Obstetrics and Gynecology Club fosters an enhanced interest among students in obstetrics and gynecology and provides information and opportunity for enhanced experiences and knowledge in the discipline. The organization is affiliated with the American College of Osteopathic Obstetrics and Gynecology.

Student National Medical Association (SNMA)

The Student National Medical Association was created to produce sensitive, qualified physicians to serve minority and indigent communities. SNMA focuses on (1) providing its members with avenues that help foster an obligation to practice medicine within minority communities; (2) instituting programs for the dissemination of health care information and the empowerment of minority communities; and (3) serving the fraternal needs of minority medical students.

Student Osteopathic Internal Medicine Association (SOIMA) and American College of Physicians (ACP)

SOIMA is the student affiliate of the American College of Osteopathic Internists, the national certifying board for osteopathic internists. SOIMA's purpose is to educate osteopathic medical students about the opportunities open to osteopathic physicians specializing in internal medicine and to help them acquire the knowledge and skills required to practice in the discipline. ACP has both a Virginia and national chapter in the state that provides support for medical students interested in the discipline of internal medicine and its sub-specialties

Student Osteopathic Medical Association (SOMA)

Student Osteopathic Medical Association is the official student organization of the American Osteopathic Association and the representative body for Osteopathic Medicine in the U.S.A. The Student Osteopathic Medical Association is one of the largest student groups on campus of the Colleges of Osteopathic Medicine, representing more than 90 percent of most student bodies. SOMA's national affiliations with similar groups at other schools provide the largest network for information exchange and interaction available today. Membership in SOMA brings benefits including free subscriptions to Student Doctor and Medical Student and discount prices on diagnostic equipment, the Preceptorship Program, SOMA scholarships, life insurance programs, and more. Locally, SOMA is involved in the school, hospital, and citizen communities through various service projects and socials.

Student Osteopathic Surgical Association (SOSA)

Osteopathic medical students interested in surgery or its subspecialties are welcomed to acquire additional knowledge and skills surrounding the practice of surgical specialties. It is affiliated with the American College of Osteopathic Surgeons.

Student Pediatric Association

The Student Pediatric Association fosters students' interest in pediatrics. The club is open to those desiring to specialize in pediatrics or those interested in family medicine and other fields in which pediatric patients will be encountered. It is affiliated with the College of Osteopathic Pediatricians.

The Student American Academy of Osteopathy (SAAO)

The Student American Academy of Osteopathy is a professional organization dedicated to serving osteopathic medical students. It is the COM's extension of the American Academy of Osteopathy, a national association established in 1937. The academy maintains the goal of developing the science and art of total health care, with an emphasis on palpatory diagnosis and the use of osteopathic manipulative medicine. Membership in SAAO allows students to receive the AAO publications and to attend the annual convocation, both at reduced prices.

Virginia Society of Osteopathic Medicine Association (VOMA)

VOMA student chapter is the student division of the state osteopathic association. It is open to all osteopathic students and deals with those medical and political issues unique to the state of Virginia. Benefits include invitations to a variety of conferences and educational programs, as well as financial support to these programs and scholarships.

Medical Society of Virginia

The student chapter of MSV represents student interest and issues in this professional body, which strives to represent the physicians of Virginia. Membership provides opportunity for networking, mentorship, scholarship and education. The organization provides information on GME, practice and scholarship opportunities, and support students at the medical colleges in the Commonwealth.

College of Osteopathic Medicine Course Descriptions

Year-1 (OMS I)

1st Trimester (Fall, 2014)

LCOM 1001: Biomedical Foundations of Osteopathic Medicine (BFOM) 7 credits

The BFOM course provides students with a foundation upon which to further develop a growing understanding of important structure-function interrelationships that are involved in states of health and disease. The course integrates fundamentals of traditional medical science disciplines (molecular and cellular biology, genetics, developmental biology, histology, anatomy, physiology, microbiology and immunology, pathology, and pharmacology) across levels of organization of the human body: from molecules – to cells – to tissues – to organs – to organ systems – to the entire body. These biomedical principles and processes are considered in the context of the body's natural ability to maintain homeostasis through self-regulation and self-healing mechanisms. Interdisciplinary, interdepartmental teams of College faculty engage with students in various learning activities aimed at an integrated approach to learning.

Each student brings to this course her/his unique experiences, knowledge and understanding, perspectives, and expectations. One of the purposes of the BFOM course is to provide a common medical scientific foundation and a holistic, osteopathic approach to learning about processes of health and disease in patients and populations.

The BFOM course provides a foundation and framework for ongoing learning throughout the curriculum that relates the holistic health and wellness of individuals to the ability of the body to (1) extract resources and energy from its surroundings and convert these to energy and resources that can provide needed structure and function; (2) sense change in its environment and provide a coordinated response for the good of the body; and (3) reproduce, grow, develop, and adapt. Students also are introduced to principles and mechanisms common to disease processes.

Student learning as well as formative and summative student assessments within the BFOM course is organized around various activities, which could include, but are not necessarily limited to the following: large group classroom application activities; team-based learning (TBL) sessions; small group case-based learning (CBL) and discussion sessions; lectures employing audience response technology; computer-based modules; independent guided reading and study; and written/computer-based examinations. In keeping with the mission of LU and the mission, values, and goals of LUCOM, the BFOM course emphasizes the importance of life-long learning with an aim to foster and support the broader development of osteopathic medical competencies and promote the best osteopathic patient-centered care possible.

LCOM 4001: Osteopathic Principles, Practices, and Manipulative Treatment I (OPPMT) 2 Credit Hours

The Osteopathic Principles, Practices, and Manipulative Treatment I course is designed to provide the student with a fundamental understanding of the history, principles, and philosophies

of osteopathic medicine. During this course, the student will be introduced to the lexicon, foundational principles, and professional expectations upon which the profession was built. The faculty also works in conjunction with other departments to complement and integrate the knowledge received from the systems-based and clinical medicine courses. Whenever possible, the OPP curriculum is designed to integrate with the Department of Structural Medicine to help enhance your knowledge of anatomic relationships, particularly in the musculoskeletal and cardiopulmonary systems, as they apply to osteopathic theory and treatment.

Additionally, the student will sequentially initiate training in the tactile and haptic skills necessary for the diagnostic palpation of their future patients, regardless of the medical specialty they choose. Consequently, this course will instruct the student in the philosophic and diagnostic underpinnings, upon which they will continue to build their osteopathic knowledge, and structurally-based examination and palpatory clinical skills which will continually develop for the rest of their clinical careers.

LCOM 2001: Patient-Centered Medicine I (PCM1) 2.5 Credits

Principles of Patient-Centered Medicine I is the first of the six-part Clinical Medicine course that is delivered across Years I and II and are coordinated with the systems courses.

Through introduction of the student to local and national health policy issues, the tenets of medical legal and regulatory principles, clinically related ethical scenarios, and the development of communication, clinical examination/observational skills that parallel the systems course during each trimester, this course seeks to develop the clinical and professional acumen, the diagnostic, therapeutic, and problem solving skills necessary for an ethical, professional, competent, compassionate, and culturally sensitive osteopathic physician. In the first trimester, the student is introduced to the use of his or her basic senses including smell, touch, auscultation, visual inspection, and hearing to assess a patient, along with the utilization of clinical symptoms and signs, and the efficient utilization of diagnostic techniques and procedures. The course integrates the tenets of the patient as a whole, incorporating considerations of body, mind, and spirit with other sciences in the practice of medicine with the professional, ethical, and moral codes that guide individuals and physicians. Emphasis during this trimester is on the competencies, knowledge, and clinical skills required to evaluate, diagnose, and treat patients with disorders of the Integument and Musculoskeletal Systems along with the Cardiovascular, Respiratory and Hematological Systems in parallel with the Biomedical Foundations courses.

The students will be exposed to the principles of team based practices, respect for, and collaboration with other health care professionals.

Each student will be expected, by the end of the series of sequential courses, to demonstrate the professional qualities expected of a graduate Osteopathic physician: the medical, clinical and psychosocial knowledge coupled with clinical skills required to acquire health related information, advance wellness, prevent disease as well as treat established pathology among diverse groups of patients at the level expected of a graduate osteopathic physician.

LCOM 3002: Integument and Musculoskeletal System (IMSK) 6.75 credits

The Skin and Musculoskeletal System course builds upon the BFOM course and aims to expand the student's foundational understanding of human structure and function in both normal and

pathologic states. Principles and concepts introduced and developed in this course are integrated into the classroom discussions and laboratory experiences of the OPPMT and PCM courses.

Students have the opportunity to study the development as well as the structure and function of the skeleton, joints, the associated muscles and soft tissues, and the neurovascular connections of the somatic body in states of health and disease, but the emphasis is on the homeostatic maintenance of health. Students will be introduced to pathologic conditions affecting the somatic body and general considerations important to clinical decision-making, including the biological basis for generating differential diagnoses and approaches to rational patient care. Osteopathic principles and concepts will be discussed, integrated, and applied along with the interdisciplinary discussion and application of traditional biomedical sciences including molecular and cellular biology, biochemistry, embryology, anatomy, histology, physiology, microbiology and immunology, pathology, and pharmacology.

This course utilizes laboratory exercises – including anatomical models, prosected cadaveric specimens, and digital microscopy – and active learning exercises along with computer-based modules and lecture demonstrations to build upon foundational understandings and prepare students for the more in-depth consideration of orthopedic and rheumatologic conditions that will occur in the OMS-II Orthopedic and Rheumatology course.

LCOM 3001: Cardiovascular, Respiratory, Hematologic Systems (CVRH) 6 Credits

The Cardiovascular, Respiratory, and Hematologic Systems course is designed to enable students to acquire the knowledge and understanding of normal structure-function relationships and the biomedical basis for health maintenance involving the cardiovascular, respiratory, and hematologic/lymphatic systems. Structures, principles, and processes involved in maintaining healthy gas exchange, blood vascular circulation and tissue perfusion are explored and compared to pathologic conditions in which there are abnormal structure-function relationships. This course also introduces students to cells and components of the blood as well as hematopoiesis and lymph production and drainage important to the homeostatic maintenance of health. Structure-function relationships from the molecular and cellular level to the whole-body level are explored and developed as a foundation for understanding disease states related to blood and the lymphatic system. Principles and mechanisms of hemodynamics developed in the BFOM course are revisited and expanded upon, as normal and abnormal processes of hemostasis are considered. Students should be able to relate the structure and function of blood cells and components to vital processes of oxygen delivery to tissues, hemostasis, and inflammation and immune function. Organs related to these systems are considered, and general disease processes related to or involving abnormal functioning of these organs are introduced. The processes, mechanisms, and clinical sequelae of immunodeficiency's are further explored. Where possible and appropriate, osteopathic principles and the approaches and rational for osteopathic manipulative treatments are discussed and examined, with application also occurring in the concurrent OPPMT course.

The intimate interrelationship of these systems in both health and disease are highlighted, and students are expected to begin to relate pathologic processes to the common clinical presentations, approaches to prevention, diagnostic evaluations, and treatments of diseases affecting these systems. This course also introduces the biomedical basis for general approaches to pharmacologic interventions in these representative disease processes.

A study of the principles and underlying mechanisms of cardiac function and maintenance of appropriate tissue blood perfusion and hemodynamics is correlated with basic approaches to diagnosis and treatment of diseases affecting cardiovascular function. Similarly, a study of pulmonary gas exchange, airflow, and pulmonary mechanics is applied to the recognition of general types of respiratory diseases. Normal and abnormal immune host defense related to the functioning of the cardiovascular and respiratory systems is examined in as well. The scientific basis for an approach to physical examination of the cardiac, pulmonary, and lymphatic tissue is discussed and explored and then is applied in concurrent studies and activities in the PCM course. The pathologic conditions and clinical considerations introduced in this course will be revisited and expanded upon in the second-year Hematology Oncology course and the Cardiology and Pulmonology course.

2nd Trimester (Spring, 2015)

LCOM 4002: Osteopathic Principles, Practices, and Manipulative Treatment II (OPPMT II) 2 Credit Hours

Prerequisite: Successful completion of Osteopathic Principles, Practices and Manipulative Treatment I.

The Osteopathic Principles, Practices, and Manipulative Treatment II course is designed to provide the student with a continued understanding of the history, principles, and philosophies of osteopathic medicine. During this course, the student will be advanced in their comprehension and application of the lexicon, foundational principles, and professional expectations upon which the profession was built. The faculty also works in conjunction with other departments to complement and integrate the knowledge received from the systems-based and clinical medicine courses. Whenever possible, the OPP curriculum is designed to integrate with the Department of Structural Medicine to help enhance your knowledge of anatomic relationships, particularly in the gastrointestinal, urinary, endocrine, and reproductive systems, as they apply to osteopathic theory and treatment.

Additionally, the student will continually advance their training in the tactile and haptic skills necessary for the diagnostic palpation of future patients, regardless of the medical specialty chosen. Consequently, this course will further instruct the student in the philosophic and diagnostic underpinnings, upon which they will continue to build their osteopathic knowledge, and structurally-based examination and palpatory clinical skills throughout the rest of their clinical careers.

LCOM 2002: Patient-Centered Medicine II (PCM II) 2.5 Credits

As a component of the clinical medicine courses, during this trimester, each student is assigned geriatric patients to follow actively for the remainder of their OMS-I and OMS-II years as a requirement for PCM.

The second segment of the six-part Patient Centered Medicine course, it is designed to continue the student's education in communication, professionalism and ethics as well in the development of the medical knowledge, clinical skills, and competencies required for the care of the patient

with pathology in the systems being covered during the trimester, including the Gastroenterology, Endocrine, Reproductive and Urological Systems.

This course is also designed to provide the knowledge and educational experiences that will allow the student to, acquire the psychosocial knowledge that will advance patient care and wellness in diverse populations, develop the skills needed to complete both comprehensive and focused history and physical examinations, correlate physical examination findings with the pathophysiological and presenting symptoms, develop an appropriate evaluation and treatment plan and produce appropriate documentation.

The course and its faculty strive to provide educational experiences, role models, and mentorship that will allow the student to develop the professional, ethical, and moral standards expected of an osteopathic professional at the student and graduate level.

COM 2100: Humanities in Medicine I (HiM I) 3 Credits

Humanities in Medicine I is a course that requires the student to examine the human and humanistic characteristics, strengths, and fragilities that collectively compose a physician and the practice of medicine. The course requires the student to present self-reflections, goals, and vision in light of human mortality and the ethical, moral, and faith challenges that medical practice presents to the student, the physician, the patient, and the families of patients, and society as a whole. The course requires an examination and global look at the doctor-patient relationship, the role of professionalism and ethics in the practice of medicine and the doctor-patient relationship, the role of religion, morality and faith in the care of the patient, the rights, privileges, and obligations of the physician as demonstrated in literature, art, music, and the student's own writing and self-evaluation.

LCOM 3006: Gastrointestinal System and Nutrition (GINutri) 4.75 credits

The Gastrointestinal (GI) System and Nutrition course is structured to enable the student to acquire knowledge related to the normal structure and function of the gastrointestinal system and be able to develop and apply this knowledge to the prevention, diagnosis, and treatment of pathological conditions affecting this system. The acquisition, metabolism, and utilization of nutrients required for maintenance of health is contrasted with the abnormalities in structure and function characteristic of disease states that arise from inadequacies in nutrient sources or processing. Students explore the concepts and principles of anabolic and catabolic states. Students explore the autonomic and neurohormonal regulation of the GI system and apply this understanding to somatovisceral and viscerosomatic dysfunction and the clinical recognition of and approach to treatment of GI disorders. The study of the molecular and cellular level structure and function of normal healthy states provides a basis for explaining the pharmacologic approaches to patient care.

In addition to studying the structure and function of the digestive tract, students examine the organization and role of accessory organs of digestion: salivary glands, liver, gall bladder, and pancreas. This course expects students to recognize and describe common pathologic conditions of these organs and the effect that these abnormalities have on digestion and nutritional status and how such abnormalities typically present clinically. The understanding developed in this course will be expanded upon and further applied in the OMS-II Gastroenterology course.

LCOM 3005: Urinary System (Uri) 4.75 credits

The Urinary System course is designed to enable the student to acquire knowledge related to the normal structure and function of the urinary system and be able to develop and apply this knowledge to the prevention, diagnosis, and treatment of pathological conditions affecting this system. The gross and microscopic structure and organization of the kidneys, ureters, bladder, urethra, and associated structures are correlated with normal functions of the body, including the maintenance of acid-base balance, electrolyte balance, body fluid balance, blood pressure, and the elimination of metabolic wastes and drug agents.

Students study and discuss the biomedical basis for common clinical presentations related to pathologic states involving the urinary system and the rationale for approaches to prevention and therapeutic intervention. The utilization of common laboratory tests used to assess urinary system functioning as well as the application of such testing results in the clinical decision-making process is explored and applied to clinical scenarios. The understanding and application of normal and abnormal functioning of the urinary system in states of health and disease that are developed in this course will be expanded and further applied in the OMS-II Nephrology/Urology course.

LCOM 3008: Endocrine and Reproductive Systems (EndoRepro) 6.75 credits

The Endocrine and Reproductive Systems course provides a study of the normal structure and function of the organs of the endocrine system as well as the female and male reproductive tracts. The study of the microscopic and macroscopic structure and organization of endocrine organs – the hypothalamus, pituitary, parathyroid glands, thyroid, pancreas, adrenal glands, ovaries, testes, and the diffuse endocrine system (DES) – is correlated with both normal and abnormal functioning. The course provides the basis for understanding pathologic conditions that result in dysfunction of endocrine organs and the biomedical basis for the diagnosis, prevention, and treatment of endocrinopathies. Students are expected to apply this understanding in the concurrent PCM course to explain the rationale for aspects of a patient history and physical examination. Additionally, this course offers an introduction to the biomedical basis of common approaches to laboratory testing and pharmacotherapeutics. The understanding developed in this course will be further expanded and applied in the OMS-II Endocrinology course.

In this course, students also examine the anatomy and physiology of the female and male genitalia, genital tract, and gonads. This introduction to the structures and functions involved in the reproductive process is intended to develop an understanding of how normal and abnormal structure-function relationships contribute to health or disease states and how disease processes can be clinically recognized and treated. This course is organized with a life-stage perspective and provides a general overview and consideration of normal and abnormal structures and processes related to human reproduction. Issues of sex and gender that are important in clinical medicine are considered as well. This general study is punctuated with more in-depth examination of certain aspects of the reproductive process, including the biomedical basis for different disease states and the clinical rational for prevention, diagnosis, and treatment of these pathologies that affect the reproductive process. This course introduces students to pathologic and pharmacologically-mediated considerations related to abnormal states of fertility/fecundity,

erectile dysfunction and impotence, contraception, hormone replacement therapies, infections, and the effects of aging on the reproductive process. The understanding and applications developed in this course will be further expanded and applied in the Women's Health course as well as the Pediatrics and Geriatrics courses during the OMS-II year.

Third Trimester (Summer of 2015)

LCOM 4003: Osteopathic Principles, Practices, and Manipulative Treatment III (OPPMT III) 1.5 Credit Hours

Prerequisite: Successful completion of Foundations of Osteopathic Medicine I and II.

The Osteopathic Principles, Practices, and Manipulative Treatment III course is designed to provide the student with a continued understanding of the history, principles, and philosophies of osteopathic medicine. During this course, the student will be advanced in their comprehension and application of the lexicon, foundational principles, and professional expectations upon which the profession was built. The faculty also works in conjunction with other departments to complement and integrate the knowledge received from the systems-based and clinical medicine courses. Whenever possible, the OPP curriculum is designed to integrate with the Department of Structural Medicine to help enhance the student's knowledge of anatomic relationships, particularly as they apply to osteopathic theory and treatment.

Additionally, the student will continually advance their training in the tactile and haptic skills necessary for the diagnostic palpation of future patients, regardless of the medical specialty chosen. Consequently, this course will further instruct the student in the philosophic and diagnostic underpinnings, upon which they will continue to build their osteopathic knowledge, and structurally based examination and palpatory clinical skills throughout the rest of their clinical careers.

LCOM 2003: Patient-Centered Medicine III (PCM III) 2.5 Credits

The third segment of the six-part Patient Centered Medicine course, is designed to continue the student's education in communication, professionalism and ethics as well in the development of the medical knowledge, clinical skills and competencies required for the care of the patient with pathology in the systems being covered during the trimester, including the Neurological, Ophthalmologic, HENT systems, and behavior of humans as individuals in population settings.

This course is also designed to provide the knowledge and educational experiences that will allow the student to acquire the psychosocial knowledge that will advance patient care and wellness in diverse populations, develop the skills needed to complete both comprehensive and focused history and physical examinations, correlate physical examination findings with the pathophysiological and presenting symptoms, develop an appropriate evaluation and treatment plan and produce appropriate documentation.

The course and its faculty strive to provide educational experiences, role models and mentorship that will allow the student to develop the professional, ethical, and moral standards expected of an osteopathic professional at the student and graduate level.

COM 3003: Nervous System/Head and Neck (NervHN) 7 credits

The Nervous System/Head and Neck course is designed to facilitate the student acquiring knowledge related to the healthy central nervous system's structure and function. In addition, the student should learn the anatomy and physiology of the normal head and neck musculature, skeleton, innervation and vasculature. The link between head and neck anatomy and nervous system anatomy will be reinforced by the studying the pathways and functions of the cranial nerves, as these nerves connect many of the central nervous system topics with those of the head and neck.

Students study and discuss the biomedical basis for common clinical presentations related to pathologic states involving the nervous system and the rationale for approaches to prevention and therapeutic intervention. Students will be asked to correlate neurological, motor and sensory symptoms with lesions in the central nervous system. This course will also emphasize the connections between the nervous system and multiple other systems and regions, which reinforces the osteopathic principle of the body being a single unit. The application of normal and abnormal functioning of the nervous system, the visual, auditory and special senses of human function and head and neck anatomy will be expanded and further applied in the OMS-II Neuropsychology ENT course.

LCOM 2011: Population Based Medicine (PBM) 3.0 Credits

The course introduces the student to principles of classical and clinical epidemiology; the relationship between patient care and public health and measures and efforts to improve individual and population health; an introduction to the principles of clinical research as well as procedures and process related to clinical research; the principles of the scientific practice of medicine in contrast to the tradition experimental practices of the past and the biostatistical principles needed to be able to read and interpret clinical research in the practice of evidence-guided medicine. The roles of public health related strategies in the prevention of disease and its dissemination are discussed by applying biostatistical methods to epidemiologic principles and the critical analysis of demonstrative medical literature.

The ability to review and critically evaluate medical literature and diagnostic and therapeutic outcomes is essential to the acquisition of the knowledge required to be competent osteopathic physicians appropriately engaged in life-long learning. The course presents the basics of these foundational skills and provides the foundation for developing an approach to evidence-guided medical practice.

Lastly, the course looks at human behavior as an individual and as a member of the population. Depression, anxiety, social phobias, self-destructive activities such as substance and alcohol abuse are examined along with the biases, behaviors, and societal reaction to homosexuality and conditions such as pedophilia, anti-social behavior, etc.

Preclinical Electives 4 Credit Hours

LCOM 6500: Preclinical Medical Outreach Elective

Pre-clinical students may complete an unrequired administratively approved four-week elective rotations at underserved clinical sites which provide diverse and preferably comprehensive services for underserved and underrepresented patients. There is wide

latitude in selection of the site of these elective rotations. Acceptable locations include Rural and Critical Access Hospitals in the U.S, Community Health Care Centers in rural and urban settings, Correctional Centers, Native American Clinics and Public Health Clinics, etc.

With prior LUCOM administrative approval, students may complete the elective at an international site. Such approval requires a minimum of 120 days of advanced notification for proper credentialing to occur and must meet educational requirements as determined by the administration.

Students will receive 4 credits for completing a four week rotation. No didactic requirements are included as a component for the elective course.

LCOM 6501: Preclinical Anatomical Cadaveric Elective

Students may engage in an unrequired four-week Anatomic Sciences elective, in which they perform advanced anatomic prosection of cadavers under the supervision of the LUCOM Structural Medicine Department faculty between OMS-II and OMS-III years. Students must apply for this elective rotation and will be selected based upon criteria established by the Structural Medicine Department and the approval of the Dean. Students will be expected to provide specimens of good quality that illustrate structural relationships, structure-function interrelation, and clinicopathologic correlations according to the objectives established at the outset of the rotation, with the expectation that the specimens can be used in the educational programs of LUCOM and LU. Structural Medicine Department faculty will evaluate student prosections and work and assign a Pass/Fail grade accordingly.

LCOM 6502: Preclinical Research Elective

Students may perform an unrequired elective Preclinical Research Rotation between OMS-I and OMS-II or OMS-II and OMS-III years. Students must apply for the rotation and receive the support of a fulltime LUCOM biomedical science or clinical faculty member who will serve as the Faculty Sponsor for the student during this research experience. Students may engage in research activity at LUCOM or LU, or the research experience may take place at an unaffiliated institution (e.g., NIH). The Faculty Sponsor, therefore, may serve as the research mentor for the student; however, in some instances, the Faculty Sponsor's role will be to provide oversight of the rotation experience for a student who engages in research activity at an unaffiliated institution. The research activity may occur in a 4 week, concentrated experience, or may – as appropriate and conducted at LUCOM or LU – be spread out over a one-trimester-long experience. Students will be required to complete an academic component for this rotation, which may consist of a culminating oral or poster presentation, written paper, or verification of substantive contribution to a manuscript submitted to a peer-reviewed journal. The Faculty Sponsor will be required to ensure that an appropriate evaluation of student performance is completed according to the administrative criteria established by the COM. Recorded grades will be Pass/Fail.

LCOM 6700 HPSP Officer Basic Training

Students may perform their required Officer Basic Training at the end of the OMS-I, OMS-II, or OMS-III years and receive elective credit from the college if they are on orders as the training increases the professionalism, ethics, and capacity of the future physician in addition to adding to his/her knowledge of medical systems employed by the U.S. Armed Services and Veterans Administration. Students will be required to utilize vacation time in addition to the four weeks allotted for the elective to complete the courses.

Year-2 (OMS-II)

1st Trimester (Fall, 2015)

LCOM 4004: Osteopathic Principles, Practices, and Manipulative Treatment IV (OPPMT IV) 2 Credit Hours

Prerequisite: Successful completion of Osteopathic Principles, Practices, and Manipulative Treatment I, II, and III.

Osteopathic Principles, Practices, and Manipulative Treatment IV is designed to initiate a longitudinal curricular continuum to medically integrate osteopathic principles and manipulative treatment into the preventive care and medical management of the patient. It places an emphasis on the evaluation, diagnosis, and treatment of the biomechanical and interrelated autonomic nervous system mediated reflexes demonstrated by the body as the student studies the structural and pathologic conditions related to diseases associated with the hematology and oncology gastroenterology, cardiopulmonary, orthopedic, rheumatology and musculoskeletal systems. In addition to discussing the physical components of the human being, this course will also discuss how the mind and spirit can be impacted by pathological processes and how these aspects of the human being may be addressed using osteopathic principles. This course builds upon the information provided in the Osteopathic Principles, Practices and Manipulative Treatment I, II and III courses and the student will sequentially continue their training in the tactile and haptic skills necessary for the palpatory diagnosis of future patients regardless of medical specialty. Consequently, this course will further instruct the student in the philosophic and diagnostic underpinnings, upon which they will continue to build their osteopathic knowledge, and structurally-based examination and clinical skills which the student will continue to develop for the rest of their clinical careers.

LCOM 2004 Patient-Centered Medicine IV:(PCM IV) 2.5 Credits

PCM IV is the fourth segment of the six-part Clinical Medicine course. It is designed to continue the student's development as a medical professional and clinician through the development of professionalism, ethical standards, medical knowledge, clinical skills, and the competencies required for the care of the patient with a concentration on pathological conditions related to conditions associated with hematology and oncology, in addition to the gastroenterology, cardiopulmonary, and musculoskeletal systems including conditions associated with orthopedics and rheumatology.

This course is designed to develop active learning skills, problem solving abilities the student needs to acquire for medical and psychosocial knowledge to advance patient care and wellness,

develop the clinical and communication skills needed to complete both comprehensive and focused history and physical examinations, the ability to correlate their physical examination findings with the pathophysiological and presenting symptoms, complaints or conditions of the patient, develop an appropriate evaluation and treatment plan and produce appropriate documentation. The course utilized case based learning opportunities in small groups, standardized patient encounters and simulation cases to both develop and evaluate knowledge, skills and competencies.

The course continues the goal of providing the knowledge, clinical skills, and competencies required of a graduate osteopathic physician. More information concerning the business of medicine and the function of medical systems is introduced to the student. More emphasis on working in clinical teams is placed on the student. The course and its faculty strive to provide educational experiences, role models, and mentorship that will allow the student to develop the professional, ethical, and moral standards expected of an osteopathic professional.

LCOM 3004: Hematology-Oncology: (HemeOnc) 2.25 credits

The Hematology-Oncology course builds upon the knowledge, experiences, and understanding of the OMS-I Blood and Lymph course. Students apply their expanding understanding of normal and abnormal structure and function of blood cells and components as well as the lymphatic system to the prevention, diagnosis, and treatment of pathologic conditions involving the hematologic system. Principles and mechanisms related cell proliferation and differentiation that were examined in previous courses are recalled, expanded, and applied to as students consider neoplasia in general – from tumor formation to clinical presentation, diagnosis, and treatment. Common benign and malignant neoplastic diseases in adults (including, but not limited to, neoplasms of the lung, breast, prostate, colon, skin, and hematologic system) and children (including, but not limited to, neoplasms of the hematologic system, brain, and neoplasms specific to children) are examined, with an emphasis on epidemiology, clinical presentation, diagnostic approaches, prognosis, and treatment. The discussion of neoplasia in this course complements the study of neoplastic disorders in other courses.

Students should be able to comprehend, synthesize potential solutions, and interactively apply knowledge of the pathophysiological processes (anomalies, disorders, neoplastic and non-neoplastic diseases) that result in altered structure and function. The incorporation of laboratory sessions utilizing models, diagnostic testing and results interpretation, and cadaveric dissection is an important component of the course. Diagnostic information obtained from patient history, physical examination, functional studies, radiographic studies, and laboratory studies are discussed and incorporated into the process of clinical decision-making. Students will discuss the appropriate application of osteopathic principles and treatments into the overall medical treatment plan.

Students are expected to demonstrate the ability to achieve an accurate diagnosis and treatment plan for disorders associated with the hematologic system and possess an understanding of the physiologic and pathophysiological processes that lead to wellness and disease.

COM 3010: Orthopedics, Rheumatology, and Dermatology (ORD) 7.25 credits

The Orthopedics, Rheumatology, and Dermatology course builds upon the guided learning experiences that were part of the OMS-I IMSK course. This OMS-II course is designed to encourage students to recall and acquire knowledge of normal and abnormal structure and function of the integument and the musculoskeletal system and somatic body and apply this knowledge to the prevention, diagnosis, and treatment of pathologic conditions commonly diagnosed in clinical settings and relevant to the medical specialties of orthopedics, rheumatology, and dermatology. The student should be able to comprehend, synthesize potential solutions, and interactively apply knowledge of the pathophysiological processes (anomalies, disorders, and non-neoplastic and neoplastic diseases) that result in altered structure and function. Additionally, students are expected to recognize abnormalities, interpret diagnostic findings, and discuss the appropriate application of osteopathic principles into the overall medical treatment plan.

Through the use of illustrative cases, students are exposed to the process of clinical diagnosis, evaluation, and treatment of medical and surgical conditions related to these medical disciplines. Recollection, application, and integration of osteopathic principles and relevant medical science knowledge in the context of clinical presentations, differential diagnoses, and rational treatment plans are emphasized in this course. The incorporation of laboratory sessions utilizing models and cadaveric dissection is an important component of the course. Diagnostic information obtained from patient history, physical examination, functional studies, radiographic studies, and laboratory studies are discussed and incorporated into the process of clinical decision-making.

Students should demonstrate the ability to achieve an accurate diagnosis and treatment plan for disorders associated with the musculoskeletal and integumentary systems and possess an understanding of the physiologic and pathophysiological processes that lead to wellness and disease.

LCOM 3013: Cardiology and Pulmonology: (CardPulm) 5.75 credits

The Cardiovascular and Pulmonology course builds upon the knowledge, experiences, and understanding of the OMS-I Cardiopulmonary System course. Students apply their expanding understanding of normal and abnormal structure and function of the cardiovascular and respiratory systems to the biomedical rationale for the prevention, diagnosis, and treatment of pathologic conditions affecting the cardiovascular and respiratory systems. Students should be able to comprehend, synthesize potential solutions, and interactively apply knowledge of the pathophysiological processes (anomalies, disorders, neoplastic and non-neoplastic diseases) that result in altered structure and function.

Clinical evaluation, treatment, and management (including osteopathic principles and treatment) of congenital and acquired structural and pathophysiological abnormalities are emphasized through active leaning methods using illustrative clinical presentations. The incorporation of laboratory sessions utilizing models, diagnostic testing and interpretation, human subjects, simulation and cadavers is an important component of the course. Diagnostic information obtained from patient history, physical examination, functional studies, radiographic studies, and laboratory studies are discussed and incorporated into the process of clinical decision-making. Students will discuss the appropriate application of osteopathic principles and treatments into the overall medical treatment plan.

Students are expected to demonstrate the ability to achieve an accurate diagnosis and treatment plan for disorders associated with these systems and possess an understanding of the physiologic and pathophysiological processes that lead to wellness and disease.

LCOM 3014: Gastroenterology: (GI) 3.75 credits

The Gastroenterology course builds upon the knowledge, experiences, and understanding of the OMS-I Gastrointestinal System and Nutrition course. As a component of this course, students study the effects of nutrition on normal growth and development, the role of metabolic products in disease and wound healing, the role and management of oral, enteral and hyperalimentation feeding techniques in light of general nutrition requirements and the pathophysiology and nutritional disorders. Students apply their expanding understanding of normal and abnormal structure and function of the gastrointestinal system to the biomedical rationale for the prevention, diagnosis, and treatment of pathologic conditions affecting the alimentary canal, salivary glands, liver, gall bladder, and pancreas. Students should be able to comprehend, synthesize potential solutions, and interactively apply knowledge of the pathophysiological processes (anomalies, disorders, neoplastic and non-neoplastic diseases) that result in altered structure and function.

Clinical evaluation, treatment, and management (including osteopathic principles and treatment) of congenital and acquired structural and pathophysiological abnormalities are emphasized through active leaning methods using illustrative clinical presentations. The incorporation of laboratory sessions utilizing models, diagnostic testing and results interpretation, and cadaveric dissection is an important component of the course. Diagnostic information obtained from patient history, physical examination, functional studies, radiographic studies, and laboratory studies are discussed and incorporated into the process of clinical decision-making. Students explore the appropriate incorporation of osteopathic principles and treatments into the overall medical treatment plan.

Students are expected to demonstrate the ability to achieve an accurate diagnosis and treatment plan for disorders associated with the systems and possess an understanding of the physiologic and pathophysiological processes that lead to wellness and disease.

2nd Trimester (Spring, 2016)

COM 2102: Humanities in Medicine II (HiM II) 3 Credits

Humanities in Medicine II require the student to continue the examination of the human and humanistic characteristics, strengths and fragilities that collectively compose a physician, his/her patients, and the practice of medicine. The course requires the student to present self-reflections, goals, and vision in light of human mortality and the ethical, moral and faith challenges that medical practice presents to the student, the physician, the patient and the families of patients, and society as a whole. The course requires an examination and global look at the doctor-patient relationship, the role of morality and faith in the care of the patient, the rights, privileges and obligations of the physician as demonstrated in literature, art, music and the students own writing and self-evaluation.

The course presents an examination of the systems of healthcare delivery in our country and globally as well as looks at the development and application of health policy, laws and regulations.

LCOM 4005: Osteopathic Principles, Practices, and Manipulative Treatment V (OPPMT V) 2 Credit Hours

Osteopathic Principles, Practices, and Manipulative Treatment V is designed to initiate a longitudinal curricular continuum to medically integrate Osteopathic principles and manipulative treatment into the preventive care and medical management of the patient. It places an emphasis on the evaluation, diagnosis, and treatment of the biomechanical and interrelated autonomic nervous system mediated reflexes demonstrated by the body as the student studies the structural and pathologic conditions of the nephrology system and urinary tracts, the central, peripheral and autonomic neurological systems, along with conditions of pathology common to the otolaryngology and ophthalmologic systems. Selected topics regarding the integration of OMM into the specialty of pediatrics will also be discussed during this and following trimesters. In addition to discussing the physical components of the human being, this course will also discuss how the mind and spirit can be impacted by pathological processes and how these aspects of the human being may be addressed using osteopathic principles. This course builds upon the information provided in the Osteopathic Principles, Practices and Manipulative Treatment I, II, III, and IV courses and the student will sequentially continue their training in the tactile and haptic skills necessary for the palpatory diagnosis of future patients regardless of medical specialty. Consequently, this course will further instruct the student in the philosophic and diagnostic underpinnings, upon which they will continue to build their osteopathic knowledge, and structurally based examination and clinical skills which the student will continue to develop for the rest of their clinical careers.

LCOM 2005 Patient-Centered Medicine V: (PCM V) 2.5 Credits

Patient-Centered Medicine Five is designed to continue the student education toward becoming a competent osteopathic professional and clinician. The medical legal, business and professional aspects of medical practice are developed as well as the medical knowledge, clinical skills and competencies required for the treatment of patients with pathology associated with the nephrology system and urinary tract, male reproductive system, the endocrine system, diseases associated with the central and peripheral neurological systems, behavioral medicine and psychiatry in addition to pathological conditions associated with the HEENT systems of the body.

This course is designed to provide the knowledge and educational experiences that will allow the student to develop his/her learning skills, acquire medical and psycho-social knowledge to promote patient outcomes and wellness, develop the skills needed to complete both comprehensive and focused history and physical examinations, correlate physical examination findings with the pathophysiological and presenting symptoms complaints or conditions of the patient, develop an appropriate evaluation and treatment plan and produce appropriate documentation. The course utilized case based learning opportunities in small groups, standardized patient encounters and simulation cases to both develop and evaluate knowledge, skills and competencies.

The course continues the goal of providing the knowledge, clinical skills and competencies required of a graduate osteopathic physician. The course and its faculty strive to provide educational experiences, role models and mentorship that will allow the student to develop the professional, ethical and moral standards expected of an osteopathic professional.

LCOM 3012: Neurology/Psychiatry/Otolaryngology: (NPO) 8.5 Credits

Using the prior studies in the Nervous System course of OMS-1 year as a foundation, this course expects students to build upon their knowledge of functional neuroanatomy and neuroscience while applying this understanding to the interpretation of clinical examination findings, patient complaints, signs and symptoms, for the generation of appropriate differential diagnoses, and formulation of treatment plans for pathological conditions commonly found in the patients. Where appropriate, students should incorporate osteopathic principles and treatment into the overall patient management plan. This approach to clinical reasoning is employed while considering a full spectrum of neurologic pathological processes, including developmental and metabolic neurologic disorders, neurodegenerative disorders, vascular disorders affecting the nervous system, infectious and inflammatory processes, neoplastic processes, and structural disorders and traumatic injuries.

Furthermore, given the strong interplay between the nervous system, organic psychiatric conditions and human behavior, this course is designed with the goal of enabling the student to obtain the requisite knowledge and skills necessary to understand the structural changes and physiologic attributes that result in functional neurocognitive capabilities and normally accepted behaviors and actions. Conversely, pathologic conditions, both organic and acquired, that result in abnormal behavior will be discussed. The student will become familiar with the DSM-V criteria of mental disorders as well as the indications, mechanisms of action, side effects and cautions surrounding commonly applied psychiatric and behavioral pharmacological agents. The indications and approaches for non-pharmacological interventions are explored as well.

The incorporation of laboratory sessions utilizing head and neck and nervous system models and cadaveric dissection is an important component of the course. Students are expected to expand upon prior knowledge and understanding related to the normal structure and function of the ears, nose, oral and nasal cavities, pharynx, larynx, neck, spinal cord and brain. Students are expected to apply knowledge and skills to patient presentations and clinical scenarios to develop an interpretation of clinical conditions and the generation of differential diagnoses and approaches to patient care for pathologic processes of the ears, nose, and throat.

Lastly, this course explores the medical specialties of ophthalmology and neuro-ophthalmology, with considerations of the clinical presentation, diagnostic evaluation and treatment of general pathologic processes affecting vision and the structure and function of the eye.

LCOM 3015: Nephrology and Urology: (NephUro) 4.75 credits

The Nephrology and Urology course builds upon the knowledge, experiences, and understanding of the OMS-I Urinary System and portions of the Reproductive System courses. Students apply their expanding understanding of normal and abnormal structure and function of the kidney, urinary system and male genital and reproductive systems to the biomedical rationale for the

prevention, diagnosis, and treatment of pathologic conditions affecting these organs and systems. Students should be able to comprehend, synthesize potential solutions, and interactively apply knowledge of the pathophysiological processes (anomalies, disorders, neoplastic and non-neoplastic diseases) that result in altered structure and function.

Clinical evaluation, treatment, and management (including osteopathic principles and treatment) of congenital and acquired structural and pathophysiological abnormalities are emphasized through active leaning methods using illustrative clinical presentations. The incorporation of laboratory sessions utilizing models, diagnostic testing and results interpretation, and cadaveric dissection is an important component of the course. Diagnostic information obtained from patient history, physical examination, functional studies, radiographic studies, and laboratory studies are discussed and incorporated into the process of clinical decision-making. Students explore the appropriate incorporation of osteopathic principles and treatments into the overall medical treatment plan.

Students are expected to demonstrate the ability to achieve an accurate diagnosis and treatment plan for disorders associated with the systems and possess an understanding of the physiologic and pathophysiological processes that lead to wellness and disease.

LCOM 3018 Endocrinology: (Endo) 3 Credits

The Endocrinology course builds upon the knowledge, experiences, and understanding developed through the OMS-I Endocrine System course. The Endocrinology course focuses primarily on the involvement of the hypothalamus, pituitary, thyroid, parathyroid, pancreas, and adrenal gland components of the endocrine system in human disease processes. The pathophysiology of the diffuse endocrine system that is distributed widely throughout the mucosal portions of the respiratory and gastrointestinal systems is also examined in this course. Students apply their expanding understanding of normal and abnormal structure and function of these components of the endocrine system to the biomedical rationale for the prevention, diagnosis, and treatment of related pathologic conditions. Students should be able to comprehend, synthesize potential solutions, and interactively apply knowledge of the pathophysiological processes (anomalies, disorders, neoplastic and non-neoplastic diseases) that result in altered structure and function.

Clinical evaluation, treatment, and management (including osteopathic principles and treatment) of congenital and acquired structural and pathophysiological abnormalities involving the endocrine organs and tissues are emphasized through active leaning methods using illustrative clinical presentations. The incorporation of laboratory sessions utilizing models, diagnostic testing and results interpretation, and cadaveric dissection is an important component of the course. Diagnostic information obtained from patient history, physical examination, functional studies, radiographic studies, and laboratory studies are discussed and incorporated into the process of clinical decision-making. Students explore the appropriate application of osteopathic principles and treatments into the overall medical treatment plan.

Students are expected to demonstrate the ability to achieve an accurate diagnosis and treatment plan for disorders associated with these components of the endocrine system and possess an understanding of the physiologic and pathophysiological processes that lead to wellness and disease.

Third Trimester (Summer of 2016)

LCOM 4006: Osteopathic Principle, Practices, and Manipulative Treatment VI (OPPMT VI) 1.5 Credit Hours

Osteopathic Principle, Practices, and Manipulative Treatment VI is designed to initiate a longitudinal curricular continuum to medically integrate osteopathic principles and manipulative treatment into the preventive care and medical management of the patient. It places an emphasis on the evaluation, diagnosis, and treatment of the biomechanical and interrelated autonomic nervous system mediated reflexes demonstrated by the body. Selected topics regarding the integration of OMM into the care of women, especially associated with reproduction, geriatric and pediatric patients will be explored. In addition to discussing the physical components of the human being, this course will also discuss how the mind and spirit can be impacted by pathological processes and how these aspects of the human being may be addressed using Osteopathic principles. This course builds upon the information provided in the previous Osteopathic Principles, Practices, and Manipulative Treatment courses and the student will sequentially continue their training in the tactile and haptic skills necessary for the palpatory diagnosis of future patients regardless of medical specialty. Consequently, this course will further instruct the student in the philosophic and diagnostic underpinnings, upon which they will continue to build their osteopathic knowledge, and structurally-based examination and clinical skills which the student will continue to develop for the rest of their clinical careers.

LCOM 2006 Patient-Centered Medicine VI :(PCMVI) 2.5 credits

Patient-Centered Medicine VI is designed to continue the student's education toward becoming a competent osteopathic professional and clinician. The medical legal, business, and professional aspects of medical practice are developed as well as the medical knowledge, clinical skills and competencies required for the treatment of patients within society associated with women's healthcare, conditions specific to pediatric patients, geriatric patients and those near the end-of-life.

This course is designed to provide the knowledge and educational experiences that will allow the student to develop his/her learning skills, acquire medical and psycho-social knowledge to promote patient outcomes and wellness, develop the skills needed to complete both comprehensive and focused history and physical examinations, correlate physical examination findings with the pathophysiological and presenting symptoms complaints or conditions of the patient, develop an appropriate evaluation and treatment plan and produce appropriate documentation. The areas of emphasis during the semester include the evaluation and treatment of pathological conditions and syndromes commonly found when dealing with women's health issues, the care of the pediatric and the geriatric patient along with issues of palliative care and end of life. The course utilized case based learning opportunities in small groups, standardized patient encounters and simulation cases to both develop and evaluate knowledge, skills and competencies.

The course continues the goal of providing the knowledge, clinical skills and competencies required of a graduate osteopathic physician. The course and its faculty strive to provide

educational experiences, role models, and mentorship that will allow the student to develop the professional, ethical and moral standards expected of an osteopathic professional.

LCOM 3016 Women's Health (WH): 3.5 Credits

The Women's Health course builds upon the knowledge, experiences, and understanding developed in portions of the OMS-I Endocrine System and Reproductive System courses. Students apply their expanding understanding of normal and abnormal structure and function of the female reproductive system, including the associated endocrine organs, and female genital tract to the biomedical rationale for the prevention, diagnosis, and treatment of pathologic conditions affecting these organs and systems. Students should be able to comprehend, synthesize potential solutions, and interactively apply knowledge of the pathophysiological processes (anomalies, disorders, neoplastic and non-neoplastic diseases) that result in altered structure and function.

Clinical evaluation, treatment, and management (including osteopathic principles and treatment) of congenital and acquired structural and pathophysiological abnormalities involving the organs and structures of the female reproductive and genital systems are emphasized through active leaning methods using illustrative clinical presentations. The incorporation of laboratory sessions utilizing models, diagnostic testing and results interpretation, and cadaveric dissection is an important component of the course. Diagnostic information obtained from patient history, physical examination, functional studies, radiographic studies, and laboratory studies are discussed and incorporated into the process of clinical decision-making. Students explore the appropriate application of osteopathic principles and treatments into the overall medical treatment plan.

Students are expected to demonstrate the ability to achieve an accurate diagnosis and treatment plan for disorders associated with the systems and possess an understanding of the physiologic and pathophysiological processes that lead to wellness and disease.

Additionally, the student will be introduced to diverse conditions and syndromes which contribute to the lack of wellness in women of all ages. The student will gain an appreciation for the pathological conditions that are important in women's health and the prevention, diagnostic evaluation, and treatment of conditions important to a woman's well-being. Reinforced in this course is the role in which pathologic conditions from other systems present and impact the overall wellness and physiology of the female patient.

LCOM 3017: Pediatrics: (Peds) 3.5 Credits

The Pediatric Course provides an overview of general pediatrics from newborn through adolescents. Areas of concentration include neonatology, developmental pediatrics, newborn screening, normal growth and development, genetic and developmental abnormalities, pediatric syndromes, as well as common pediatric clinical conditions and presentations, including pediatric emergencies. The examination of the newborn, child, and adolescent is emphasized along with relevant osteopathic management approaches and treatments. Psychological abnormalities common to children are explored along with treatment recommendations.

The student should demonstrate the ability to achieve an accurate diagnosis and treatment plan for disorders associated with the sub-set of patients and possess an understanding of the physiologic and pathophysiological processes that lead to wellness and disease.

LCOM 2007: Geriatrics and End of Life: (Geri) 2.5 credits

The Geriatrics and End of Life course allows the student to explore the complex physical, pathological, psychological, and social conditions commonly found in this population, including the spectrum of syndromes commonly found: from dementia and delirium to multi-system failures or malignancies. The goals and reality of independence and "successful aging" are addressed. The geriatric education program at LUCOM provides opportunities for the student to learn the proper clinical evaluation and treatment of geriatric patients utilizing multiple training settings, including rural or underserved settings, where the student's care of the elders is under the supervision of a skilled geriatric physician. During this course, students participate in EPEC, an End of Life seminar, as one means of an introduction to the issues that surround considerations of death and dying. The student should gain an understanding of hospice and palliative care, the legal requirements of living wills, power of attorney, and guardians, etc., in the care of the patient.

The student should demonstrate the ability to achieve an accurate diagnosis and treatment plan for disorders associated with the sub-set of patients and possess an understanding of the physiologic and pathophysiological processes that lead to wellness and disease.

COM 2050: Capstone Course (Cap) 6 Credits

The Capstone course requires students to demonstrate that they have acquired and are able to apply acquired medical, psychological and psychosocial knowledge and skills in a manner that indicates they are adequately prepared to enter into the clinical and patient-focused phase of their medical education (i.e. the student core and elective rotations). The course also provides specific clinical skills and knowledge that are essential to success. The course includes:

OSCE and Clinical Skills Exam

This high stakes evaluation, occurring over a two week period, reviews the knowledge and skills that students were expected to acquire over the preceding two years of study. Realistic clinical cases scenarios will require students to properly examine, diagnose, and describe treatment for standardized patients who present with clinical syndromes or conditions. Students will also be expected to demonstrate medical knowledge and clinical skill during simulation and case-based clinical scenario's utilizing low and high fidelity simulators as well as computer-based cases. Students are expected to utilize proper communication and interview techniques, demonstrate appropriate clinical examination skills, and incorporate osteopathic principles and philosophy in the evaluation of these patients.

Basic Life Support (BLS)

This training and certification is required of each student before advancing to ACLS training and certification.

Advanced Cardiac Life Support (ACLS)

This training and certification is required of all students before entering the clinical education phase of their education.

Pediatric Advanced Life Support (PALS)

This training and certification also is a requirement of each student to advance to OMS-III education.

LCOM 6100: Board Review Course (RVC) 4 Credits

The course includes a structured board review presented by the college and utilizes a prescribed curriculum selected by the administration and faculty.

Students must pass the course in order to be declared eligible to sit for COMLEX Level-1 and proceed to clinical education. Students must achieve the score established annually by the administration on a standardized examination such as COMSAE to pass the courses and demonstrate their preparation to enter clinical education and preparation for success on required national board examinations.

OMM/OPP Review

The course, a component of the Board Review Course, provides a comprehensive review of the theory and practical application of OPP/OMM in preparation for clinical education and taking COMLEX Level One.

LCOM 6700: HPSP Officer Basic Training

Students may perform their required Officer Basic Training at the end of the OMS-I, OMS-II or OMS-III years and receive elective credit from the college if they are on orders as the training increases the professionalism, ethics, and capacity of the future physician in addition to adding to his/her knowledge of medical systems employed by the U.S. Armed Service and Veterans Administration. Students will be required to utilize vacation time in addition to the four weeks allotted for the elective to complete the courses.

Osteopathic Medical School – Year THREE (OMS-III)

August 1, 2016 to June 30, 2017

Curriculum for Core Rotations for OMS-III STUDENTS:

The OMS-III core curriculum has been developed by the faculty and designed to ensure that all students obtain the competencies required to move toward Graduate Medical Education and to allow success on national competency examinations such as COMLEX. The curriculum is designed to cover the major components of the principle medical disciplines, but is not inclusive of all aspects of each general discipline. The required curriculum, in addition to the clinical experience provided at the rotation site, consists of assigned readings requirements from a designated text and faculty selected journals, the completion of on-line case-based clinical modules for the discipline, and the completion of assigned study in OPP/OMM topics correlated with the rotation.

The student should expect to devote approximately two hours daily outside of clinical time meeting the requirements of the curriculum as described in the syllabus in addition to reading or study requirements that are developed daily in conjunction with clinical care of patients assigned by the faculty.

Since clinical experiences will vary for the individual, the end-of-rotation examinations are derived primarily from the assigned reading, from the clinical modules, and from the assigned OMM/OPP materials.

To successfully pass the clinical rotation, each student must pass both the clinical component and the end of rotation examination. The final grade in the rotation is a weighted combination of the two grades.

End-of-rotation examinations will occur on the last Friday of each block at a time and place assigned for each core rotation site. In addition to the end of rotation examination, a hands-on OMM/OPP education session is required of all OMS-III students and OMS-IV students completing core rotation services. Students may be required to return to the campus for end-of-rotation examinations and OMM labs.

As a part of the course requirements, each student must submit monthly a rotation log detailing in an unidentifiable format (case number or patient number) all patients cared for, all procedures observed or done on all rotations in addition to documentation of not less than ten structural examinations and five OMM treatments performed during each block of Family Medicine, Internal Medicine, Women's Health, Underserved Care, Pediatrics, and General Surgery.

Each rotation consists of four week blocks beginning on Monday and ending on Friday. The last Friday of each rotation is set aside for end of rotation testing and OMM hands on laboratory experience. Further and more specific information concerning clinical rotations, policy, and procedures is found in the LUCOM Clinical Manual.

The goal of clinical education at LUCOM is to provide experience in the major core disciplines of medicine (Family Medicine, Internal Medicine, Pediatrics, Women's Health, Psychiatry, and Surgery) and graduate well-rounded generalist physicians that are prepared to enter any specialty

discipline for resident training. It is not the goal of the college to develop specialists during this phase of their education. Students are expected to learn the pathophysiology and structure associated with patient conditions, the indications, contraindications, complications and follow-up of therapy for patients with a wide variety of medical issues. They will not acquire the depth of information, knowledge, and skills expected of a resident, fellow, or practicing physician until they reach that stage of their career. No student is expected, nor should they expect, to acquire the knowledge, skills, and competencies to graduate as a specialist in any discipline. "Interoperate skills" are not emphasized during this phase of the development of the physician. It is not the goal of the COM to advance any one specialty among its students at the time of graduation. The education of students at this point of their career is structured to meet these goals.

Students will be expected to participate fully in the structured educational opportunities and obligations during their OMS-III and OMS-IV years. This includes completing all required segments of the curriculum, taking call, working the hours of their service and attending, being responsive to their educational team, and displaying the individual and professional responsibility expected of an osteopathic physician. **Students will not follow the same academic or vacation schedule as OMS-I and OMS-II students; rather they will meet the obligations and needs of their patients they serve.**

LCOM 5000: Orientation to Clinical Medicine (OCM) 4 Credits

This two week course occurring at the beginning of the OMS-III year provides information on the policies and procedures that will govern the students' clinical training years. This course focuses on the rights, responsibilities and duties of the students, faculty, and teaching facilities; a review of the requirements and goals of the curriculum; as well as the opportunities and requirements for international and national rotations focused on providing osteopathic medical care to underserved populations. It also provides students an introduction to their assigned clinical sites, their coordinators, Directors of Student Medical Education (DSME) and clinical faculty. Included in the Orientation are the following modules:

Medicolegal Seminar and Review

This learning module presents the legal and regulatory aspects of medical practice, a review of billing, coding procedures and processes, the business operations of the clinics and hospitals where training will occur. Topics such as informed consent, risk management, patient privacy, discrimination, living wills, DNR, etc. are explored. Training in required topics such as OSHA, HIPPA, CLEA and the regulatory policies and practices that govern clinical practice occur during this preclinical program.

Professionalism, Ethics, Cultural Sensitivity Seminars

These seminars provide a look at the professional and societal requirements and standards that govern personal, patient and professional interactions in clinical settings, and the expected actions of medical students and medical professionals. During these activities, students discuss interaction with diverse populations of patients.

Student Health Records, Drug Screens and Immunization Documentation Reviews:

Review or repeating of background checks, drug screens, T.B. skin tests, immunizations, current history and physical examinations etc., is performed during the period for all students in preparation for start of clinical education.

LCOM 5001-5002: 2 Blocks of Community-Based Family Medicine: 20 Credit Hours

The student will be assigned in four week blocks to one or more clinical sites under the supervision of one or more primary care specialists and faculty. In the majority of cases, the supervising physician will be a family medicine practitioner; however, some students will spend clinic based time with internal medicine, women's health or pediatric specialists. The student will provide supervised care for patients in both outpatient and inpatient settings on this service.

Family medicine clinical experiences allow students to understand the diagnostic process and management decisions for a large variety of medical conditions, the treatment of both acute and chronic conditions and the psychosocial complications that are faced by patients and health care providers. Students will learn about health policy and public health aspects of the health care system, the Medicolegal and regulatory requirements of practice and the economic systems of practice in the U.S.A. Students learn the fundamentals of an approach to the evaluation and management of frequently occurring, complex, concurrent, and ill-defined problems across a wide variety of acute and chronic presentations.

LCOM 5100-5101: 2 Blocks of Internal Medicine (Hospital-Based, one block will be General IM): 20 Credit Hours

The students of LUCOM spend two, hospital-based, blocks during their OMS-III year on internal medicine. For the majority of students, both blocks will be done on an inpatient hospitalist service. In some cases and with prior approval, the student may spend one of the blocks assigned to a hospital based internal medicine sub-specialty service, such as cardiology, neurology, critical care, etc.

Students will expand history and physical diagnosis skills, gain an understanding of the indications and applications of differing diagnostic techniques, develop the ability to prioritize patient problems and treatments, generate a differential diagnosis, and implement patient management strategies, observe their effects and the appropriate follow up of the patients on their service. Internal Medicine requires extensive problem-solving skills utilizing structured, scientifically researched and founded processes, inductive and deductive reasoning and team approach to the care of the adult patient. The discipline provides an opportunity to view the patient as a whole and not merely as a pathological or disease-specific condition, to coordinate the total care of the patient to understand how a disease impacts not only on the patient's health, but also on his or her emotional and social well-being.

LCOM 5200-5201: 2 Blocks of Surgery (Hospital-Based, one block will be General Surgery): 20 Credit Hours

The surgery curriculum during the OMS-III years consists of two blocks of surgery. One block of surgery will be done on a general surgery service with LUCOM faculty. The second month

may be completed by an additional rotation in general surgery or a hospital based surgical subspecialties including orthopedics, anesthesia, pathology, radiology, trauma surgery, transplant surgery, vascular surgery, oncological surgery, and urology.

The General surgery rotation will include exposure to a variety of surgical topics and experiences, including minor surgery procedures as well as major, inpatient as well as outpatient patients, gastrointestinal (abdominal surgery), hernia repair, breast, endocrine, and trauma surgery experiences.

Students will be expected to acquire the knowledge to know the indications for surgery vs. medical therapy, the evaluation and work up of the surgical patient, the post-op care of the patient, and the appropriate prophylactic treatment of the patient.

The student will be expected to acquire competency in the management of nutrition, blood, fluid, electrolytes, pain, and infection.

The student will participate fully in hospital lectures, seminars, conferences, and meetings, in addition to their hands-on experiences.

LCOM 5300: 1 Block of Women's Health/OB-GYN: 10 Credit Hours

The goal of the Women's Health/OB-Gyn rotation is to expose students to the fundamentals of women's health in inpatient and outpatient clinical settings. During this rotation, the student will be active in the operative and none operative care of the pregnant and obstetrical patient, medical and surgical management of pathology surrounding reproductive health and malignancies, preventive health care and procedures, and the treatment of acute and chronic illness. The students will participate in the evaluation, diagnosis and treatment of both medical and surgical patients during the block. Upon completion of this rotation students should be prepared to address basic issues in women's health care for women of all ages and begin to apply them to their chosen specialty.

LCOM 5400: 1 Block of Pediatrics: 10 Credit Hours

This four week block during the OMS-III year provides a survey of pediatric medicine, from the care of the well newborn, through childhood and adolescence. Each stage of the child's life has distinct challenges, important conditions and milestones that must be considered to ensure the proper developmental and preventive medical outcomes. The rotation may be conducted in an outpatient, inpatient, or combined setting under the direction of pediatric professionals. Similar to internal medicine, the student will be exposed to the differing subspecialties of pediatrics practice during the rotation.

The issues of guardianship, privacy, legal responsibility and informed consent are considered as a component of the rotation. Pediatricians must develop the communication and interpersonal skills to treat the parents and sometimes, the family, rather than just the child. The differences in the psychosocial, legal, and medical needs of adolescents are to be learned by the student during the rotation as well.

LCOM 5600: 1 Block of Psychiatry/Behavioral Health: 10 Credit Hours

The Psychiatry and Behavioral Health rotation provides an experience in which third year students are required to become knowledgeable of normal and abnormal psychiatric and behavioral functions, the pathophysiology behind the conditions, their evaluation, diagnosis and treatment. Generally conducted as an outpatient service, the rotation may include institutional care of patients. The service will provide exposure to psychiatric care for children, adolescence, adult and geriatric patients. The service will require students to recognize psychiatric emergencies and develop knowledge of appropriate interventions. The student will reinforce previously learned pharmacological treatment methods and develop knowledge of counseling and non-pharmacological treatment methods for common behavioral and organic-based conditions. The student will become familiar with the legal rights and responsibilities of the patient, the health care provider, and the public in issues of psychiatric care. The student will learn the workings of the health care team concerning psychiatric care of the patient. The diagnosis and treatment of common psychiatric and behavioral problems will be emphasized.

LCOM 5700: 1 Block of Underserved Care (may be at rural hospital, community health center, medical mission, public health departments, etc): 10 Credit Hours

All students must complete one rotation at an underserved clinical site that provides diverse and preferably comprehensive services for underserved and underrepresented patients. Acceptable locations include Rural and Critical Access Hospitals in the U.S, Community Health Care Centers in rural and urban settings, Correctional Centers, Native American Clinics and Public Health Clinics, etc.

With prior LUCOM administrative approval, students may complete the requirement at an international site. Such approval requires a minimum of 120 days of advanced notification for proper credentialing to occur and must meet educational requirements as determined by the administration.

The delivery of quality medical care in health systems with wide diversity of patient types and varying degrees of resources is the focus of the curriculum for this rotation in underserved care. Training and experience in these settings is felt to be important to produce physicians who have the confidence and skill to practice in the rural and remote regions of our country, and in international or missionary settings. This rotation provides students with the opportunity to experience medicine in rural and underserved environments while providing care for otherwise underserved populations. The student often must utilize the knowledge and skills of a diverse health care team where many of the high-tech tools of medicine are not available. In this environment, students advance their abilities in patient care on the basis of their medical history, communication, physical exam, and clinical medicine skills. Participants will be given robust curricular opportunities for procedural skills in medicine and surgery that will better prepare them for residency training and practice. The curriculum places an emphasis on preventive medicine, population-based care, and public health subjects.

LCOM 6001-6002: 2 Blocks of Scholarly Activity: 20 Credit Hours

Scheduled for all OMS-III students at end of their third year, this educational experience includes the comprehensive end of third year clinical evaluations (OSCE, S.P., Simulation and

OMM evaluations) which are required to be passed for the student to successfully advance to their OMS-IV year. In addition, a board preparation course for COMLEX CE and PE, research and time designated for scholarly activity for the required OMS-IV year academic paper are provided.

The COM will also provide a required seminar for OMS-IV and GME selection program for the students to assist in the ERAS and Board Match process during this segment of the curriculum.

1 Block of Vacation

Vacation for OMS-III students occurs during a four week block **designated by the COM** and determined annually prior to the start of the academic year. Time off may not be taken at any other time during the year without special permission by the Office of the Dean**.**

All students will return to LUCOM campus for this portion of the curriculum including the required end of year evaluations and the face to face components of the board review program.

Osteopathic Medical School – Year Four: (OMS-IV)

August 28, 2017 to May 4, 2018

Curriculum for Core Rotations for OMS-IV STUDENTS:

The OMS-IV core curriculum, like OMS-III, includes an educational curriculum established by the COM and developed by the faculty. The curriculum is designed to ensure that all students obtain the minimal competencies required to move into GME. The curriculum is designed to cover components of each discipline not previously covered and which are more applicable to preparation for clinical practice. Topics include discussions related to health care systems, the business of medicine, health policy, epidemiology, population-based care, ethics, and professionalism. Due to the diversity of rotations allowed, it may not be inclusive of all aspects of any discipline. The required curriculum, in addition to the clinical experience provided at the rotation site, consists of assigned reading requirements from a designated text and faculty selected journals, the completion of online case-based clinical modules providing information for clinical scenarios, and the completion of assigned study in OPP/OMM topics correlated with the rotation.

The student should expect to spend 1-2 hours daily meeting these requirements of the curriculum as described in the syllabus in addition to reading or study requirements that are developed daily in conjunction with the clinical care of patients assigned by the faculty.

Since clinical experiences will vary, the end-of-rotation examinations are derived from the assigned reading, from the clinical modules, and from the assigned OMM/OPP materials.

To successfully pass the rotation, each student must pass both the clinical component and the end-of-rotation examination when applicable. The final grade in the rotation is a weighted combination of the two grades.

End of rotation examinations will occur on the last Friday of each block at a site assigned for each core rotation site. In conjunction with the end of rotation examination, each core site will provide a hands-on OMM/OPP education session that is required of all OMS-III students and all OMS-IV students during their core rotation services.

As a part of the core rotation and selective course requirements, each student must submit in their rotation logs all patients cared for, all procedures observed or performed, including the requirement for documentation of not less than 10 structural examinations and 5 OMM treatments performed during each block of Emergency Medicine, Critical Care, Medicine and Surgical Selectives.

Elective rotations are evaluated by the preceptor at the site only; there is no end of rotation examinations and no OMM/OPP requirements assigned.

Each LUCOM student must complete four blocks of required rotations which may include end of rotation examination and OMM practical sessions during the OMS-IV year. In addition, OMS-IV students must successfully complete one required underserved selective and four elective rotations during this segment of their osteopathic medical education.

The core rotation requirements for OMS-IV students serve to function as a "Sub-internship" and are designed to further refine clinical medicine and patient care knowledge and skills in preparation for graduate medical education. Students will be expected to assume additional responsibility and expand their volume of patient care activities during this portion of their education. The rotations are hospital based, at COM affiliated or GME program locations and with COM appointed or credentialed faculty.

LCOM 5800: 1 Block of Emergency Medicine: 10 Credit Hours

The Emergency Medicine rotation allows students to concentrate on the care of the acutely ill or injured patient. Students will be working under the supervision of residents and attending physicians, alongside other members of the health care team in institutional settings. The ability to rapidly assess the patient, reach a diagnosis, provide interventions and stabilizing care are hallmark features of the rotation. Each student will be expected to complete a minimum of 148 hours on service during this rotation, (fourteen 12 hours shifts, fifteen 10 hours shifts or nineteen 8 hours shifts), and each student's experience will include day, night, week days, and weekend experiences during the four weeks of the service. The ability to work in a high intensity, team-based environment, to evaluate information and make decisions, to problem solve, and to establish a relationship with the patient rapidly and effectively are critical to successful completion of the rotation. Additionally, demonstrations of the ability to perform a variety of procedures are a large part of this service.

LCOM 5150-5151: 2 Blocks of Hospital IM Selective: 20 Credit Hours

These clinical experiences emphasize more definitive intervention and treatment of the acutely ill patient. Most of the patients seen in these institutions during the student's rotation will be suffering the consequences of chronic pathology, often produced by genetic or individual choices and a lack of preventive and primary health care. Care of these patients is more medical discipline specific, more exhaustive, and under the supervision of experts.

The care of the critically ill patient suffering the effects of both acute and chronic illness is emphasized. Success demands that the student demonstrates the ability to provide a comprehensive evaluation of the patient, that they are knowledgeable of and able to search current, scientific based literature and research relating to the patient's status, evaluate complex diagnoses, design treatment plans for complex pathologies involving multiple systems, and provide advanced care which leads to stabilization and health.

The ability to apply tertiary complex diagnostic and therapeutic interventions to improve the health status of the unstable and critically ill patient, to make complex diagnosis, and to research and apply their knowledge of the current, scientific based literature are emphasized during these rotations.

This clinical experience emphasizes synthesizing differential diagnoses and patient care. The IM Selectives available to the student are all hospital based and require the student to have continuity with the patient for an extended period of time associated during their inpatient care. Rotations include: Cardiology, Pulmonology, Neurology, Nephrology, Critical Care Medicine, IM Service, Infectious Disease, Endocrinology, Oncology-Hematology, and Gastroenterology.

This hospital-based medicine rotation allows the student to have the opportunity to function in a supervised environment at a level similar to the responsibilities expected during the first year of graduate medical education.

LCOM 5250: 1 Block of Hospital Surgery Selective: 10 Credit Hours

The Surgical Selectives that are available for the student are all hospital based and require the student to have continuity with the patient for an extended period of time associated with inpatient care. They are all designed to require the student to demonstrate evaluation, decision making, and management skills. The student will demonstrate the ability to design both interventional and conservative treatment plans and provide that care for the patient. The rotations are not intended to produce the level of knowledge, skill and competencies required of a skilled surgeon in any of the disciplines. They place an emphasis on the pre- and post-operative evaluation and care of the patient and not the skills required for the intraoperative treatment of the patient. The Surgery Selectives available include: General Surgery, Orthopedic Surgery, Gynecological Surgery, Urological Surgery, Oncology Surgery, Transplant Surgery, Trauma Surgery, pathology, radiology, and Anesthesia.

This hospital-based medicine rotation allows the student to have the opportunity to function in a supervised environment at a level similar to the responsibilities expected during the first year of graduate medical education.

LCOM 7---: 4 Blocks of Elective: 40 Credit Hours

Electives allow students to strengthen their knowledge and skills in specific disciplines and areas of either individual weakness or interest. Electives provide a measure of individuation to the undergraduate medical education, allowing students the opportunity to explore and develop clinical, medical service, and research interests. They provide students the opportunity to rotate at sites outside of core locations affiliated with the COM and acquire knowledge of differing approaches to the practice of medicine within varying disciplines. Often becoming audition

rotations, these clinical experiences allow students to demonstrate to Program Directors, clinical faculty, and DME's their interest and abilities while seeking selection for GME training.

Students have control over the selection of their elective rotations within certain educational requirements established by LUCOM administration.

Electives in domestic locations must be approved a minimum of 90 days in advance by the Office of Clinical Education. All elective faculty must be appointed by the COM and meet the administrative criteria established by the COM.

The student may not do more than two electives with the same preceptor and may not do more than two electives in the same discipline at the same hospital or institution.

The student may perform an international medicine rotation for up to two electives provided the experience meets the academic standards established by LUCOM. Due to additional time required to certify and credential these rotation sites, these must be applied for at least 120 days in advance of the desire date of rotation.

Students may perform one elective non-clinical rotation, (10 credits) examples including but not limited to research, health policy, education, OMM, etc. during the OMS-IV year. Students must apply for this rotation and receive the support of a fulltime LUCOM biomedical science or clinical faculty member who will serve as the Faculty Sponsor for the student if seeking research experience. Students may engage in research activity at LUCOM or LU, or the research experience may take place at an unaffiliated institution (e.g., NIH). The Faculty Sponsor, therefore, may serve as the research mentor for the student; however, in some instances, the Faculty Sponsor's role will be to provide oversight of the rotation experience for a student who engages in research activity at an unaffiliated institution. The research activity may occur in a one-month, concentrated experience, or may – as appropriate and conducted at LUCOM or LU – be spread out over a one-trimester-long experience. Students will be required to complete an academic component for this rotation, which may consist of a culminating oral or poster presentation, written paper, or verification of substantive contribution to a manuscript submitted to a peer-reviewed journal. The Faculty Sponsor will be required to ensure that an appropriate evaluation of student performance is completed according to the administrative criteria established by the COM. Recorded grades will be Pass/Fail.

Faculty Roster

Brewer, Jody; B.S.,Ph.D.
Chair, Department of Molecular and Cellular Sciences, College of Osteopathic Medicine
Professor of Molecular and Cellular Sciences, Department of Molecular and Cellular Sciences
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SUMMARY

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