

**SUNY Upstate Medical University College of Medicine**

**Calendar for Four Week Periods  
2019-2020**

**2020-2021**

1	May 28, 2019	to	June 23, 2019	1	May 26, 2020	to	June 21, 2020
2	June 24, 2019	to	July 21, 2019	2	June 22, 2020	to	July 19, 2020
3	July 22, 2019	to	August 18, 2019	3	July 20, 2020	to	August 16, 2020
4	August 19, 2019	to	September 15, 2019	4	August 17, 2020	to	September 13, 2020
5	September 16, 2019	to	October 13, 2019	5	September 14, 2020	to	October 11, 2020
6	October 15, 2019	to	November 10, 2019	6	October 13, 2020	to	November 8, 2020
7	November 11, 2019	to	December 8, 2019	7	November 9, 2020	to	December 6, 2020
8	January 6, 2020	to	February 2, 2020	8	January 4, 2021	to	January 31, 2021
9	February 3, 2020	to	March 1, 2020	9	February 1, 2021	to	February 28, 2021
10	March 2, 2020	to	March 29, 2020	10	March 1, 2021	to	March 28, 2021
11	March 30, 2020	to	April 26, 2020	11	March 29, 2021	to	April 25, 2021
12	April 27, 2020	to	May 24, 2020	12	April 26, 2021	to	May 23, 2021

**Calendar for Five Week Periods**

**2019-2020**

**2020-2021**

A	May 28, 2019	to	June 30, 2019	A	May 26, 2020	to	June 28, 2020
B	July 1, 2019	to	August 4, 2019	B	June 29, 2020	to	August 2, 2020
C	August 5, 2019	to	September 8, 2019	C	August 3, 2020	to	September 6, 2020
D	September 9, 2019	to	October 13, 2019	D	September 7, 2020	to	October 11, 2020
E	October 15, 2019	to	November 17, 2019	E	October 13, 2020	to	November 15, 2020
F	November 18, 2019	to	December 22, 2019	F	November 16, 2020	to	December 20, 2020
G	January 6, 2020	to	February 9, 2020	G	January 4, 2021	to	February 7, 2021
H	February 10, 2020	to	March 15, 2020	H	February 8, 2021	to	March 14, 2021
I	March 16, 2020	to	April 19, 2020	I	March 15, 2021	to	April 18, 2021
J	April 20, 2020	to	May 24, 2020	J	April 19, 2021	to	May 23, 2021

**Late Fees for 2019-2020**

<b>Period</b>	<b>Late Fee Starts</b>
1	May 13, 2019
2	June 10, 2019
3	July 8, 2019
4	August 5, 2019
5	September 2, 2019
6	September 30, 2019
7	October 28, 2019
8	December 23, 2019
9	January 20, 2020
10	February 17, 2020
11	March 16, 2020
12	April 13, 2020

The SUNY Upstate Medical University College of Medicine Course Selection Book is published in the month of February prior to the academic year that it is referenced to. The College of Medicine 2019-2020 academic year runs from May 28, 2019 through May 24, 2020. The Course Selection Book is printed as a convenient carry-around reference guide for students, faculty and staff. However, please be aware that there may be changes to the College of Medicine course offerings throughout the year, so the most up-to-date, accurate information on course offerings for the College of Medicine is available in MyUpstate.

<https://bannerweb.upstate.edu/>

**UPSTATE MEDICAL  
UNIVERSITY  
COLLEGE OF  
MEDICINE COURSE  
SELECTION BOOK  
2019-2020**

**CELL AND DEVELOPMENTAL BIOLOGY**

**Teaching in Human Anatomy .... ANAT0405  
1 TO 5 Credits Basic Science Selective,  
Concurrent Elective, Pass/Fail Grading**

ELECTIVE DIRECTOR: Dr. Robert Zajdel  
CONTACT: ZAJDELR@UPSTATE.EDU  
PREREQUISITES: ALL THIRD YEAR CLERKSHIPS  
MAXIMUM NUMBER OF STUDENTS: 15  
PERIODS OFFERED: Concurrent

This course is not available in the elective lottery.

ELECTIVE DESCRIPTION: Students are expected to assist in teaching gross anatomy to first year medical students. Emphasis is placed upon laboratory activities, including helping with daily dissections, working with students in small group sessions to facilitate an understanding of sectional and radiographic anatomy, and providing an opportunity to appreciate the application of gross anatomy to clinical medicine. Students may be asked to assist in the laboratory outside of designated class time and to offer individualized instruction to students experiencing difficulty in the course. Teaching assistants will be required to provide a log of their contact hours to the course director. Credit for the elective will be awarded on a basis of time spent teaching in the laboratory, tutoring, or preparing teaching specimens. Student feedback, direct faculty observation of interactions with students and correct answers to student and faculty questions will be used for assessment.

**Teaching in Neuroanatomy ..... ANAT0409  
1 TO 5 Credits Basic Science Selective,  
Concurrent Elective**

ELECTIVE DIRECTOR: Dr. Dana Mihaila  
CONTACT: MIHAILDA@UPSTATE.EDU  
PREREQUISITES: NEUROLOGY  
MAXIMUM NUMBER OF STUDENTS: 999  
PERIODS OFFERED: Concurrent

This course is not available in the elective lottery.

ELECTIVE DESCRIPTION: To review, master, and teach functional neuroanatomy to first year medical students using case studies to focus learning. Teaching a discipline is one of the best ways of learning and reinforcing this material. Moreover, returning to the neuroanatomy laboratory portion of the Neuroscience course after the Neuroscience clerkship reinforces the clinical experience and prepares the student for residency. Almost any clinical discipline will benefit from this review. Moreover, the student is able to reinforce the basic science education of the 1st year student by expanding on the more advanced student's clinical experience. Activities will include review of the neuroanatomy syllabus and brain and cross sectional anatomy, meeting with all faculty, neurosurgery residents, and other graduate and medical student assistants to review clinical case and laboratory material prior to each of the 10 laboratory units, teaching and giving chalk talks in the laboratory with a faculty mentor, and tutoring students in difficulty outside scheduled laboratory hours. This elective takes place during time the neuroanatomy laboratory is

taught during the Neuroscience course, usually beginning at the end of the first week in April and continuing through the laboratory examination seven weeks later. It may be taken for 3-5 credit hours, depending on the beginning and end of elective time. Introductory brain anatomy is especially heavy during the first 2 weeks, and review and case study analysis is especially heavy during the last week of the course. Elective time should include one of these periods. Time requirements are dependent on student participation in laboratory and pre-lab conferences. Close faculty interaction allows careful assessment of student's knowledge and teaching abilities.

**Teaching in Human Anatomy .... ANAT0410  
1 TO 8 Credits Pass/Fail Grading**

ELECTIVE DIRECTOR: Dr. Robert Zajdel  
CONTACT: ZAJDELR@UPSTATE.EDU  
PREREQUISITES: ALL THIRD YEAR CLERKSHIPS  
MAXIMUM NUMBER OF STUDENTS: 1  
PERIODS OFFERED: Concurrent

This course is not available in the elective lottery.

ELECTIVE DESCRIPTION: This elective is designed to provide medical students, especially those with an interest in the musculoskeletal system, with an opportunity to actively participate in teaching gross anatomy to first year students in the Doctor of Physical Therapy (DPT) program. Emphasis is placed upon demonstrating prosected specimens to the students, assisting students with their dissections, preparing content for teaching, and conducting small group laboratory peer teaching. Weekly activities will include involvement in laboratory teaching, laboratory problem solving sessions, and review and student sessions. Students will also help grade quizzes and exams. Performance will be evaluated upon knowledge of gross anatomy, interest in teaching, and active engagement in course activities by engaging in the following activities: assisting students with their dissections, coordinating small group laboratory problem solving sessions and content knowledge.

**ANESTHESIOLOGY**

**Anesthesiology & Basic Life Support -  
Upstate ..... ANES0801  
4 Credits**

ELECTIVE DIRECTOR: Dr. Jesus Calimlim  
CONTACT: CALIMLIR@UPSTATE.EDU  
PREREQUISITES: SURGERY  
MAXIMUM NUMBER OF STUDENTS: 3  
PERIODS OFFERED: 001, 002, 004, 005, 006, 007,  
008, 009, 010, 011, 012

ELECTIVE DESCRIPTION: (Cannot accept students in July or August). The elective is designed to be both flexible and educational. In order to fully explore what the exciting field of anesthesia has to offer to all medical students, emphasis will be placed on practical clinical activities according to the student's individual interests and motivation. Students will participate in patient care directly, with an attending as an acting resident (AI). Knowledge and clinical skills gained will be useful in virtually any field the student pursues.

Procedures such as mask ventilation, endotracheal intubation and IVs will be available daily. Patient selection will be tailored to each student. Preoperative evaluation for those interested in family practice, internal medicine, or surgery will be available. Skills and knowledge of emergency care or intensive care, such as airway management and invasive hemodynamic monitoring will also be available. Students interested in pediatrics or OB/GYN will also find clinical experiences and interesting patients available. Since the subject of anesthesia encompasses a large subject area, any student will find a topic of interest in this course. Advanced areas of interest include cardiovascular and thoracic anesthesia, intensive care and acute and chronic pain treatment. Some of these advanced areas of interest take the anesthesiologist out of the operating room.

**Applied Clinical Anesthesiology. ANES0808  
4 Credits Crouse Hospital**

ELECTIVE DIRECTOR: Dr. Pathman Selvarajah  
 CONTACT: DanielleMartin@crouse.org  
 PREREQUISITES: SURGERY  
 MAXIMUM NUMBER OF STUDENTS: 2  
 PERIODS OFFERED: 001, 002, 003, 004, 005, 006, 007, 008, 009, 010, 011, 012

ELECTIVE DESCRIPTION: The student will have the opportunity to observe how patients are assessed and prepared for surgery, and will also understand why particular anesthetic techniques are chosen in clinical practice. The elective will give the student the opportunity to participate in patient care on a one to one basis with an attending anesthesiologist. From a point of view of motor skills, the student will be expected to be able to maintain an airway, to intubate and to fully understand what is involved in the care of the unconscious patient. For two weeks students may rotate to main operating room, surgical outpatient centers, or childbirth center, depending on interest.

**Pain Medicine..... ANES0810  
4 Credits**

ELECTIVE DIRECTOR: Dr. Parakulam Thomas  
 CONTACT: rubachaa@upstate.edu  
 PREREQUISITES: ALL THIRD YEAR CLERKSHIPS  
 MAXIMUM NUMBER OF STUDENTS: 2  
 PERIODS OFFERED: 001, 002, 003, 004, 005, 006, 007, 008, 009, 010, 011, 012

This course is not available in the elective lottery.

ELECTIVE DESCRIPTION: Pain medicine is fast becoming a field of its own. This is due to the complexities of the pain syndromes and the subsequent management of all aspects of pain. During their rotation, medical students will be introduced to the different fields of pain medicine including acute pain, chronic pain, cancer pain, pain psychiatry and addiction psychiatry. Students will gain clinical experience in diagnosis of pain syndromes and appropriate techniques involved in treating these syndromes. Students will learn anatomy related to pain medicine. They will develop basic skills in the use of fluoroscopy, CT guidance and ultrasound for therapeutic pain interventions. Students will also be introduced to a

multimodal and multidisciplinary approach to the treatment of pain. Weekly activities will include lectures, observation and participation in intervention pain techniques. Note: After registering, and at least one month prior to the rotation, contact Dr. PS Thomas to make arrangements.

**CENTER FOR BIOETHICS AND HUMANITIES**

**Intro to Medical Creative WritingCBHX2404  
1 Credits**

ELECTIVE DIRECTOR: Dr. Deirdre Neilen  
 CONTACT: szczechk@upstate.edu  
 PREREQUISITES: NONE  
 MAXIMUM NUMBER OF STUDENTS: 8  
 PERIODS OFFERED: 11

ELECTIVE DESCRIPTION: Students will read other physician writers' works and then begin an extended piece of their own. Patient narratives, narrative competence, and medical humanities are all terms increasingly used when talking about ways to improve physician-patient interactions and satisfaction. In this introductory course, we will explore how and why writing can illuminate medicine and increase a physician's observations, making him/her more aware of the patient's needs

**Individual Study in Bioethics .... CBHX2405  
2 TO 6 Credits**

ELECTIVE DIRECTOR: Dr. James Dwyer  
 CONTACT: DWYERJA@UPSTATE.EDU  
 PREREQUISITES: NONE  
 MAXIMUM NUMBER OF STUDENTS: 4  
 PERIODS OFFERED: 001, 002, 003, 004, 005, 006, 007, 008, 009, 010, 011, 012, Concurrent

This course is not available in the elective lottery.

ELECTIVE DESCRIPTION: The purpose of this elective is to provide students the opportunity to explore, in a careful and supervised way, important issues in bioethics. Students will work with their preceptor to develop an individualized plan of study. This plan will usually involve extensive reading, attendance at some lectures and seminars, frequent discussions with the preceptor, attendance at meetings of the ethics committee, and a written paper. Students may explore a particular topic or area (for example, issues in one specialty of medicine), design a small study (for example, a chart of review of advance directives), or learn more about the work of clinical consultation (by discussing cases with consultants and attending meetings of the ethics committee). This elective may be taken full-time or Concurrently with other courses.

**Physicians and Social Responsibility I  
..... CBHX2408  
1 Credits Concurrent Elective**

ELECTIVE DIRECTOR: Dr. James Dwyer  
 CONTACT: DWYERJA@UPSTATE.EDU  
 PREREQUISITES: NONE  
 MAXIMUM NUMBER OF STUDENTS: 16

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## COURSE SELECTION BOOK 2019 – 2020 SYRACUSE CAMPUS ELECTIVES

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PERIODS OFFERED: Concurrent

This course is not available in the elective lottery.

**ELECTIVE DESCRIPTION:** This is the first of a two-elective sequence that establishes a critical, analytic component in conjunction with selected health-related service activities, to provide a robust, service-learning experience for medical students to develop their understanding of and commitment to physician's social responsibility. Course content addresses a variety of topics, such as fundamentals of health systems and financing; impacts of socioeconomic disparities in health and illness; cultural diversity in clinical practice; health outcomes; advocacy skills; structure and effectiveness of the safety net; global health inequities; environmental issues in health. Exact topics are modified from year to year.

### **Physicians and Social Responsibility II** ..... **CBHX2410** **2 Credits** **Concurrent Elective**

**ELECTIVE DIRECTOR:** Dr. Kathy Faber-Langendoen

**CONTACT:** FABERLAK@UPSTATE.EDU

**PREREQUISITES:** CBHX2408

**MAXIMUM NUMBER OF STUDENTS:** 16

**PERIODS OFFERED:** Concurrent

**ELECTIVE DESCRIPTION:** Physicians and Social Responsibility II is the second part of a two-elective sequence that establishes a critical, analytic component in conjunction with selected health-related service activities to provide a robust, service-learning experience for medical students to develop their understanding of and commitment to physicians' social responsibility. Students will critically analyze their service experiences in light of the fundamental concepts discussed in PSRI. Some content related to student experiences will be presented in a more advanced way than in PSR I (e.g. fundamentals of health systems/financing, impacts of socioeconomic disparities in health and illness; advocacy skills, structure and effectiveness of the safety net; global health inequities). A substantial portion of the seminar time will be spent with students presenting their critical analyses of issues arising in their service sites.

## **EMERGENCY MEDICINE**

### **Acting Internship in Emergency Medicine** ..... **EMED1302** **4 Credits** **Acting Internship Selective**

**ELECTIVE DIRECTOR:** Dr. Matthew Sarsfield

**CONTACT:** welchka@upstate.edu

**PREREQUISITES:** INTERNAL MEDICINE and SURGERY

**MAXIMUM NUMBER OF STUDENTS:** 6

**PERIODS OFFERED:** 001, 002, 003, 004, 005, 006, 007, 008, 009, 010, 011, 012

**ELECTIVE DESCRIPTION:** The student will function as an acting intern in the Emergency Department working under the direct supervision of Emergency Department attending physician or third year emergency medicine resident. The student will have the opportunity to make the initial patient contact and formulate a diagnostic and therapeutic plan which will then be discussed with and reviewed by the attending physician. During the

elective the student will be exposed to the entire range of Adult Emergency Department problems. This experience will give the student an understanding of what the practice of Emergency Medicine entails and provide exposure to a wide range of patient population.

### **Emergency Medicine in a Community Hospital** ..... **EMED1307** **4 Credits** **Preceptor's Site**

**ELECTIVE DIRECTOR:** Dr. David Wirtz

**CONTACT:** dwirtz@usacs.com

**PREREQUISITES:** ALL THIRD YEAR CLERKSHIPS

**MAXIMUM NUMBER OF STUDENTS:** 1

**PERIODS OFFERED:** 001, 002, 003, 004, 005, 006, 007, 008

This course is not available in the elective lottery.

**ELECTIVE DESCRIPTION:** This rotation is an introduction to emergency medicine in a community hospital setting. Cortland Regional Medical Center is a 166 bed hospital with approximately 35,000 ED visits per year. There is a diverse mix of pathology seen in the ED and all patients are seen by the ED medical staff. The medical student will always be supervised by a board certified residency trained emergency medicine specialist. They will examine, diagnose and treat pathology in all major disciplines of medicine. There will also be informal lectures to supplement the clinical experience. If there are any particular interests or needs of a student, every effort will be made to meet them. There will be approximately 36 hours per week clinical responsibility and varying amounts of supplemental teaching (lectures, rounds etc.). Self study with a standard emergency text is encouraged, and reference materials are available in the department.

### **Emergency Medicine Research.. EMED1308** **4 Credits**

**ELECTIVE DIRECTOR:** Dr. Susan Wojcik

**CONTACT:** welchka@upstate.edu

**PREREQUISITES:** NONE

**MAXIMUM NUMBER OF STUDENTS:** 2

**PERIODS OFFERED:** 001, 002, 003, 004, 005, 006, 007, 008, 009, 010, 011, 012

This course is not available in the elective lottery.

**ELECTIVE DESCRIPTION:** Goals of the elective include provision of experience in direct participation in ongoing projects of the Department, development of an understanding of the use of evidence tools and methodologies. The focus is on the formulation of researchable clinical questions. A student relevant research project will be designed and completed.

### **Acting Internship in Pediatric Emergency Medicine** ..... **EMED1309** **4 Credits** **Acting Internship Selective**

**ELECTIVE DIRECTOR:** Dr. Erin Hanley

**CONTACT:** welchka@upstate.edu

**PREREQUISITES:** PEDIATRICS and INTERNAL MEDICINE and SURGERY

**MAXIMUM NUMBER OF STUDENTS:** 4

## COURSE SELECTION BOOK 2019 – 2020 SYRACUSE CAMPUS ELECTIVES

PERIODS OFFERED: 001, 002, 003, 004, 005, 006, 007, 008, 009, 010, 011, 012

**ELECTIVE DESCRIPTION:** The student will function as an acting intern within the Pediatric Emergency Room working under the direct supervision of a Pediatric Emergency Specialist. The student will provide patient contact and devise a management plan in concert with attending supervision. The overall experience will offer the student an understanding of the practice of Pediatric Emergency Medicine.

### **Clinical Toxicology ..... EMED1321 4 Credits Basic Science Selective, Pass/Fail Grading**

**ELECTIVE DIRECTOR:** Dr. Christine Stork-Medicis  
**CONTACT:** STORKC@UPSTATE.EDU  
**PREREQUISITES:** INTERNAL MEDICINE and PEDIATRICS and EMERGENCY MEDICINE

**MAXIMUM NUMBER OF STUDENTS:** 3

**PERIODS OFFERED:** 001, 004, 006, 007, 008, 009, 010, 011, 012, 03B, 05B

**ELECTIVE DESCRIPTION:** At the end of this rotation the student should have a comprehensive approach to the poisoned patient as defined by: 1) The ability to manage exposures when the specific toxin cannot be identified or when inadequate information is known regarding a specific toxin; 2) The ability to appropriately evaluate and initiate therapy for a number of commonly presenting toxins; 3) The ability to appropriately include toxins in the differential diagnosis of any patient. Students will round on inpatient toxicology cases at local hospitals and provide telephone follow-up consultation on hospitals in the Upstate New York Poison Centers service area. Daily case discussion, high fidelity patient simulations and weekly structured conferences will occur. The student will provide both an oral and written project commensurate with their learning experience. **NOTE:** Some periods are offered for 4 weeks and 4 credits; others are offered for 2 weeks and 2 credits.

### **Undersea and Hyperbaric Medicine ..... EMED1323 4 Credits Pass/Fail Grading**

**ELECTIVE DIRECTOR:** Dr. Deepali Sharma  
**CONTACT:** welchka@upstate.edu  
**PREREQUISITES:** INTERNAL MEDICINE and SURGERY  
**MAXIMUM NUMBER OF STUDENTS:** 1

**PERIODS OFFERED:** 001, 004, 005, 006, 007, 008, 009, 010, 011, 012

**ELECTIVE DESCRIPTION:** The medical student will rotate for 2-4 weeks. The student will rotate in the Hyperbaric Medicine and Wound Care Center at SUNY Upstate University Hospital. Clinic hours are Monday-Friday, 8 am - 4 pm. The medical student will gain basic exposure to dive medicine, clinical hyperbaric medicine and problem wound management. They will be overseen by an attending physician and fellow in UHM (undersea and hyperbaric medicine). The student will participate in hyperbaric medicine consultations, wound care consultations, and ongoing wound care revisits. The student will oversee the daily hyperbaric oxygen treatments including assessment of any patient

complications. The student will also have the option to take some home call for emergencies in hyperbaric medicine. Finally, the student will be expected to attend Wednesday morning teaching rounds and UHM fellowship lectures from 8am-10am. The Director of Hyperbaric Medicine and Wound Care will oversee the elective.

### **Emergency Ultrasound..... EMED1324 4 Credits Pass/Fail Grading**

**ELECTIVE DIRECTOR:** Dr. Elizabeth Nicholas  
**CONTACT:** welchka@upstate.edu

**PREREQUISITES:** ALL THIRD YEAR CLERKSHIPS

**MAXIMUM NUMBER OF STUDENTS:** 1

**PERIODS OFFERED:** 001, 003, 004, 005, 006, 007, 009, 010, 011, 012

**ELECTIVE DESCRIPTION:** This is an adult learning driven four week elective designed to introduce the students to the use of point-of-care (POC) ultrasound in the ED. The students will receive hands on training to learn the basics of emergency ultrasound. Students will read material and watch videos designed to help develop background knowledge of certain areas of emergency ultrasound. These areas include but are not limited to: Cardiac, Pulmonary, Aorta, EFAST (Extended Focused Assessment with Sonography for Trauma), Hepatobiliary, Renal, Transabdominal/Transvaginal Pelvic, Deep Venous Thrombosis, and Procedural. Furthermore, the students will be given the opportunity to practice and develop their skills by scanning patients in the ED with the ultrasound faculty and also independently. These images will be reviewed at scheduled image review sessions. The students will also spend time with the ultrasound technicians at University Hospital and/or Community General learning how to perform formal ultrasounds.

### **Emergency Medicine Advanced Simulation: Teaching and Learning with Simulation ..... EMED1325 4 Credits**

**ELECTIVE DIRECTOR:** Dr. Elliot Rodriguez  
**CONTACT:** welchka@upstate.edu  
**PREREQUISITES:** EMED1302

**MAXIMUM NUMBER OF STUDENTS:** 1

**PERIODS OFFERED:** 001, 003, 004, 005, 006, 007, 008, 009, 010, 011, 012

This course is not available in the elective lottery.

**ELECTIVE DESCRIPTION:** The goal of this elective experience is to provide senior level medical students an opportunity to learn the fundamentals of teaching with simulation. The student will have the opportunity to practice applying these concepts by teaching various learners under the supervision of experienced faculty educators. The student will learn to program and use the high fidelity simulation mannequins. During the elective, the student will develop a simulation scenario of sufficient quality to be submitted for publication. The scenario will be a shared work product and used to teach future learners. The elective will be based at the department's EMSTAT Center, a state of the art



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## COURSE SELECTION BOOK 2019 – 2020 SYRACUSE CAMPUS ELECTIVES

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immersive simulation-learning environment. NOTE: Availability dependent on activity schedule.

### **Emergency Room - VAH ..... EMED1345 4 Credits Veteran's Administration Hosp**

ELECTIVE DIRECTOR: Dr. Mary DiRubbo  
CONTACT: welchka@upstate.edu  
PREREQUISITES: INTERNAL MEDICINE  
MAXIMUM NUMBER OF STUDENTS: 1  
PERIODS OFFERED: 001, 002, 003, 004, 005, 006, 007, 008, 009, 010, 011, 012

This course is not available in the elective lottery.

**ELECTIVE DESCRIPTION:** This elective is intended to provide the student with a clinical experience in an active emergency room. The student will be working with and directly reporting to an attending physician covering the ER. In addition, the student will be working with a first or second year ED resident. This rotation allows the student to learn emergency medical care in a setting that is committed to teaching. It is located in a fully integrated academic institution and directed by physicians with full academic appointments. The student can expect exposure to a wide variety of medical and surgical cases. Previous students have appreciated most the primary care experience involving dermatology, ophthalmology, ENT, GU and ambulatory internal medicine problems. Additionally, this rotation affords the student the initial evaluation of acutely ill patients before they are treated, stabilized and admitted to an inpatient service.

### **FAMILY MEDICINE**

#### **Acting Internship in Family Medicine - Residency Based Family Medicine**

#### **..... FAMP1612 4 Credits Acting Internship Selective**

ELECTIVE DIRECTOR: Dr. James Tucker  
CONTACT: anne.louise@sjhsyr.org  
PREREQUISITES: INTERNAL MEDICINE and PEDIATRICS  
MAXIMUM NUMBER OF STUDENTS: 1  
PERIODS OFFERED: 001, 002, 003, 004, 005, 006, 007, 008, 009, 010, 011, 012

**ELECTIVE DESCRIPTION:** This elective is intended to achieve several goals: 1) provide an in-depth exposure to both in-patient and out-patient family medicine, 2) increase basic medical interviewing skills and medical facts, 3) allow the students to work closely with family medicine residents at all levels of training, and 4) give students who are interested in this residency an opportunity to demonstrate their interest and skills to our faculty. Mornings will encompass morning report, bedside rounds with the PGY3 and PGY1 residents, attending rounds with the faculty attending of the week and didactic conferences as provided by the PGY3 or attending. Noon-times are devoted to various didactic conferences. Afternoons are divided between floor coverage and outpatient either at the model office or the faculty practice. The student will work one weekend during the rotation. The student will see the breadth of

inpatient and outpatient family medicine. Four weeks prior to the elective, the student must contact the Medical Education Department at 315-448-5547 for instructions.

### **Family Medicine Preceptorship . FAMP1615 4 Credits Preceptor's Site**

ELECTIVE DIRECTOR: Dr. Heather Finn  
CONTACT: FINNH@UPSTATE.EDU  
PREREQUISITES: FAMILY MEDICINE  
MAXIMUM NUMBER OF STUDENTS: 1  
PERIODS OFFERED: 001, 002, 003, 004, 005, 006, 007, 008, 009, 010, 011, 012

This course is not available in the elective lottery.

**ELECTIVE DESCRIPTION:** This course may be completed at urban, suburban, and rural sites throughout New York State with approved voluntary faculty. A number are within commuting distance of Syracuse and include managed care settings, community health centers, and private practices. Preceptorships in other states may be arranged, but require significant advance planning. Students will understand the role of family physicians; will develop skills in the diagnosis and management of common medical problems; and will understand the nature of consultation with other medical specialists. Students progress from observation to initial patient contact with preceptor review. Rate of progression and participation, assignment of short literature reviews of patient problems, and night call are at the discretion of the individual preceptors.

### **Integrative Medicine..... FAMP1635 4 Credits**

ELECTIVE DIRECTOR: Dr. Kaushal Nanavati  
CONTACT: NANAVATK@UPSTATE.EDU  
PREREQUISITES: FAMILY MEDICINE  
MAXIMUM NUMBER OF STUDENTS: 1  
PERIODS OFFERED: 001, 002, 003, 004, 005, 006, 007, 008, 009, 010, 011, 012

**ELECTIVE DESCRIPTION:** To gain an understanding of "Integrative" or "Complementary and Alternative Medicine" through precepting with providers, readings and conferences. The instructor will discuss individualized goals, learning objectives and course setup with the student prior to the elective period. Students will be encouraged to understand unfamiliar disciplines and concepts of health within their cultural and philosophical traditions while assessing them from a scientific outcome based methodology. Physician-patient communication regarding therapies and decision processes for utilization or discussion within the context of a medical practice will be considered. Weekly activities will include: Self directed reading, outpatient contact with practitioners and meetings with instructor. A reading list will be developed from a spectrum of evidence based materials to a sampling of "layperson" readings to get a both broad overview and the specifics of the chosen subject areas.

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## COURSE SELECTION BOOK 2019 – 2020 SYRACUSE CAMPUS ELECTIVES

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### **Occupational Medicine ..... FAMP1636 4 Credits Preceptor's Site**

ELECTIVE DIRECTOR: Dr. Michael Lax  
CONTACT: manninga@upstate.edu  
PREREQUISITES: ALL THIRD YEAR CLERKSHIPS  
MAXIMUM NUMBER OF STUDENTS: 1  
PERIODS OFFERED: 003, 004, 005, 006, 007, 008,  
009, 010, 011, 012

This course is not available in the elective lottery.

ELECTIVE DESCRIPTION: This elective will familiarize students with the evaluation and follow-up of patients with suspected workplace related illnesses. Students will interact with members of the team to develop and implement treatment plans. Emphasis will be placed on students developing skills to accurately diagnose occupational illness and to recognize the physicians role in the prevention of occupational illness.

### **Literature and Medicine: Examining Issues in Primary Care ..... FAMP1642 2 Credits Concurrent Elective**

ELECTIVE DIRECTOR: Dr. Ruth Hart  
CONTACT: HARTRH@UPSTATE.EDU  
PREREQUISITES: NONE  
MAXIMUM NUMBER OF STUDENTS: 999  
PERIODS OFFERED: Concurrent

ELECTIVE DESCRIPTION: This elective will examine health issues in primary care, using the perspectives afforded by literature, film and theater. Hands-on literature and drama experiences will be part of the elective with attendance expected at live theater performances and at a local author lecture series. Topics to be included are: professionalism, resource allocation, physician-patient communication, quality of life, cultural diversity and research ethics. Class participation and discussion are the basis for assessment. The class meets late August to early December on Wednesday evenings, 6-9 pm, with occasional events on other weekday evenings. Cost for performances: \$35.00 total.

### **Examining Issues in Primary Care ..... FAMP1643 2 Credits Concurrent Elective**

ELECTIVE DIRECTOR: Dr. Ruth Hart  
CONTACT: HARTRH@UPSTATE.EDU  
PREREQUISITES: NONE  
MAXIMUM NUMBER OF STUDENTS: 50  
PERIODS OFFERED: Concurrent

ELECTIVE DESCRIPTION: This elective will offer students the opportunity to examine issues in primary care through the reading and discussion of literary selections that focus on relevant topics such as professionalism, aging, resource allocation, and cultural diversity. Attendance at activities and performances that make a connection with the community at large such as Syracuse Stage theater performances, author lectures and readings, films based on literary adaptations and other performances in the arts will be included (choices depend on what is

offered at that time). The emphasis of the course is on group participation and discussion. Cost of course: \$35.00

### **Introduction to Rural Health..... FAMP1646 1.5 Credits Concurrent Elective, Preceptor's Site**

ELECTIVE DIRECTOR: Dr. Carrie Roseamelia  
CONTACT: ROSEAMEC@UPSTATE.EDU  
PREREQUISITES: NONE  
MAXIMUM NUMBER OF STUDENTS: 60  
PERIODS OFFERED: Concurrent

This course is not available in the elective lottery.

ELECTIVE DESCRIPTION: This elective is required for all medical students admitted to SUNY Upstate College of Medicine through the Rural Medical Scholars Program and runs concurrently over the MS1 and MS2 preclinical years. This elective introduces basic principles related to comprehensive rural health care. The format of the course is interactive, allowing students to learn about their roles as future health care professionals, and pass on enthusiasm for rural practice to a new generation of future small town practitioners. Students will be exposed to specific rural health issues through small group case discussions and learn about different rural communities across NYS. Students will extrapolate from their medical school knowledge to teach a clinical case to a team of high school students, preparing their teams for a case competition each Spring.

### **Public Health and Biopsychosocial Primary Care ..... FAMP1649 1 Credits Concurrent Elective**

ELECTIVE DIRECTOR: Dr. Christopher Morley  
CONTACT: MORLEYCP@UPSTATE.EDU  
PREREQUISITES: ALL THIRD YEAR CLERKSHIPS  
MAXIMUM NUMBER OF STUDENTS: 10  
PERIODS OFFERED: 8

This course is not available in the elective lottery.

ELECTIVE DESCRIPTION: Students will perform a validated, communications-intensive standardized patient encounter at the beginning of the course. The standardized patient case will include a number of complicating issues, including comorbid chronic physical illness and mental health symptoms, along with social challenges that impact self-care and adherence. The initial formative SP encounter will allow the student to watch and rate their own performance. Students will then be exposed to literature and instruction on social determinants of health, and receive didactic training in the application of chronic care models, patient-centeredness, cultural competency, motivational interviewing, and condition-specific topics.

### **Rural Medical Education Program ..... FAMP1650 4 Credits Concurrent Elective**

ELECTIVE DIRECTOR: Dr. Carrie Roseamelia, Dr. James Greenwald  
CONTACT: ROSEAMEC@UPSTATE.EDU



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## COURSE SELECTION BOOK 2019 – 2020 SYRACUSE CAMPUS ELECTIVES

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PREREQUISITES: INTERNAL MEDICINE  
MAXIMUM NUMBER OF STUDENTS: 15  
PERIODS OFFERED: Concurrent

This course is not available in the elective lottery.

**ELECTIVE DESCRIPTION:** This elective is suggested for students admitted to the College of Medicine through the Rural Medical Scholars Program and runs period G-J for Syracuse campus students, and Period G-I for Binghamton students. Students train in small town communities across NYS with local, board certified, clinical preceptors. An emphasis is placed on the continuous and comprehensive care of patients. Students develop skills in the diagnosis and management of a wide range of common ambulatory and secondary hospital problems of patients across the age spectrum. Students participate in office hours with small town, community-based preceptors, conduct inpatient rounds, laboratory work, night call, and case presentations.

**Rural Immersion Week ..... FAMP1651**  
**1 Credits Concurrent Elective**

ELECTIVE DIRECTOR: Dr. Carrie Roseamelia  
CONTACT: ROSEAMEC@UPSTATE.EDU  
PREREQUISITES: NONE  
MAXIMUM NUMBER OF STUDENTS: 20  
PERIODS OFFERED: Concurrent

This course is not available in the elective lottery.

**ELECTIVE DESCRIPTION:** This elective is suggested for students admitted to the College of Medicine through the Rural Medical Scholars Program and runs for one week, the summer before MS2. Students train in in-patient and out-patient community offices in host communities, working side-by-side with local physicians. Students meet with community leaders from various agencies including: local business owners, state assembly, public health, hospital administration, behavioral health and hospice. Students provide mentorship to high school students and are expected to spend a half day giving back to the community through scheduled volunteer activities.

**Rural Medicine Community Health AI**  
..... FAMP1652  
**4 Credits Acting Internship Selective**

ELECTIVE DIRECTOR: Dr. Carrie Roseamelia, Dr. Robert Ostrander  
CONTACT: ROSEAMEC@UPSTATE.EDU  
PREREQUISITES: NONE  
MAXIMUM NUMBER OF STUDENTS: 15  
PERIODS OFFERED: 001, 002, 003, 004, 005, 006, 007, 008, 009, 010, 011, 012

This course is not available in the elective lottery.

**ELECTIVE DESCRIPTION:** The goal of this community based Acting Internship is to prepare the fourth year medical student to assume the role of a first year resident in caring for patients across the lifespan in an ambulatory Family Medicine Clinic, managing acute and chronic conditions, as well as providing wellness and prevention care. The Acting Internship will provide training and experience in the key components of

outpatient primary care. The student will spend 8 half-days per week in the Family Medicine office, performing all aspects of Evaluation and Management visits. These aspects include, but are not limited to: taking a history, performing a physical examination, reviewing other data (e.g. diagnostic tests, consult notes, medical records) relevant to the visit, formulating a differential diagnosis, assessing the status of chronic conditions, identifying gaps in guideline and/or evidence based wellness and prevention, formulating and ordering appropriate diagnostic tests, making appropriate referrals for ancillary services and consultations, formulating a treatment and follow-up plan incorporating shared decision

### INTERDEPARTMENTAL

**USMLE Preparation ..... INTD0900**  
**0 Credits Concurrent Elective**

ELECTIVE DIRECTOR: Mary Ann Grandinetta  
CONTACT: GRANDINM@UPSTATE.EDU  
PREREQUISITES: NONE  
MAXIMUM NUMBER OF STUDENTS: 5  
PERIODS OFFERED: Concurrent

This course is not available in the elective lottery.

**ELECTIVE DESCRIPTION:** This elective is open to students who are in the basic science years and are preparing for their USMLE Step Exam.

**USMLE Preparation ..... INTD1000**  
**0 Credits**

ELECTIVE DIRECTOR: Mary Ann Grandinetta  
CONTACT: GRANDINM@UPSTATE.EDU  
PREREQUISITES: NONE  
MAXIMUM NUMBER OF STUDENTS: 0  
PERIODS OFFERED: Concurrent

**ELECTIVE DESCRIPTION:** This elective is open to students who have not passed the USMLE Step I by the end of their first semester of the third year.

**Medical Science Education Transition**  
..... INTD1200  
**3 Credits**

ELECTIVE DIRECTOR: Mary Ann Grandinetta, Dr. Margaret Maimone  
CONTACT: GRANDINM@UPSTATE.EDU  
PREREQUISITES: NONE  
MAXIMUM NUMBER OF STUDENTS: 24  
PERIODS OFFERED: Concurrent

**ELECTIVE DESCRIPTION:** This four-week course is designed to provide an academic introduction to medical school. Divided into subject blocks, students engage in a primer for basic science courses scheduled in the first year. In addition, students participate in academic support activities including: time and stress management; study strategies; and the successful transition to medical school.

**Teaching Assistant for Practice of Medicine Course..... INTD9423**

**1 TO 4 Credits                      Concurrent Elective**

ELECTIVE DIRECTOR:                      Dr. Alison McCrone

CONTACT:                                      donovake@upstate.edu

PREREQUISITES: INTERNAL MEDICINE and SURGERY

MAXIMUM NUMBER OF STUDENTS:                      28

PERIODS OFFERED:                                      Concurrent

This course is not available in the elective lottery.

ELECTIVE DESCRIPTION: Students will review materials in the physical diagnosis techniques, medical interviews and communication skills. Student Assistants will work one-to-one with faculty to teach MSIs and MSIIIs. Students will participate in course evaluation and in methods of evaluating the skills taught in the course and act as a teaching assistant in the POM 1 and POM 2 courses. Activities might include: evaluating student performance on CCEs, helping in small group sessions, grading student write-ups and developing educational materials.

**Hospice Volunteering ..... INTD9425**

**1 Credits   Concurrent Elective, Preceptor's Site**

ELECTIVE DIRECTOR:                      Dr. Judith Setla

CONTACT:                                      sconover@hospicecny.org

PREREQUISITES:                                      NONE

MAXIMUM NUMBER OF STUDENTS:                      15

PERIODS OFFERED:                                      Concurrent

ELECTIVE DESCRIPTION: Hospice volunteers are trained to help patients / families cope with issues at the end of life. Volunteers will learn how to assist with the physical, emotional, and spiritual struggles of this unique time. Once trained, volunteers will be matched with families based on interests, experience, and availability. Typical activities would be: Visit, watch TV, read to patients, grocery shopping, mowing lawns, childcare, sitting with patient's so family can run errands, driving patients or families to appointments or to visit loved ones. This is a rich opportunity to assist those in your community who are living with dying, and to learn about the psych-social-spiritual aspects of the journey towards the end of life.

**Hospice and Palliative**

**Medicine/Spirituality ..... INTD9426**

**4 Credits                                      Preceptor's Site**

ELECTIVE DIRECTOR:                      Dr. Barbara Krenzer

CONTACT:                                      KRENZERB@UPSTATE.EDU

PREREQUISITES: ALL THIRD YEAR CLERKSHIPS

MAXIMUM NUMBER OF STUDENTS:                      1

PERIODS OFFERED: 001, 002, 003, 004, 005, 006, 007, 008, 009, 010, 011, 012

This course is not available in the elective lottery.

ELECTIVE DESCRIPTION: The medical student will learn the basics of both inpatient and outpatient palliative care for patients nearing the end of life. In addition to control of pain and other physical symptoms, special attention will be paid to spiritual and emotional needs of patients and families. Patients will

have cancer and non-cancer diagnoses. Students will be asked to keep a journal of their experiences.

**Peer Tutoring in Basic Science... INTD9427**

**0.5 TO 6 Credits   Basic Science Selective, Concurrent Elective, Pass/Fail Grading**

ELECTIVE DIRECTOR:                      Mary Ann Grandinetta

CONTACT:                                      GRANDINM@UPSTATE.EDU

PREREQUISITES: ALL THIRD YEAR CLERKSHIPS

MAXIMUM NUMBER OF STUDENTS:                      20

PERIODS OFFERED:                                      Concurrent

This course is not available in the elective lottery.

ELECTIVE DESCRIPTION: Students in this elective will serve as peer tutors to students in basic science courses. Students and tutees will meet to review course material, study skills, test taking and time management strategies. Tutor training may be required. Third and fourth year medical students conduct group and one-on-one tutoring sessions for first and second year medical students in basic science coursework. Review of relevant basic science course material, tutoring methods, and topics in study strategies and time management are covered in the tutoring sessions.

**Endocrinology ..... INTD9431**

**4 Credits                                      Preceptor's Site**

ELECTIVE DIRECTOR:                      Dr. Marisa Desimone

CONTACT:                                      oliverl@upstate.edu

PREREQUISITES: INTERNAL MEDICINE and PEDIATRICS

MAXIMUM NUMBER OF STUDENTS:                      1

PERIODS OFFERED: 001, 004, 005, 006, 007, 008, 009, 010, 011, 012

ELECTIVE DESCRIPTION: The goal of this elective is for the student to demonstrate competency in applying the principles of evaluation and management of youth and adults with general endocrine disorders and diabetes mellitus. The curriculum for pediatrics will span abnormalities of growth and pubertal development, diabetes, congenital hypothyroidism, disorders of sexual differentiation, and neonatal hypoglycemia and hypocalcemia. The curriculum content for adults will include diabetes, thyroid disorders including nodules and cancer, hypopituitarism and pituitary tumors, parathyroid disorders, osteoporosis and lipid disorders.

**Fundamentals in Quality Improvement and Patient Safety through IHI Open School**

**..... INTD9434**

**1 Credits                                      Concurrent Elective**

ELECTIVE DIRECTOR:                      Dr. Lynn Cleary

CONTACT:                                      CLEARYL@UPSTATE.EDU

PREREQUISITES:                                      NONE

MAXIMUM NUMBER OF STUDENTS:                      99

PERIODS OFFERED:                                      Concurrent

ELECTIVE DESCRIPTION: This elective uses the online courses from the Institute for Healthcare Improvement (IHI) Open School to provide students with fundamental knowledge and skills in quality

improvement, patient safety, and related content. The elective is self-paced and asynchronous. By the end of the course, students will qualify for an IHI Open School Basic Certificate of completion. The estimated time of completion of the online modules is 20 hours. In addition, students are required to submit two case analyses, one based on the analysis of an opportunity to improve a process/outcome and the other on an analysis of a near miss or error, based on cases they have seen, and discuss the elective experience with the instructor. The knowledge and skills from this course will distinguish the individual who takes it as uniquely prepared for entering residency with advanced competency in Systems-based Practice, a required competency in all residencies.

**Pathophysiology of Disease ..... INTD9437  
2 Credits Basic Science Selective,  
Concurrent Elective**

ELECTIVE DIRECTOR: Dr. Margaret Maimone  
CONTACT: MAIMONEM@UPSTATE.EDU  
PREREQUISITES: ALL THIRD YEAR CLERKSHIPS  
MAXIMUM NUMBER OF STUDENTS: 45  
PERIODS OFFERED: Concurrent

ELECTIVE DESCRIPTION: In this course, students will choose a disease of interest and conduct a thorough literature review of the pathophysiological mechanisms underlying the disease. Students will then synthesize this information into a learning module that reviews the current state of knowledge of this disease, and disseminate this information to an appropriate audience. The learning module may consist of a powerpoint, video, case study, poster or other educational modality, and it may be disseminated via oral presentation to clerkship students, regional/national conference presentation or submission for publication. Students are also required to write a reflection about their experience in the elective after they have completed the other requirements. After registering, but no later than 3 weeks prior to the desired start date of this concurrent elective, students must contact the course director to set up a meeting to discuss course expectations, disease topic, and timeline for completion of the elective. For those students choosing to do an oral presentation, the dates must be arranged with the course director well in advance of the desired date, and dates/times will be subject to the availability of an appropriate audience.

**TA in Basic Science ..... INTD9438  
1 TO 4 Credits Basic Science Selective,  
Concurrent Elective**

ELECTIVE DIRECTOR: Dr. Thomas Poole  
CONTACT: POOLET@UPSTATE.EDU  
PREREQUISITES: ALL THIRD YEAR CLERKSHIPS  
MAXIMUM NUMBER OF STUDENTS: 30  
PERIODS OFFERED: Concurrent

ELECTIVE DESCRIPTION: Teaching assistants will assist course directors of one or more of the required basic science courses in MS1 or MS2. Teaching assistants will prepare review materials and conduct regular review sessions as well as hold regular office

hours to assist students with course material. They will interact regularly with the course directors to discuss review materials and topic areas with which students are struggling. Teaching assistants will be required to provide a log of their preparation hours and contact time to the course director. At the conclusion of the elective, teaching assistants will write a short reflection on their teaching experience. Students may sign up to assist with more than one course as their schedule permits.

**Foundations of Reasoning in Medicine  
..... INTD9439  
1 TO 2 Credits Basic Science Selective,  
Concurrent Elective**

ELECTIVE DIRECTOR: Dr. Thomas Poole, Dr. William Paolo  
CONTACT: POOLET@UPSTATE.EDU  
PREREQUISITES: ALL THIRD YEAR CLERKSHIPS  
MAXIMUM NUMBER OF STUDENTS: 12  
PERIODS OFFERED: Concurrent

ELECTIVE DESCRIPTION: The elective provides fourth year medical students the opportunity to participate in the facilitation of small groups within the Foundations of Reasoning in Medicine (FRM) course, encompassing either the FRMI or FRMII course. It may also provide fourth year students an opportunity to complete other quality improvement projects needed within the course. The Foundations of Reasoning in Medicine course is longitudinal and uses an active, case-based learning approach. The course integrates with the horizontally constructed systems-based units of first and second year courses, aligning with each block. These interactive sessions take place in a small group format which will allow first and second year students to apply the thought processes that practicing physicians bring to their patients every day. Small group cases will be held in both FRM I and FRM II. Elective students will choose which year of the FRM course they will like to participate in. FRM I will consist of a given diagnosis, with participants learning the basic science/patho-physiology of the disease being studied. FRM II objectives include clinical reasoning of the case and conclusion of a differential diagnosis. Immediately after registering, please contact Kristen Vella, Course Coordinator at vellak@upstate.edu

**MD/PhD Grand Rounds ..... MDPH062  
0 TO 2 Credits Concurrent Elective**

ELECTIVE DIRECTOR: Samuel Castleberry, Dr. Andras Perl, Krystal Ripa, Dr. Leszek Kotula  
CONTACT: CASTLEBS@UPSTATE.EDU  
PREREQUISITES: NONE  
MAXIMUM NUMBER OF STUDENTS: 35  
PERIODS OFFERED: Concurrent

ELECTIVE DESCRIPTION: This course is a required course for students in the MD/PhD program. Interested parties are welcome to attend the bi-weekly seminar component of the course. Student participation varies depending on the stage of training: MSI and MSII students attend Grand Rounds, read assigned papers, and participate in discussion. Students in the PhD years will spend eight clinical hours per month. From each

month's clinical experience the student will write up, in detail, a clinical case, reviewing the clinical scenarios, pathophysiology, pharmacology, etc. and also summarize recent advances or gaps in our knowledge with respect to clinical and translational research related to the specific disease and case report. The clinical mentor will review each month's write-up. Once per year, each student will present one of their clinical cases and discuss the chosen case within the context of the basic, clinical and translational research issues discussed in the relevant case report. The student presenter is also responsible for assigning relevant background papers of the Grand Rounds seminar and facilitating discussion. Students will be required to arrange a clinical mentor for each semester of their PhD training. To ensure a breadth of exposure, students will be required to select a minimum of two different clinical areas of experience during the course of their PhD training. MSIII and MSIV student participation is the same as students in the PhD years. Cases will be chosen from their clerkships. Course grading and credit hours depending on the stage of training for the student.

**Western & Traditional Chinese Medicine in the People's Republic of China ... INTL9501  
4 Credits**

ELECTIVE DIRECTOR: Dr. Paul Ko  
CONTACT: abbottjh@upstate.edu  
PREREQUISITES: NONE  
MAXIMUM NUMBER OF STUDENTS: 6  
PERIODS OFFERED: 001, 008, 009, 011, 012

This course is not available in the elective lottery.

ELECTIVE DESCRIPTION: The China elective is a collaborative agreement between ZAST (Zhejiang Association for Science and Technology); its hospital partners, and the Upstate Medical University. The elective is designed to allow Upstate Medical University students to experience medical care, both traditional Chinese and western style provided at two general hospital in the Zhejiang province. The elective takes place at Xiaoshan No. 1 People's Hospital and the Zhejiang Hospital. Both hospitals are located in Hangzhou, a large metropolitan city which is about a two hour drive from Shanghai. Depending upon students' interests, they may spend the entire elective at one hospital or split their time between the two hospitals. At each hospital they will have the opportunity to see and participate in both western style medical care, and traditional Chinese medical care. Students will be precepted by identified physicians in both institutions throughout their elective time. The elective is offered as a four-week rotation and is generally offered from January 1st through June 30th in each year. Exact dates of the rotation are flexible and can be arranged through Dr. Paul Ko, the course director or Jennifer Abbott, course coordinator. NOTE: Students will be required to provide their own travel to and from Shanghai. Travel requires a tourist visa (see [www.travisia.com](http://www.travisia.com) for details). ZAST and the hospital affiliates will provide accommodations for students during the elective. Accommodations are in Hangzhou. The hospitals will provide means for transportation between the apartment and the hospitals.

Transportation is by public bus service and bicycle. Costs of transportation will be provided by the participating hospitals.

**INTERNAL MEDICINE**

**Geriatric Medicine..... GERI 1801  
4 Credits**

ELECTIVE DIRECTOR: Dr. Sharon Brangman  
CONTACT: BRANGMAS@UPSTATE.EDU  
PREREQUISITES: ALL THIRD YEAR CLERKSHIPS  
MAXIMUM NUMBER OF STUDENTS: 1  
PERIODS OFFERED: 001, 002, 003, 004, 005, 006, 007, 008, 009, 010, 011, 012

This course is not available in the elective lottery.

ELECTIVE DESCRIPTION: This elective is flexible in terms of both content and length to allow the student to design an educational experience consistent with their interests and career goals. The student may participate in any or all of the clinical activities of the Division of Geriatrics including: 1. Ambulatory practice at University Geriatricians which is also the clinical site of the Center of Excellence. 2. Acute Care of the Elderly (ACE) Team at University Hospital. 3. Geriatric consultations, palliative and hospice services at the VA Medical Center. At the end of this elective, the student will have new skills in the assessment and management of medical conditions frequently encountered in older adults, across a variety of care settings. Students considering a career in any adult medical or surgical discipline will find this elective to be very helpful.

**Clinical Nephrology.....MDCN2002  
4 Credits**

ELECTIVE DIRECTOR: Dr. Sarah Lappin, Dr. Stephen Knohl  
CONTACT: oliverl@upstate.edu  
PREREQUISITES: INTERNAL MEDICINE  
MAXIMUM NUMBER OF STUDENTS: 1  
PERIODS OFFERED: 001, 002, 003, 004, 005, 006, 007, 008, 009, 010, 011, 012

ELECTIVE DESCRIPTION: Teaching is oriented around detailed discussion of the pathophysiology and management of renal disease. The consult team includes an attending, fellow, residents, and medical students. Consultations cover chronic kidney disease, fluid and electrolyte disorders, and end stage renal disease to include dialysis and transportation. Inpatients are seen on observation status, inpatient beds, and in several ICUs at UH and the VA. There are three weekly scheduled conferences and three weekly renal clinics at which students are encouraged to participate. Basic textbook reading and an attempt at evidence based medicine and critical assessment of the literature is required. The student should gain knowledge related to the pathophysiology and treatment of a variety of renal diseases such as glomerulonephritis, kidney stones, fluid and electrolyte disorders, and acute and chronic renal failure. A basic understanding of urinalysis and dialysis will be taught. This rotation provides a true clinical opportunity to integrate physiology, pharmacology, pathology, and molecular biology in disease ranging from chronic



outpatient states to critically ill patients in the surgical and medical ICUs. The elective is based at University Hospital with consultations at the VA Hospital and Crouse Hospital. An outpatient transplant clinic and nearby dialysis unit offer optional exposure to chronic management of ESRD.

**Clinical Pulmonary Disease ..... MDCN2004  
4 Credits**

ELECTIVE DIRECTOR: Dr. Sarah Lappin, Dr. James Sexton

CONTACT: oliverl@upstate.edu

PREREQUISITES: INTERNAL MEDICINE

MAXIMUM NUMBER OF STUDENTS: 1

PERIODS OFFERED: 001, 002, 003, 004, 005, 006, 007, 008, 009, 010, 011, 012

ELECTIVE DESCRIPTION: The major emphasis of the elective is on the diagnosis and management of pulmonary disease and on applied pulmonary physiology. The student will participate in the care of patients on the Pulmonary Service and will see, with the attending physician, all pulmonary consults requested by other services. The student can anticipate seeing problems such as solitary pulmonary nodules, difficult pneumonias, pulmonary infiltrates in immunocompromised patients, pleural effusions, post-operative pulmonary complications, and pre-operative pulmonary evaluations, chronic obstructive lung disease and asthma. The student will learn the indications for special diagnostic procedures such as CT scans, pleural biopsy, needle aspiration and biopsy, and fiberoptic bronchoscopy. The student will have the opportunity to observe a fiberoptic bronchoscopy. The student will learn to interpret the results of pulmonary function tests and arterial blood gas analysis.

**Clinical Endocrinology, Diabetes & Metabolism ..... MDCN2005  
4 Credits Preceptor's Site**

ELECTIVE DIRECTOR: Dr. Sarah Lappin, Dr. Marisa Desimone

CONTACT: oliverl@upstate.edu

PREREQUISITES: INTERNAL MEDICINE

MAXIMUM NUMBER OF STUDENTS: 1

PERIODS OFFERED: 001, 004, 005, 006, 007, 008, 009, 010, 011, 012

ELECTIVE DESCRIPTION: The goal of this elective is for the student to demonstrate competency in applying the principles of evaluation and management of adults with general endocrine disorders and diabetes mellitus. Objectives include: 1) Teaching specialized history taking and physical examination, clinical procedures and laboratory testing of patients with endocrine and metabolic abnormalities of all categories; 2) Demonstration of testing procedures and their applications to the known physiology of each endocrine system in an evaluation of that system; 3) Teach the evaluation and management of adults with diabetes mellitus, working with the multidisciplinary Joslin Center team of endocrinologists, educators, nutritionists, exercise specialist, podiatrists and other consultants for diabetes-related complications; 4) Demonstrate how endocrine malfunction can be

diagnosed and treated both in specific endocrinopathies of the pituitary, thyroid, parathyroid, pancreas, adrenal cortex and gonads and in other endocrine and metabolic disorders (e.g., lipid disorders, metabolic bone disease, growth disorders, water and electrolyte abnormalities). Ambulatory patient care sessions will be at the Joslin Center for Diabetes, University Endocrinologists and Osteoporosis Center of the SUNY Upstate Medical University and at the Diabetes and Endocrine clinics at the VA Medical Center.

**Clinical Infectious Disease.....MDCN2014  
4 Credits**

ELECTIVE DIRECTOR: Dr. Sarah Lappin, Dr. Stephen Thomas

CONTACT: oliverl@upstate.edu

PREREQUISITES: INTERNAL MEDICINE

MAXIMUM NUMBER OF STUDENTS: 1

PERIODS OFFERED: 001, 002, 003, 004, 005, 006, 007, 008, 009, 010, 011, 012

ELECTIVE DESCRIPTION: An advanced undergraduate course in diagnosis and management of patients with Infectious Diseases. The student, working closely with a Resident or Fellow, will do the initial evaluation of patients referred to our service for consultation, will present his/her patients to the Attending Physician on daily ward rounds and will subsequently be responsible for following his/her patients through their hospital course. He/she will be asked periodically to review certain subjects and to make brief presentations at daily rounds, the weekly Infectious Diseases Conference or the weekly Clinical Case Conference. The student is expected to take advantage of the opportunity to explore clinical microbiology.

**Gastroenterology.....MDCN2017  
4 Credits**

ELECTIVE DIRECTOR: Dr. Sarah Lappin, Dr. Sekou Rawlins

CONTACT: oliverl@upstate.edu

PREREQUISITES: INTERNAL MEDICINE and SURGERY

MAXIMUM NUMBER OF STUDENTS: 1

PERIODS OFFERED: 001, 003, 004, 005, 006, 007, 008, 009, 010, 011, 012

ELECTIVE DESCRIPTION: During this experience, the student will function as the acting intern for patients admitted to the Gastroenterology and Hepatology services, will learn to provide consultative services in Gastroenterology and will participate in three outpatient sessions weekly. The student will join other members of the section in case-management, journal club, pathology, radiology and clinical conferences. As learning objectives, the student will interpret and integrate data from the clinical record, laboratory, radiology, endoscopic, histopathologic and manometric studies to develop clinical management strategies.

**Hematology/Oncology .....MDCN2040  
4 Credits**

ELECTIVE DIRECTOR: Dr. Sarah Lappin, Dr. Stephen Graziano

CONTACT: oliverl@upstate.edu



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## COURSE SELECTION BOOK 2019 – 2020 SYRACUSE CAMPUS ELECTIVES

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PREREQUISITES: INTERNAL MEDICINE

MAXIMUM NUMBER OF STUDENTS: 1

PERIODS OFFERED: 001, 002, 003, 004, 005, 006, 007, 008, 009, 010, 011, 012

ELECTIVE DESCRIPTION: This experience will be designed to provide an exposure to the problems encountered in diagnosis and treatment of ambulatory patients with a broad variety of solid tumors and hematologic disorders in the outpatient setting. Training is provided in blood cell identification and the diagnosis and treatment of hematologic disorders. Knowledge of the mechanisms of action, pharmacology, toxicities and the therapeutic indication for various classes of anti-tumor compounds will be obtained. The relationships between the principles derived from experimental tumor systems and human cancer will be emphasized. Additionally, the interdisciplinary nature of oncology practice will be stressed. Emphasis will also be placed upon the various phases of clinical investigation, and experimental design which relates to the development of properly conceived and executed clinical trials. Nine interdisciplinary Clinic sessions will be attended weekly. The student will be expected to accept primary patient responsibility and become intimately involved not only in the medical but also the psychosocial implications of malignant/ hematologic disease.

### **Clinical Cardiology ..... MDCN2044 4 Credits**

ELECTIVE DIRECTOR: Dr. Sarah Lappin, Dr. Timothy Ford

CONTACT: oliverl@upstate.edu

PREREQUISITES: INTERNAL MEDICINE

MAXIMUM NUMBER OF STUDENTS: 1

PERIODS OFFERED: 001, 002, 003, 004, 005, 006, 007, 008, 009, 010, 011, 012

ELECTIVE DESCRIPTION: This course is designed to provide a basic background in clinical cardiology. Students should improve their skills in the physical examination of the heart and gain experiences with pathophysiology, diagnosis, and management of angina pectoris, myocardial infarction and congestive heart failure, hypertension, and valvular heart disease, among other cardiovascular diseases. They will also become familiar with the value of information obtained and the techniques involved in electrocardiographic stress testing, nuclear cardiology and echocardiography. There will be a one hour didactic electrocardiography session per week with supplemental self-assessed learning/computer assisted learning (American College of Cardiology ECG-SAP). Students should be able to understand the data generated from cardiac catheterization and percutaneous coronary interventions including PCTA and Stents. They will also be introduced to the morbidity, mortality and benefits of cardiac surgery. These improvements in clinical skills should lead to the ability to approach a patient with heart disease, along with its diagnosis, evaluation of its severity, and its treatment.

### **Critical Care .....MDCN2058 4 Credits**

ELECTIVE DIRECTOR: Dr. Sarah Lappin, Dr. James Sexton

CONTACT: oliverl@upstate.edu

PREREQUISITES: INTERNAL MEDICINE and SURGERY

MAXIMUM NUMBER OF STUDENTS: 2

PERIODS OFFERED: 001, 002, 003, 004, 005, 006, 007, 008, 009, 010, 011

ELECTIVE DESCRIPTION: The students will be taught the theory and techniques used in the management of critically ill patients. After completion of the course a student will be able to understand the management of a patient with multiple system organ failure as well as be comfortable with advanced ventilatory and hemodynamic management. Students receive practical instruction in the performance of invasive procedures including but not limited to central lines, pulmonary artery catheters and arterial lines.

### **Clinical Internal Medicine & Infectious Diseases .....MDCN2059 4 Credits Community General Hospital**

ELECTIVE DIRECTOR: Dr. Sarah Lappin, Dr. Mitchell Brodey

CONTACT: oliverl@upstate.edu

PREREQUISITES: INTERNAL MEDICINE and SURGERY

MAXIMUM NUMBER OF STUDENTS: 1

PERIODS OFFERED: 001, 002, 003, 004, 005, 006, 007, 008, 009, 010, 011, 012

ELECTIVE DESCRIPTION: Observation and participation in clinical infectious diseases will include inpatient care at Community General Hospital as well as outpatient experience. Emphasis on diagnosis and treatment of common problems in unusual infectious disease problems and travel medicine. Emphasis is also placed on care of patients with HIV disease both in the outpatient and inpatient setting. After completing the course, the student should have good ability to diagnose and treat inpatient and outpatient medical problems as well as a thorough understanding of the principles and practice of antibiotic use, HIV therapy and travel medicine.

### **Clinical Dermatology .....MDCN2066 2 Credits**

ELECTIVE DIRECTOR: Dr. Ramsay Farah

CONTACT: FARAHRS@UPSTATE.EDU

PREREQUISITES: INTERNAL MEDICINE

MAXIMUM NUMBER OF STUDENTS: 2

PERIODS OFFERED: 001, 002, 003, 004, 005, 006, 007, 008, 009, 010, 011, 012

This course is not available in the elective lottery.

ELECTIVE DESCRIPTION: Dermatology will be the focus. Students will see patients on an outpatient basis. Basic dermatologic conditions and procedures will be emphasized. Students will learn skin examination techniques. Emphasis will be placed on recognizing skin lesion morphology and distribution leading to differential diagnosis. Students are expected

## COURSE SELECTION BOOK 2019 – 2020 SYRACUSE CAMPUS ELECTIVES

to be on time and attend all clinics. Case reports and write ups are encouraged. THIS IS A 4 WEEK ELECTIVE

### **Clinical Rheumatology..... MDCN2075 4 Credits**

ELECTIVE DIRECTOR: Dr. Sarah Lappin, Dr. Andras Perl

CONTACT: oliverl@upstate.edu

PREREQUISITES: INTERNAL MEDICINE

MAXIMUM NUMBER OF STUDENTS: 1

PERIODS OFFERED: 001, 002, 003, 005, 006, 007, 008, 009, 010, 011, 012

ELECTIVE DESCRIPTION: This is a clinical care experience elective that focuses on the diagnosis, treatment, and management of rheumatological disorders utilizing direct patient contact and case-based teaching. Elective participants will be exposed to rare and common rheumatological conditions through our inpatient consultations and outpatient Adult clinic. Under the supervision of the attending the student will develop skills in musculoskeletal examination and clinical evaluation, interpretation of laboratory tests (including joint fluid examination and x-ray and MRI imaging studies) and the management of rheumatic diseases commonly seen by generalists. Participation in regularly scheduled rounds, clinic and other conferences are expected as they provide a more formal training for the students. The course will culminate in the student's presentation at our Friday didactic session. For those interested in clinical or basic science research, please contact the department prior to the start of the elective for arrangements.

### **The Scientific Basis of Critical Care ..... MDCN2214 2 Credits Basic Science Selective**

ELECTIVE DIRECTOR: Dr. Dana Savici

CONTACT: savicid@upstate.edu

PREREQUISITES: ALL THIRD YEAR CLERKSHIPS

MAXIMUM NUMBER OF STUDENTS: 0

PERIODS OFFERED: 08B

This course is not available in the elective lottery.

ELECTIVE DESCRIPTION: The intensive care unit is the setting for dramatic manifestations of organ failure (lung, heart, kidney, liver, etc) and systemic derangements of normal physiology. The basic sciences of physiology, pharmacology, microbiology, anatomy and pathology are utilized on a daily basis to learn and understand each of our critically ill patients. Students will be imbedded in the Medical Intensive Care Unit for a 2 week elective. Students will participate in daily rounds, participate in the care of selected patients, and meet with the course instructor daily for 1 hour (4-5 days per week). The focus of these meetings will be to review the basic science aspects of assigned patients.

### **The Clinical Experience ..... MDCN2215 6 Credits Concurrent Elective, Pass/Fail Grading**

ELECTIVE DIRECTOR: Dr. Sarah Lappin

CONTACT: oliverl@upstate.edu

PREREQUISITES: NONE

MAXIMUM NUMBER OF STUDENTS: 12

PERIODS OFFERED: Concurrent

This course is not available in the elective lottery.

ELECTIVE DESCRIPTION: You have come to medical school to become a doctor but doctoring is scant during your MSI year. While you have Practice of Medicine (POM), it only allows you glimpses of the real world of medicine. A 6-week Internal Medicine experience will be much different as you will have an extended stay in the clinical world working with members of the Internal Medicine team. You will gain insight and skills that will serve you well during the remaining three years of medical school. Students will participate in three 2-week blocks in which they will work with faculty, house staff, and, perhaps, clerkship students, in a variety of venues including the following: Outpatient Clinics (General Medicine and Subspecialty) (1.) Intensive Care Unit (2.) Coronary Care Unit (3.) General Medicine Inpatient (4.) Hematology/Oncology Inpatient. Additionally, the student will participate in a weekly small-group session with a member of the faculty to tackle a variety of topics such as clinical case review or physical exam skills.

### **Acting Internship in Internal Medicine - UH/CGH General Medicine .....MDCN2217 4 Credits Acting Internship Selective**

ELECTIVE DIRECTOR: Dr. Sarah Lappin

CONTACT: oliverl@upstate.edu

PREREQUISITES: INTERNAL MEDICINE

MAXIMUM NUMBER OF STUDENTS: 7

PERIODS OFFERED: 001, 002, 003, 004, 005, 006, 007, 008, 009, 010, 011, 012

ELECTIVE DESCRIPTION: This experience allows a medical student, who must have successfully completed the Internal Medicine clerkship, to further develop along the RIME (Reporter, Interpreter, Manager, Educator) pathway. Whereas a clerkship student should have demonstrated proficiency as a Reporter, and hopefully, shown promise as an Interpreter, the Acting Intern is expected to master the Reporter function, demonstrate level-appropriate Interpreter function, and display abilities as Manager and Educator. In this four week rotation, you will function just as an intern would (short of authority to sign orders) on an inpatient service and be supervised by an attending and/or senior resident.

### **Acting Internship in Internal Medicine - UH Hematology/Oncology .....MDCN2219 4 Credits Acting Internship Selective**

ELECTIVE DIRECTOR: Dr. Sarah Lappin

CONTACT: oliverl@upstate.edu

PREREQUISITES: INTERNAL MEDICINE

MAXIMUM NUMBER OF STUDENTS: 1

PERIODS OFFERED: 001, 002, 003, 004, 005, 006, 007, 008, 009, 010, 011, 012

ELECTIVE DESCRIPTION: This experience allows a medical student, who must have successfully completed the Internal Medicine clerkship, to further develop along the RIME (Reporter, Interpreter, Manager, Educator) pathway. Whereas a clerkship



## COURSE SELECTION BOOK 2019 – 2020 SYRACUSE CAMPUS ELECTIVES

platform integrating basic science and clinical material covered in the first three years of medical school. The TA will prepare three one-hour lectures and help facilitate three more that cover common clinical scenarios in the third year, while integrating basic science material from the second year. Lectures will be given to a cohort of a second year medical students and third year students on their Internal Medicine rotation. TAs will be expected to facilitate discussion among students. This elective runs during the duration of the school year. A majority of the TAs time will be spend independently preparing lectures.

### **Internal Medicine Intern Bridge Elective** ..... MDCN2225 **1 Credits**

ELECTIVE DIRECTOR: Dr. Sarah Lappin  
CONTACT: oliverl@upstate.edu  
PREREQUISITES: ALL THIRD YEAR CLERKSHIPS  
MAXIMUM NUMBER OF STUDENTS: 6  
PERIODS OFFERED: 009, 011, 012

This course is not available in the elective lottery.

ELECTIVE DESCRIPTION: This is a week long elective held in the Spring semester of the fourth year. The elective is designed as a 'boot camp' program for those entering a categorical medicine intern year. Students will spend one week sampling shifts on an admitting service, ICU nights, and Night float. Students will also be expected to attend orientation lectures that include dosing, Coding/billing, death/DNR/declaring, time management and medical hand-offs.

### **Internal Medicine Code Team/Rapid Response** ..... MDCN2226 **1 Credits**

ELECTIVE DIRECTOR: Dr. Sarah Lappin  
CONTACT: oliverl@upstate.edu  
PREREQUISITES: NONE  
MAXIMUM NUMBER OF STUDENTS: 4  
PERIODS OFFERED: 001, 002, 003, 004, 005, 006, 007, 008, 009, 010, 011, 012

ELECTIVE DESCRIPTION: The code team elective is a one week rotation where students will work closely with the rapid response team residents responding to all codes in the hospital. Students will learn the skills involved in rapid assessment, stabilization, early resuscitation intervention, as well as basic and advanced cardiac life support. Students will be exposed to situations which include, but are not limited to, respiratory distress, arrhythmias, cardiac arrest, hypotension, and altered mental states. By the end of this rotation, students should feel prepared to respond to and run codes in the hospital at the level of a first year intern and comprehend and execute the management of a deteriorating patient utilizing a multidisciplinary approach.

### **Academic Teaching Elective** ..... MDCN2227 **2 Credits Concurrent Elective, Pass/Fail Grading**

ELECTIVE DIRECTOR: Dr. Sarah Lappin  
CONTACT: oliverl@upstate.edu

PREREQUISITES: NONE  
MAXIMUM NUMBER OF STUDENTS: 12  
PERIODS OFFERED: Concurrent

This course is not available in the elective lottery.

ELECTIVE DESCRIPTION: The teaching elective is a two credit concurrent course during 4th year designed to expose students with an interest in medical education to teaching. Students will be expected to prepare and present two lectures, one Elective X feedback session, one small group presentation on Adult Learning Styles, one lecture will be a case-based discussion presented to 3rd year medical students, the second will be a basic science lecture presented to the 1st or 2nd year medical students and the final is a feedback session with a clerkship student and a faculty member during Elective X. Finally, students will do a short presentation to all elective students on Adult Learning Styles. After completion of this elective students should be more prepared to be medical educators in their fields and communities.

### **Quality Improvement Elective** ..MDCN2228 **2 Credits Basic Science Selective, Concurrent Elective, Pass/Fail Grading**

ELECTIVE DIRECTOR: Dr. Sarah Lappin  
CONTACT: oliverl@upstate.edu  
PREREQUISITES: NONE  
MAXIMUM NUMBER OF STUDENTS: 12  
PERIODS OFFERED: Concurrent

This course is not available in the elective lottery.

ELECTIVE DESCRIPTION: The quality improvement elective is a two credit concurrent course during 4th year designed to expose students to quality improvement and patient safety. In this elective students will work closely with the IM Quality Chief and the Vice-Chair for Quality as well as other faculty members to design and complete a quality improvement/patient safety project during 4th year; completion will be determined by the IM Quality Chief on a case by case basis. Completion of a project may include, but is not limited to, an abstract, poster presentation, or publication. Students will also attend resident quality council meetings, monthly student-run quality meeting and monthly M&M meetings, perform at least one morbidity and mortality review, and complete a selection of IHI modules. With completion of this elective, students will graduate with a Distinction in Quality.

### **Diabetes SPECIAL Elective (Students Providing Education on Chronic Illness and Lifestyle)** .....MDCN2229 **2 Credits Concurrent Elective**

ELECTIVE DIRECTOR: Dr. Ruth Weinstock  
CONTACT: WEINSTOR@UPSTATE.EDU  
PREREQUISITES: NONE  
MAXIMUM NUMBER OF STUDENTS: 10  
PERIODS OFFERED: Concurrent

ELECTIVE DESCRIPTION: The diabetes SPECIAL elective is designed to promote the formation of a relationship between a medical student in the



preclinical years of training, an attending physician, and a patient with poorly controlled diabetes. Throughout the duration of the course, medical students will attend office visits and routinely communicate with patients and their attending on a weekly or biweekly basis, to help improve patient self-management and glycemic control. By the end of the course, students should understand the importance of empathy and support in a patient-provider relationship and the impact of a chronic illness on all aspects of a patient's life.

**NEUROSCIENCE AND PHYSIOLOGY**

**Current Research in Obesity and Regulation of Appetite ..... NEUP6201  
0.5 Credits                      Concurrent Elective**

ELECTIVE DIRECTOR:                      Dr. Mary Lou Vallano  
CONTACT:                                      VALLANOM@UPSTATE.EDU  
PREREQUISITES:                                      NONE  
MAXIMUM NUMBER OF STUDENTS:                      4  
PERIODS OFFERED:                                      Concurrent

ELECTIVE DESCRIPTION: The purpose of this seminar-based course is to develop the student's knowledge of current research strategies and discoveries in a focused and clinically-relevant area of medical research. The centerpiece of the course, aimed at academically-minded students, will be four videotaped lectures by NIH-funded, international experts in the field of autism and neurodevelopmental diseases. The format includes four primary activities: (1) student pre-seminars; (2) videotaped lectures obtained from the NIH archives; (3) critical discussion periods involving students and 2-3 expert faculty members; (4) a short paper. To enhance their organizational, communication, and critical-thinking skills, each student will develop a pre-lecture power point presentation as an introduction to the videotaped NIH lecture. It will be ~50 min in length to allow some time for questioning and the presenter will assign 2 papers for all participants to read in advance. Students will be required to view the lecture video in advance of preparing their pre-seminar so as to tailor the presentation for maximal audience benefit and minimal overlap with the lecture. Following this, the NIH lecture will be viewed (~1hr). Afterwards, students and faculty will participate in a critical discussion of the topic, including clinical considerations and future therapeutic relevance. Following all four pre-seminars, lectures, and discussions, students will submit a short written paper summarizing the current status of the field, including future goals and experimental strategies (~5 pages). Students will have opportunities to consult with participating faculty as they prepare their presentations and papers. Students will receive written formative feedback based on their presentations, paper, and participation.

**Current Research in Autism and Neurodevelopmental Diseases .. NEUP6202  
0.5 Credits                      Concurrent Elective**

ELECTIVE DIRECTOR:                      Dr. Mary Lou Vallano  
CONTACT:                                      VALLANOM@UPSTATE.EDU  
PREREQUISITES:                                      NONE  
MAXIMUM NUMBER OF STUDENTS:                      4

PERIODS OFFERED:                                      Concurrent  
This course is not available in the elective lottery.

ELECTIVE DESCRIPTION: The purpose of this seminar-based course is to develop the student's knowledge of current research strategies and discoveries in a focused and clinically-relevant area of medical research. The centerpiece of the course, aimed at academically-minded students, will be four videotaped lectures by NIH-funded, international experts in the field of autism and neurodevelopmental diseases. The format includes four primary activities: (1) student pre-seminars; (2) videotaped lectures obtained from the NIH archives; (3) critical discussion periods involving students and 2-3 expert faculty members; (4) a short paper. To enhance their organizational, communication, and critical-thinking skills, each student will develop a pre-lecture power point presentation as an introduction to the videotaped NIH lecture. It will be ~50 min in length to allow some time for questioning and the presenter will assign 2 papers for all participants to read in advance. Students will be required to view the lecture video in advance of preparing their pre-seminar so as to tailor the presentation for maximal audience benefit and minimal overlap with the lecture. Following this, the NIH lecture will be viewed (~1hr). Afterwards, students and faculty will participate in a critical discussion of the topic, including clinical considerations and future therapeutic relevance. Following all four pre-seminars, lectures, and discussions, students will submit a short written paper summarizing the current status of the field, including future goals and experimental strategies (~5 pages). Students will have opportunities to consult with participating faculty as they prepare their presentations and papers. Students will receive written formative feedback based on their presentations, paper, and participation.

**NEUROLOGY**

**Acting Internship in Adult Clinical Neurology ..... NEUR2801  
4 Credits                      Acting Internship Selective**

ELECTIVE DIRECTOR:                      Dr. Michael Vertino  
CONTACT:                                      reidyj@upstate.edu  
PREREQUISITES:                                      ALL THIRD YEAR CLERKSHIPS  
MAXIMUM NUMBER OF STUDENTS:                      1  
PERIODS OFFERED:                                      001, 002, 003, 004, 005, 006, 007, 008, 009, 010, 011, 012

ELECTIVE DESCRIPTION: The Adult Neurology Acting Internship will help students broaden their knowledge of neurology, enhance their clinical acumen, localization and examination skills, and competence. Each AI will serve as an integral part of the team, either on the inpatient service or the consultation service. The AI will be responsible, under the supervision of housestaff and attending physicians, for the evaluation of and management of patients assigned to them. Students will take night calls and make work rounds with their supervising resident. Acting interns will participate in all scheduled conferences for the housestaff, including morning report, EEG/EMG conference, neuro-Ophthalmology and the resident review course sessions. Outpatient experiences may be arranged depending on the time schedule and availability of faculty members. Evaluation of students



is based on their oral presentations, written documentation, interactions with housestaff and attendings and other educational assignments.

**Clinical Pediatric Neurology .....NEUR2804  
4 Credits**

ELECTIVE DIRECTOR: Dr. Ai Sakonju  
 CONTACT: SAKONJUA@UPSTATE.EDU  
 PREREQUISITES: PEDIATRICS and NEUROLOGY  
 MAXIMUM NUMBER OF STUDENTS: 1  
 PERIODS OFFERED: 002, 003, 004, 005, 006, 007, 008, 009, 010, 011, 012

This course is not available in the elective lottery.

ELECTIVE DESCRIPTION: This elective will give students the opportunities to participate in the care and consultations of acute inpatient and outpatient pediatric neurology. They will gain familiarity with the essentials of the pediatric neurologic examination at various developmental stages. The student may further elect to concentrate on specific areas of interest with the help of faculty and resident physicians.

**Elective in Outpatient NeurologyNEUR2808  
4 Credits**

ELECTIVE DIRECTOR: Dr. Michael Vertino  
 CONTACT: reidyj@upstate.edu  
 PREREQUISITES: NEUROLOGY  
 MAXIMUM NUMBER OF STUDENTS: 2  
 PERIODS OFFERED: 001, 002, 003, 004, 005, 006, 007, 008, 009, 010, 011, 012

This course is not available in the elective lottery.

ELECTIVE DESCRIPTION: This elective will provide an outpatient experience for students interested in neurology. Students help arrange their own schedule over the 4-week period to include working with neurologist from the following specialities: Neuromuscular disease/EMG, epilepsy/EEG/evoked potentials, neuroophthalmology/headache, Cerebrovascular disease, General neurology, Pediatric neurology, Movement disorders, Cognitive neurology, Multiple sclerosis. The month will be scheduled according to the student's interests and the availability of attending physicians. Students will have the opportunity to participate in patient care within the above areas.

**Neuro-Ophthalmology.....NEUR2814  
4 Credits**

ELECTIVE DIRECTOR: Dr. Luis Mejico  
 CONTACT: ReidyJ@upstate.edu  
 PREREQUISITES: NEUROLOGY  
 MAXIMUM NUMBER OF STUDENTS: 1  
 PERIODS OFFERED: 001, 002, 003, 004, 005, 006, 007, 008, 009, 010, 011, 012

This course is not available in the elective lottery.

ELECTIVE DESCRIPTION: Neuro-ophthalmology interfaces Neurology, Ophthalmology, Neurosurgery, and Medicine to evaluate patients who have non-ophthalmic problems of the visual system. Students will learn to use the basic principles of the neurological

history and examination, coupled with techniques of the ophthalmological examination to investigate various neuro-ophthalmic problems. Majors areas of emphasis include optic nerve disorders, visual field defects, ocular motility problems, neuroophthalmic manifestations of systemic diseases, familiarity with various neuro-diagnostic tests, and therapeutics. Some experience in evaluation of neurological patients is included. Students will participate in weekly Neuro-ophthalmology conference and will be assigned responsibility for the preparation of one session during their rotation. Most of the experience will be with outpatients, and some inpatient consultations.

**NEUROSURGERY**

**Neurosurgery Acting InternshipNSUG3201  
4 Credits Acting Internship Selective**

ELECTIVE DIRECTOR: Dr. Lawrence Chin  
 CONTACT: ryanke@upstate.edu  
 PREREQUISITES: NEUROLOGY  
 MAXIMUM NUMBER OF STUDENTS: 2  
 PERIODS OFFERED: 001, 002, 003, 004, 005, 006, 007, 008, 009, 010, 011, 012

ELECTIVE DESCRIPTION: The goal of the Neurosurgery Acting Internship will be to increase the ability of the student to carry out a thorough evaluation of a patient with neurologic disease. The Acting Internship will provide the student with direct responsibility for patient care under supervision of the neurosurgical attending and house staff. Emphasis will be placed on the evaluation of neurological problems by history and neurologic examinations. In addition, the student will be instructed in the interpretation of standard x-ray procedures used in neurologic diagnosis. Full participation in the conferences, seminars, and clinics of the Neurosurgery Service will be part of this program. At the end of this course we would expect that the student would be able to evaluate a patient with a neurological problem, make a reasonable differential diagnosis, and be able to outline a course of laboratory studies and diagnostic procedures designed to provide a firm diagnosis. Further, we would expect the student to be able to carry out basic pre-and post-operative care of neurosurgical patients.

**OBSTETRICS AND GYNECOLOGY**

**High Risk Obstetrics Acting Internship  
..... OBGY3604  
4 Credits Acting Internship Selective,  
Crouse Hospital**

ELECTIVE DIRECTOR: Dr. Robert Silverman  
 CONTACT: falcones@upstate.edu  
 PREREQUISITES: OBSTETRICS and GYNECOLOGY  
 MAXIMUM NUMBER OF STUDENTS: 2  
 PERIODS OFFERED: 001, 002, 003, 004, 005, 006, 007, 008, 009, 010, 011, 012

ELECTIVE DESCRIPTION: This represents an intensive experience with the clinical management of High Risk Obstetrical patients being seen in the obstetrical unit of Crouse hospital and in the outpatient area of the Regional Perinatal Center. Special attention is given to

identification of high risk patients, intensified perinatal care, experience with tests of fetal well being (amniocentesis, NST, BPP, ultrasound) during the prenatal period as well as intrapartum period (fetal heart rate monitoring, scalp PH, etc.). The student will gain an insight into maternal-fetal medicine at the clinical level. Specific goals are: 1) Clear knowledge of and an ability to apply the high risk scoring system; 2) Ability to interpret tests of fetal welfare. A review and presentation of a topic in high risk obstetrics will be required to be completed within the elective period.

**Reproductive Endocrinology and Infertility  
..... OBGY3608  
4 Credits**

ELECTIVE DIRECTOR: Dr. Shawky Badawy  
CONTACT: BADAWYS@UPSTATE.EDU  
PREREQUISITES: OBSTETRICS and GYNECOLOGY  
MAXIMUM NUMBER OF STUDENTS: 1  
PERIODS OFFERED: 001, 003, 004, 005, 006, 007, 008, 009, 010, 011, 012

ELECTIVE DESCRIPTION: The student will learn the general rules of working up a patient with endocrinologic problems and/or infertility. The correlation of lab data will be discussed and an explanation of the importance of these data relating to the case under discussion has to be clearly evaluated. The student will be exposed to good material with multitudes of problems such as amenorrheas, irregular bleeding, anovulation, tubal problems, and uterine factors including congenital uterine malformations. The diagnosis and management will be fully discussed. The student will have a chance to scrub on cases in the O.R. and this will give him/her an opportunity to study some surgical pathology relating to reproductive endocrinology and infertility. The weekly conferences will deal with endocrine and infertility case and literature discussions and the students could participate in the topics and discussions.

**AI in Reproductive Health..... OBGY3619  
4 Credits Acting Internship Selective**

ELECTIVE DIRECTOR: Dr. Renee Mestad  
CONTACT: MESTADR@UPSTATE.EDU  
PREREQUISITES: OBSTETRICS and GYNECOLOGY  
MAXIMUM NUMBER OF STUDENTS: 2  
PERIODS OFFERED: 001, 002, 003, 004, 005, 006, 007, 008, 009, 010, 011, 012

ELECTIVE DESCRIPTION: The goal of this course is to familiarize medical students with specific women's health care issues, including sexuality, pregnancy, contraception, abortion, preventive health matters, also including peri-menopausal issues, domestic violence and STD prevention. Students will be responsible to produce a research paper on a related area of their choice, with preceptor's concurrence. They will participate in a variety of outpatient facilities, as well as operating room sessions. Patient counseling issues will be strongly emphasized. Reading assignments will be tailored to the student's particular area of interest.

**Miracle Continuity..... OBGY3622  
2 Credits Concurrent Elective**

ELECTIVE DIRECTOR: Dr. Jodi Wallis  
CONTACT: WALLISJ@UPSTATE.EDU  
PREREQUISITES: NONE  
MAXIMUM NUMBER OF STUDENTS: 20  
PERIODS OFFERED: Concurrent

This course is not available in the elective lottery.

ELECTIVE DESCRIPTION: The MIRACLE Continuity Elective is a fifteen-month elective opportunity providing both academic and field experiences for 20 first year medical students who desire to gain information, insights and experiences regarding 1) The continuity of care in woman and child health; 2) The psychosocial dimension of care; 3) The pre- and perinatal primary parenting factors involved in optimum maternal and child health care and 4) The nature of pregnancy, birth and breastfeeding and their impact on maternal/child health and the emerging family. Each student is paired with a family receiving pregnancy care within the SUNY Maternal Child Health Center component of the University Health Care Center and local OB/GYN practices. Pairing will occur during the mid second trimester following family consent. Students will remain involved with the family throughout the pregnancy, at birth and through newborn child care until the child's first birthday. The objectives are 1) To provide an opportunity for medical student-family interaction during the period from pregnancy through the child's first birthday in a co-learning partnership between student and the family; 2) To incorporate wellness into everyday lives of the family and the student; 3) To inform both medical students and parent of the basic tenets of parenting during pregnancy, birthing, breast feeding; 4) To provide an opportunity for women and their families to influence the health care system of the future; 5) To gain valuable insights into the relationship of basic science course work to clinical practice of medicine.

**AI in Gynecologic Oncology ..... OBGY3624  
4 Credits Acting Internship Selective,  
Preceptor's Site**

ELECTIVE DIRECTOR: Dr. W. Douglas Bunn  
CONTACT: BUNNW@UPSTATE.EDU  
PREREQUISITES: OBSTETRICS and GYNECOLOGY  
MAXIMUM NUMBER OF STUDENTS: 1  
PERIODS OFFERED: 001, 002, 003, 004, 005, 006, 007, 008, 009, 010, 011, 012

ELECTIVE DESCRIPTION: This is a subinternship experience in the outpatient and inpatient management of patients with gynecological malignancies. Students will participate in all aspects of patient care under the direction and supervision of the attending and resident physician staff. Students will participate in surgical procedures, become familiar with anatomy of the abdomen and pelvis and begin to develop surgical skills. Students will take histories, perform physical examinations, write notes, and present patients on rounds and in the office. A presentation on a topic of the student's choice is required at the end of the rotation.

**Office-Based Obstetrics and Gynecology**  
 ..... **OBGY3626**

**4 Credits**

ELECTIVE DIRECTOR: Dr. George Stanley  
 CONTACT: STANLEYG@UPSTATE.EDU  
 PREREQUISITES: OBSTETRICS and GYNECOLOGY  
 MAXIMUM NUMBER OF STUDENTS: 1  
 PERIODS OFFERED: 002, 003, 004, 005, 006, 007, 008, 009, 010, 011, 012

This course is not available in the elective lottery.

ELECTIVE DESCRIPTION: This very busy office-based practice will expose the students to a full spectrum of obstetric and gynecologic disease processes. In addition to their responsibilities with patient care in the office, students will assist in surgeries, attend deliveries, and take 4 night calls with the attending physician. Students will function on a level commensurate with their abilities under the direction of the attending staff.

**Breast Disease** ..... **OBGY3631**  
**4 Credits**

ELECTIVE DIRECTOR: Dr. Jayne Charlamb  
 CONTACT: CHARLAMJ@UPSTATE.EDU  
 PREREQUISITES: OBSTETRICS and GYNECOLOGY  
 MAXIMUM NUMBER OF STUDENTS: 1  
 PERIODS OFFERED: 001, 002, 003, 004, 005, 006, 007, 008, 009, 010, 011, 012

This course is not available in the elective lottery.

ELECTIVE DESCRIPTION: The goal of the course is to gain in-depth exposure in the diagnosis and treatment of benign and malignant breast disease from a multi-disciplinary perspective. Primary focus is on participation in evaluation and treatment of outpatients at the Breast Care and Surgical Center at 90 Presidential Plaza (UHCC). History taking with the attending, physical exams with the attending and office procedures with the attending will be emphasized to provide an understanding of the approach to various medical problems of the breast. Participation in the OR is also encouraged with review of the specimens in pathology to provide a more comprehensive view of the diagnostic process. Experience in the mammography, ultrasound, needle localization and radiation therapy is available in the radiology department, if the student is interested. The student is encouraged to participate in the Multidisciplinary Breast Cancer Program held at the Regional Oncology each Friday afternoon. Teaching will occur on a one-to-one basis with attending; independent reading and learning is imperative.

**OPHTHALMOLOGY**

**Ophthalmology** ..... **OPTH4001**  
**4 Credits**

ELECTIVE DIRECTOR: Dr. Robert Fechtner  
 CONTACT: kammerr@upstate.edu  
 PREREQUISITES: INTERNAL MEDICINE and SURGERY  
 MAXIMUM NUMBER OF STUDENTS: 1  
 PERIODS OFFERED: 001, 002, 003, 004, 005, 006, 007, 008, 009, 010, 011, 012

ELECTIVE DESCRIPTION: In this course, an attempt is made to give the student an understanding of the eye, its function, abnormalities and diseases, and its relation to the body as a whole. Students are taught history taking and techniques of examination. They are expected to intelligently approach a patient with eye problems, ask the proper questions to obtain a valuable history, and examine a patient to adequately understand pathology if it exists. No attempt is made to teach students to refract in the short time allowed; however, they should be able to do a reasonable visual field. Although students attend surgery and learn surgical techniques as part of the curriculum, most of the elective time is spent in the Eye Clinic working up patients as the student's ability develops. To be able to recognize the more serious problems that threaten vision and require treatment, and to have a basic understanding of therapy are main focuses of the elective. As students develop a working knowledge of the ophthalmoscope, they become familiar with eye changes in systemic disease, including fundus changes in systemic disease as well as local disease. Students make rounds with the residents and attendings, and take part in morning conferences each day. Students are encouraged to participate in case presentations and literature reviews, attending all Visiting Professor Days, lectures, seminars, Journal Clubs, and special programs on the Departmental schedule. DVD teaching sets, as well as a departmental library, provide a background for clinical exposure and patient care. A 20-minute presentation by students taking the elective for at least 4 credits is part of the Course curriculum.

**Ophthalmology** ..... **OPTH4003**  
**4 Credits**

ELECTIVE DIRECTOR: Dr. Robert Fechtner  
 CONTACT: kammerr@upstate.edu  
 PREREQUISITES: SURGERY  
 MAXIMUM NUMBER OF STUDENTS: 2  
 PERIODS OFFERED: 001, 002, 003, 004, 005, 006, 007, 008, 009, 010, 011

This course is not available in the elective lottery.

ELECTIVE DESCRIPTION: Student will spend majority of his/her time in the private office of a practicing ophthalmologist, learning the routine of office practice. The student will also observe in the operating room when the attending physician is operating, and spend time in the clinics on the attending's clinic days. Students are expected to attend departmental lectures, seminars, etc. A 20-minute presentation in the Department at the end of the elective is part of the Course curriculum for all students taking the elective for at least 4 credits.

**Clinical Elective in Ophthalmology & Otolaryngology** ..... **OPTH4004**  
**4 Credits** **Pass/Fail Grading**

ELECTIVE DIRECTOR: Dr. Robert Fechtner  
 CONTACT: kammerr@upstate.edu  
 PREREQUISITES: SURGERY  
 MAXIMUM NUMBER OF STUDENTS: 1  
 PERIODS OFFERED: 003, 004, 005, 006, 007, 008, 009, 010, 011, 012

This course is not available in the elective lottery.

**ELECTIVE DESCRIPTION:** This elective is offered as a combined learning experience by the Departments of Otolaryngology and Ophthalmology. The primary objective of the elective is to provide a broad exposure to the "medical" aspects of the specialties as they would be encountered by the primary care physician. The greatest proportion of the student's time will be directed towards the outpatient evaluation and care of common problems of the eyes, ears, nose and throat with minimal emphasis on the surgical and more complicated problems relating to the specialty.

**ORTHOPEDIC SURGERY**

**Orthopedic Acting Internship - Upstate Medical University.....ORTH4401  
4 Credits            Acting Internship Selective**

**ELECTIVE DIRECTOR:** Dr. Brian Kistler  
**CONTACT:** hyerk@upstate.edu  
**PREREQUISITES:** SURGERY  
**MAXIMUM NUMBER OF STUDENTS:** 4  
**PERIODS OFFERED:** 001, 002, 003, 004, 005, 006, 007, 008, 009, 010, 011, 012

**ELECTIVE DESCRIPTION:** This Acting Internship is designed for the student interested in an orthopedic surgery residency program. The acting internship is an attempt to allow the student to put into practice those skills and concepts gained in the third year clerkship. Students are expected to participate throughout the range of activities within the department on both an inpatient and outpatient basis, from ER to the OR. The student will assume as much responsibility for the management and care of their patients as their skill and interest allow.

**Pediatrics Orthopedics .....ORTH4405  
4 Credits**

**ELECTIVE DIRECTOR:** Dr. Danielle Katz  
**CONTACT:** KATZD@UPSTATE.EDU  
**PREREQUISITES:** SURGERY and PEDIATRICS  
**MAXIMUM NUMBER OF STUDENTS:** 1  
**PERIODS OFFERED:** 001, 002, 003, 004, 005, 006, 007, 008, 009, 010, 011, 012

**ELECTIVE DESCRIPTION:** A wide variety of children's musculoskeletal problems will be presented to the student utilizing clinics, the Emergency Department, and elective and emergent surgery. Approaches to evaluating and treating both common and more complex problems will be carried out under the supervision of the resident and attending staffs. The student will be encouraged to become actively involved with care of the patients; responsibility in each area will be increased as the student's skills develop and will depend upon his/her availability and initiative. At the conclusion of the elective, the student should be more at ease with pediatric patients and their parents and more adept at appropriately recognizing and dealing with common pediatric orthopedic problems.

**Orthopedic Acting Internship in Sports Medicine ..... ORTH4406  
4 Credits**

**ELECTIVE DIRECTOR:** Dr. John Cannizzaro  
**CONTACT:** hyerk@upstate.edu  
**PREREQUISITES:** SURGERY  
**MAXIMUM NUMBER OF STUDENTS:** 1  
**PERIODS OFFERED:** 001, 002, 003, 004, 005, 006, 007, 008, 009, 010, 011, 012

**ELECTIVE DESCRIPTION:** The student will be part of the Sports Medicine team, managing athletic injuries with the three members of the faculty and Sports Orthopedic Resident. The student will be expected to assist in the Operating Room and the surgical care of injured athletes. A mini-research project can be developed with the faculty. At the completion of this acting internship, the student should have a general knowledge of musculoskeletal athletic injury and an exposure to some of the responsibilities of a team physician. The non-operative approach to most athletic injuries should be appreciated as well as the thought process involved in surgical care.

**Hand, Shoulder, Elbow Surgery ORTH4412  
4 Credits**

**ELECTIVE DIRECTOR:** Dr. Kevin Setter  
**CONTACT:** Hyerk@upstate.edu  
**PREREQUISITES:** SURGERY  
**MAXIMUM NUMBER OF STUDENTS:** 1  
**PERIODS OFFERED:** 001, 002, 003, 004, 005, 006, 007, 008, 009, 010, 011, 012

**ELECTIVE DESCRIPTION:** Students will become proficient in the diagnosis, pathophysiology, and non-operative and operative treatments for common hand, elbow, and shoulder disorders. Students will gain a fundamental knowledge and understanding of anatomy about the upper extremity. Students will actively participate in clinic outpatient care and actively assist in the operating room during surgical cases. Experience will be gained in general orthopedic and soft tissue surgical techniques, including tendon repair, neurovascular repairs, and bony orthopedic procedures. A close association exists between the students and hand Residents and Fellows to allow for a strong opportunity to develop these skills.

**OTOLARYNGOLOGY**

**Otolaryngology Acting Internship .....OTOL4801  
4 Credits            Acting Internship Selective**

**ELECTIVE DIRECTOR:** Dr. Sherard Tatum, Dr. Robert Kellman  
**CONTACT:** TATUMS@UPSTATE.EDU  
**PREREQUISITES:** ALL THIRD YEAR CLERKSHIPS  
**MAXIMUM NUMBER OF STUDENTS:** 3  
**PERIODS OFFERED:** 001, 002, 003, 004, 005, 006, 007, 008, 009, 010, 011, 012

**ELECTIVE DESCRIPTION:** In-depth care of both inpatients and outpatients on Otolaryngology Service. Increasing patient care responsibilities and supervised



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## COURSE SELECTION BOOK 2019 – 2020 SYRACUSE CAMPUS ELECTIVES

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minor surgical techniques are emphasized. Management of head and neck trauma along with reconstructive care of patients with malignancies are also taught to the student. Moreover, the student participates in all judgments regarding patients seen with communicative disorders such as hearing loss, dysphonia, etc.

### **PATHOLOGY**

#### **Surgical Pathology ..... PATH5202 2 OR 4 Credits**

ELECTIVE DIRECTOR: Dr. Christopher Curtiss  
CONTACT: kellykc@upstate.edu  
PREREQUISITES: ALL THIRD YEAR CLERKSHIPS  
MAXIMUM NUMBER OF STUDENTS: 2  
PERIODS OFFERED: 001, 004, 005, 006, 007, 008, 009, 011, 012

This course is not available in the elective lottery.

ELECTIVE DESCRIPTION: This is a subinternship experience exposing the student to all aspects of Surgical Pathology that can be taken for either 2 or 4 weeks. The student works with a pathology resident under the direct supervision of an attending pathologist. He/she is expected to examine specimens grossly, take sections, review microscopic slides, make diagnoses, and sign out cases with an attending pathologist. The student also participates in frozen section diagnoses with a resident and attending pathologist. He/she is expected to attend and participate in the Monday morning, Thursday morning, and Friday noon Anatomic Pathology conferences as well as other pertinent departmental conferences. NOTE: This elective can be taken for either 2 or 4 weeks. For this reason, instructor approval is required to arrange the number of weeks.

#### **Clinical Pathology ..... PATH5214 2 OR 4 Credits**

ELECTIVE DIRECTOR: Dr. John Frederiksen  
CONTACT: underwol@upstate.edu  
PREREQUISITES: ALL THIRD YEAR CLERKSHIPS  
MAXIMUM NUMBER OF STUDENTS: 2  
PERIODS OFFERED: 001, 004, 005, 006, 007, 008, 009, 010, 011, 012

This course is not available in the elective lottery.

ELECTIVE DESCRIPTION: The rotation is 2 or 4 weeks in duration. Each student will choose from a list of the following subspecialties which have specific time frames and include: Hematopathology/Bone Marrows, Blood Bank/Transfusion Medicine, Microbiology/Virology, Cytogenetics, Molecular Diagnostics, Special Hematology/Special Chemistry, Immunology, Flow Cytometry, and Andrology. Each requires permission of the respective lab director in order to fit lab schedules. The student will participate in the laboratory training program along with the resident(s) on service, review study sets, and participate in sign-outs with attendings or in the clinical evaluations appropriate to the service. The student will also be expected to attend all Pathology conferences that the residents attend while on CP rotation. They may, by prior arrangement in some services, receive

instruction in laboratory techniques. Intensity of technical instruction will vary with interest, level of student effort and length of stay. These rotations will expose the student to the function of a Clinical Laboratory and the role of a Pathologist. NOTE: Prior arrangement and approval is necessary, for the best experience and coordination, contact Linda Underwood (underwol@upstate.edu) early in the academic year. This elective can be taken for either 2 or 4 weeks. For this reason, instructor approval is required to arrange the number of weeks.

#### **Andrology .....PATH5222 1 Credits**

ELECTIVE DIRECTOR: Dr. Kazim Chohan  
CONTACT: CHOANK@UPSTATE.EDU  
PREREQUISITES: ALL THIRD YEAR CLERKSHIPS  
MAXIMUM NUMBER OF STUDENTS: 1  
PERIODS OFFERED: 01A, 01B, 02A, 02B, 03A, 03B, 04A, 04B, 05A, 05B, 06A, 06B, 08A, 08B, 09A, 09B, 10A, 10B, 11A, 11B

This course is not available in the elective lottery.

ELECTIVE DESCRIPTION: Through this elective students will gain knowledge about male reproductive physiology, male factor infertility, semen analysis and application of results, sperm function tests, sperm preparations for assisted reproduction and become familiar with the latest techniques in evaluating male infertility. Students will also learn clinical laboratory management. This course is highly recommended for students interested in Pathology, Urology, Endocrinology, Obstetrics and Gynecology, Internal and Family Medicine specialties. The Course is open all year and offered to one student per one week rotation.

#### **Forensic Pathology .....PATH5223 2 OR 4 Credits Basic Science Selective**

ELECTIVE DIRECTOR: Dr. Robert Stoppacher  
CONTACT: kellykc@upstate.edu  
PREREQUISITES: ALL THIRD YEAR CLERKSHIPS  
MAXIMUM NUMBER OF STUDENTS: 1  
PERIODS OFFERED: 001, 002, 003, 004, 005, 006, 007, 008, 009, 010, 011, 012

This course is not available in the elective lottery.

ELECTIVE DESCRIPTION: Students will gain exposure to medicolegal death investigation and forensic pathology through observation and participation in autopsies conducted by forensic pathologists at the Onondaga County Medical Examiner's Office (MEO), attendance at death scenes with medicolegal death investigators, observation of court testimony (when opportunities available), and attendance at forensically-relevant journal club, Pathology resident didactics, and Grand Rounds occurring during the rotation month. Daily rotation activities will include attendance at MEO morning briefing, autopsies, and death scenes, as well as assisting Medical Examiners with review of medical records on cases. NOTE: This elective can be taken for either 2 or 4 weeks. For this reason, instructor approval is required to arrange the number of weeks.





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PREREQUISITES: INTERNAL MEDICINE and PEDIATRICS

MAXIMUM NUMBER OF STUDENTS: 1

PERIODS OFFERED: 001, 002, 003, 004, 005, 006, 007, 008, 009, 010, 011, 012

ELECTIVE DESCRIPTION: Our elective introduces students to a wide variety of cardiac diagnoses in the fetus, infant, child, and adolescent, as well as the adult with congenital heart disease. Students learn to evaluate children with known or suspected heart disease in a busy outpatient setting. Emphasis is placed upon learning to perform a thorough, focussed cardiac history and physical examination. During the elective students review many electrocardiograms and echocardiograms with attendings in clinic and they are also invited to attend at least one invasive procedure (e.g. cardiac catheterization, catheter-based intervention, electrophysiological study with or without radiofrequency ablation, or a cardiac operation). Students should attend all conferences of the Division and each student is also expected to make a final presentation to the members of the Division at the end of the elective. After completion of our elective, students should have a clearer overview of heart disease in children and a greater ability to differentiate murmurs, chest pain, syncope and palpitations that are benign from those that are caused by significant cardiac disease.

### **Pediatric Pulmonology ..... PEDS5617 4 Credits**

ELECTIVE DIRECTOR: Dr. Zafer Soultan, Dr. Christopher Fortner

CONTACT: SOULTANZ@UPSTATE.EDU

PREREQUISITES: PEDIATRICS

MAXIMUM NUMBER OF STUDENTS: 1

PERIODS OFFERED: 001, 002, 003, 004, 005, 006, 007, 008, 009, 010, 011, 012

ELECTIVE DESCRIPTION: The student will learn about and participate in the management of pediatric patients with pulmonary disorders. Specific emphasis will be placed on asthma, bronchopulmonary dysplasia, cystic fibrosis, hypnotherapy and patients with tracheostomies or requiring ventilatory support. The student will be expected to present a specific topic at a Divisional seminar. Opportunities exist for participation in Divisional research activities.

### **Continuity of Pediatric Ambulatory Care ..... PEDS5627 2 TO 6 Credits Concurrent Elective**

ELECTIVE DIRECTOR: Dr. Winter Berry

CONTACT: BERRYW@UPSTATE.EDU

PREREQUISITES: PEDIATRICS and FAMILY MEDICINE and OBSTETRICS and GYNECOLOGY

MAXIMUM NUMBER OF STUDENTS: 1

PERIODS OFFERED: Concurrent

This course is not available in the elective lottery.

ELECTIVE DESCRIPTION: This is a year long elective from August to April. Students will have the opportunity to care for the needs of children in a weekly continuity clinic in the Outpatient Department of

Pediatrics (OPD). Each student will attend one clinic session (afternoon) per week as part of a continuity program organized for residents. Students will be assigned a number of families of young children who will be followed throughout the year. Students will have the opportunity to observe the growth and development of well infants as well as participate in the management of a variety of patient problems which face the practicing pediatrician.

### **Adolescent Medicine ..... PEDS5628 4 Credits Concurrent Elective**

ELECTIVE DIRECTOR: Dr. Karen Teelin

CONTACT: TEELINK@UPSTATE.EDU

PREREQUISITES: PEDIATRICS

MAXIMUM NUMBER OF STUDENTS: 1

PERIODS OFFERED: 001, 002, 003, 005, 006, 007, 008, 010, 011, 012, Concurrent

ELECTIVE DESCRIPTION: The goal of the adolescent medicine elective for medical students is to help them become competent, confident, and comfortable performing comprehensive medical evaluations on adolescent patients. During this rotation the medical student will be exposed to a range of adolescent health problems, for example: adolescent gynecology and STIs, contraceptive counseling, psychiatric concerns, endocrine problems including transgender patients, eating disorders, and drug and alcohol related problems. The medical student will also be exposed to the general health care of adolescent patients in the ambulatory setting. This elective includes opportunities for community involvement if desired, based on the student's interest.

### **Pediatric Gastroenterology & Nutrition ..... PEDS5638 4 Credits**

ELECTIVE DIRECTOR: Dr. Prateek Wali

CONTACT: carlsodj@upstate.edu

PREREQUISITES: ALL THIRD YEAR CLERKSHIPS

MAXIMUM NUMBER OF STUDENTS: 2

PERIODS OFFERED: 001, 002, 003, 004, 005, 006, 007, 008, 009, 010, 011, 012

ELECTIVE DESCRIPTION: The purpose of this elective is to introduce the fourth year medical student to the Pediatric Gastroenterology and Nutrition in a primarily out patient setting with no night call or weekend duties. Students will observe our approach in evaluation and treatment of patients with gastrointestinal diseases and nutritional deficiencies. They will actively participate in patient assessment and treatment recommendations. The student will first assess the patient through history, physical exam and discussion with the parents/patient regarding current symptoms. The student then will present the patient to the GI provider who goes over laboratory tests, procedures or treatment. Student will also participate in operating room to observe endoscopy, colonoscopy, polypectomy, esophageal dilatation, pH probe, impedance study, Bravo pH analysis and endoscopic placement of gastrostomy tube. There will also be daily teaching and discussion. Each student should present



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disorders, hematology/oncology disease, and major orthopedic, neurosurgical, pediatric, trauma, cardiovascular and ENT surgery.

### **Pediatric Hematology-Oncology Ambulatory Rotation..... PEDS5648 4 Credits**

ELECTIVE DIRECTOR: Dr. Andrea Dvorak  
CONTACT: DVORAKA@UPSTATE.EDU  
PREREQUISITES: ALL THIRD YEAR CLERKSHIPS  
MAXIMUM NUMBER OF STUDENTS: 1  
PERIODS OFFERED: 001, 002, 003, 004, 005, 006,  
007, 008, 009, 010, 011, 012

ELECTIVE DESCRIPTION: This rotation provides the opportunity for the student to see the management of both pediatric hematologic and pediatric oncologic disorders. The students will have the chance to interact with multiple pediatric providers in the care of these patients. The outpatient rotation allows the student to see both the chronic long term patients as well as the acute consults that present in the clinic.

### **Neonatology Acting Internship . PEDS5651 4 Credits Acting Internship Selective**

ELECTIVE DIRECTOR: Dr. Melissa Nelson  
CONTACT: melissanelsonmd@crouse.org  
PREREQUISITES: PEDIATRICS  
MAXIMUM NUMBER OF STUDENTS: 1  
PERIODS OFFERED: 001, 002, 003, 004, 005, 006,  
007, 008, 009, 010, 011, 012

ELECTIVE DESCRIPTION: The Crouse NICU is a 57 bed Level IV Regional Perinatal Center that provides comprehensive care for critically ill neonates born in the Central New York Region. Students will be actively involved in the daily management of NICU patients as part of a multidisciplinary care team with frequent collaboration with colleagues from surgical and pediatric subspecialties. They will be expected to independently assess patients and develop and present management plans on daily rounds. They will be exposed to prenatal consults, delivery room resuscitations, neonatal transports, and all perinatal conferences. This elective will provide excellent preparation for pediatric residency and any career in pediatrics.

## **PHARMACOLOGY**

### **Cardiac Arrhythmias (Mechanisms, Diagnostics, Treatment) ..... PHAR6005 2 Credits Basic Science Selective**

ELECTIVE DIRECTOR: Dr. Arkadii Perzov  
CONTACT: PERTSOVA@UPSTATE.EDU  
PREREQUISITES: ALL THIRD YEAR CLERKSHIPS  
MAXIMUM NUMBER OF STUDENTS: 12  
PERIODS OFFERED: 009, 05A

ELECTIVE DESCRIPTION: This 2 credits course is intended for students considering a career in cardiology and interventional electrophysiology. Upon successful completion of the course the students will enhance their understanding of basic mechanisms of cardiac arrhythmias, their diagnostics and treatment. The

course will run in a small discussion group format. The group will meet daily to discuss a set of 4-5 topics formulated by the moderator. The students are expected to study the material independently and be prepared to give a short presentation on any of the topics to the class as well as discuss it with other members of the group.

## **PUBLIC HEALTH & PREVENTIVE MEDICINE**

### **Public Health ..... PRVM6420 4 Credits Basic Science Selective, Preceptor's Site**

ELECTIVE DIRECTOR: Dr. Travis Hobart  
CONTACT: lewissa@upstate.edu  
PREREQUISITES: NONE  
MAXIMUM NUMBER OF STUDENTS: 2  
PERIODS OFFERED: 001, 002, 003, 004, 005, 006,  
007, 008, 009, 010, 011, 012

ELECTIVE DESCRIPTION: This elective will allow the student to explore the implementation of public health and population-oriented prevention activities in actual community settings. The requirements for this elective can be met at a local agency that works in public health (e.g. the HIV education specialist employed by Upstate who works in the community). Students will be responsible for arranging the elective with the agency. The elective must be approved by Dr. Hobart. Students will complete a specific project based on their interests and current public health activities at the agency. Examples of student projects include: HIV treatment and prevention symposium, implementation of risk reduction strategies for IV drug use, vaccine shortage management, bioterrorism, and chronic disease prevention. A project summary report is required at the end of the elective to gain credit for the course.

### **Public Health Experience ..... PRVM6421 4 Credits Basic Science Selective**

ELECTIVE DIRECTOR: Dr. Travis Hobart, Dr. Martha Wojtowycz  
CONTACT: lewissa@upstate.edu  
PREREQUISITES: NONE  
MAXIMUM NUMBER OF STUDENTS: 2  
PERIODS OFFERED: 001, 002, 003, 004, 005, 006,  
007, 008, 009, 010, 011, 012

ELECTIVE DESCRIPTION: An independent study, community-based project, or international public health experience aimed at improving students understanding public health, determinants of health and possible interventions to prevent the public health issue the student is studying. Students enrolling in this elective generally have chosen a venue, focus of interest (research interest), and site supervisor (if off campus) prior to enrolling in the elective. Students will be assessed, if possible, by their site supervisor based agreed upon expectations of the project, active participation, and attendance. In addition, student must write a scholarly paper and give a presentation on their research project to an agreed upon audience in order to receive credit for the elective.







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PERIODS OFFERED: 001, 002, 003, 004, 005, 006, 007, 008, 009, 010, 011, 012

This course is not available in the elective lottery.

**ELECTIVE DESCRIPTION:** This is an individualized elective designed for students interested in obtaining specialized intensive experiences in psychiatry. The student is directly involved in planning the experience. Generally speaking, electives will include patient care, case conferences, grand rounds and attendance at seminars. Students may also acquire experience in community psychiatry programs. Electives can be built around the following areas: Addiction Psychiatry; Child and Adolescent Psychiatry; Consultation Liaison; Forensic Psychiatry; Inpatient Psychiatry; Outpatient Psychiatry

### **Introduction to Medical Spanish PSYCH6828 2 Credits Concurrent Elective**

**ELECTIVE DIRECTOR:** Dr. MariaLourdes Fallace  
**CONTACT:** FALLACEM@UPSTATE.EDU  
**PREREQUISITES:** PSYCHIATRY  
**MAXIMUM NUMBER OF STUDENTS:** 20  
**PERIODS OFFERED:** Concurrent

This course is not available in the elective lottery.

**ELECTIVE DESCRIPTION:** The Introduction to Medical Spanish course builds on the strong foundation of the Basic Spanish level to continue learning medical Spanish terminology, sentence construction, role play with classmates imitating situations at a doctor's office, hospital or emergency rooms. Students learn communication at a higher level with patients and the public in general. They are able to have dialogues asking more relevant questions related to the patient's complaint in grammatically correct sentences using regular and irregular verbs in the present and past tense.

### **Intermediate Medical Spanish... PSYCH6829 2 Credits Concurrent Elective**

**ELECTIVE DIRECTOR:** Dr. MariaLourdes Fallace  
**CONTACT:** FALLACEM@UPSTATE.EDU  
**PREREQUISITES:** PSYCHIATRY  
**MAXIMUM NUMBER OF STUDENTS:** 20  
**PERIODS OFFERED:** Concurrent

This course is not available in the elective lottery.

**ELECTIVE DESCRIPTION:** Intermediate Medical Spanish prepares medical students to communicate effectively with patients with limited English proficiency. Students at this level speak only Spanish in class and are able to volunteer at a local clinic, shadow a health care provider and assist him/her in communicating to the patient the nature of the problem/condition, necessary tests required, the results, as well as treatment and prognosis. They are able to inform the patient about follow up appointments and convey any other information.

### **Advanced Medical Spanish ..... PSYCH6830 3 Credits Concurrent Elective**

**ELECTIVE DIRECTOR:** Dr. MariaLourdes Fallace  
**CONTACT:** FALLACEM@UPSTATE.EDU

**PREREQUISITES:** PSYCHIATRY  
**MAXIMUM NUMBER OF STUDENTS:** 20  
**PERIODS OFFERED:** Concurrent

This course is not available in the elective lottery.

**ELECTIVE DESCRIPTION:** Advanced Medical Spanish is service learning elective that prepares medical students to communicate effectively with patients with limited English proficiency. Students at this level are able to shadow a health care provider and assist him/her in obtaining accurate history of the patient, performing a physical examination and communicating to the patient the condition, necessary tests and results, as well as treatment and prognosis.

### **Basic Spanish ..... PSYCH6832 2 Credits Concurrent Elective**

**ELECTIVE DIRECTOR:** Dr. MariaLourdes Fallace  
**CONTACT:** FALLACEM@UPSTATE.EDU  
**PREREQUISITES:** NONE  
**MAXIMUM NUMBER OF STUDENTS:** 30  
**PERIODS OFFERED:** Concurrent

This course is not available in the elective lottery.

**ELECTIVE DESCRIPTION:** Basic Spanish is a foundation course that gives students a strong base to be able to learn medical terminology in Spanish. Students learn parts of the human body, organs, systems symptoms of common illnesses along with basic communication. They are able to have a basic dialog and develop sentences grammatically correct using regular and irregular verbs in conjunction with other parts of a sentence in concordance with gender and number.

### **Psychiatry Elective ..... PSYCH6835 4 Credits**

**ELECTIVE DIRECTOR:** Dr. Hilary Gamble  
**CONTACT:** StuenziK@upstate.edu  
**PREREQUISITES:** PSYCHIATRY  
**MAXIMUM NUMBER OF STUDENTS:** 2  
**PERIODS OFFERED:** 001, 002, 003, 004, 005, 006, 007, 008, 009, 010, 011, 012

This course is not available in the elective lottery.

**ELECTIVE DESCRIPTION:** The Psychiatry elective is offered to fourth year who meet with the Psychiatry Department Education Director/Coordinator. Depending on availability the elective may be clinical, research, or academic in nature.

## **RADIOLOGY**

### **Diagnostic Radiology .....RADL7201 4 Credits**

**ELECTIVE DIRECTOR:** Dr. Hal Cohen  
**CONTACT:** nearym@upstate.edu  
**PREREQUISITES:** INTERNAL MEDICINE and SURGERY  
**MAXIMUM NUMBER OF STUDENTS:** 11  
**PERIODS OFFERED:** 001, 002, 003, 004, 005, 006, 007, 008, 009, 010, 011, 012

**ELECTIVE DESCRIPTION:** This elective is designed to expand the student's knowledge of the fundamentals

of diagnostic radiology and the use of radiology in clinical diagnosis. Building upon the foundation of the junior clerkship, the student will observe the daily performance and interpretation of radiographic procedures. The student may select rotations to various areas of the department according to his or her individual interests. Rotations are offered in addition to chest, gastrointestinal, genitourinary, and bone imaging. Audiovisual teaching materials are available. Students are required to prepare a one page summary and a ten minute oral presentation of an interesting case at the end of the elective.

**Neuroradiology ..... RADL7206  
4 Credits**

ELECTIVE DIRECTOR: Dr. Kirk Craig  
CONTACT: nearym@upstate.edu  
PREREQUISITES: NEUROLOGY  
MAXIMUM NUMBER OF STUDENTS: 1  
PERIODS OFFERED: 001, 002, 003, 004, 005, 006, 007, 008, 009, 010, 011, 012

ELECTIVE DESCRIPTION: This elective offers the student an in-depth experience in all aspects of Neuroradiology. Emphasis is placed on the interpretation of computed tomography (CT) and magnetic resonance (MR) imaging of the head and spine, cerebral angiograms, and myelograms. The role of imaging studies in the diagnostic evaluation of the patients with suspected neurological or otolaryngological disease is emphasized. The student attends and participates in all neuroradiology teaching sessions and conferences. He/she is encouraged to undertake a special project during the elective, including research on and presentation of a topic of neuroradiologic interest.

**Interventional Radiology ..... RADL7210  
4 Credits**

ELECTIVE DIRECTOR: Dr. Mohammed Jawed  
CONTACT: nearym@upstate.edu  
PREREQUISITES: INTERNAL MEDICINE and SURGERY  
MAXIMUM NUMBER OF STUDENTS: 1  
PERIODS OFFERED: 001, 002, 003, 004, 005, 006, 007, 008, 009, 010, 011, 012

ELECTIVE DESCRIPTION: Interventional Radiologists (IR's) are Radiologists who use their expertise in medical imaging to guide small instruments such as catheters, and/or needles to diagnose and treat diseases percutaneously. The elective will familiarize the student with the dynamic practice of Interventional Radiology (IR) through hands on participation with the Attending Staff and Residents of the Division of Interventional Radiology. Activities include participation in pre-procedure patient work-up and planning, performance of procedures, and patient follow-up. Objectives: 1) Recognize patients that may benefit from diagnostic and/or therapeutic services offered by IR. 2) Evaluate and request appropriate procedures. 3) Be aware of necessary pre-procedural workup and post-procedural care. There is a participation in a weekly Multidisciplinary GI Oncology conference in which the student will learn about the exciting developing field of Interventional Oncology.

The small faculty-to-student ratio maximizes the opportunity for one to one teaching.

**Nuclear Medicine .....RADL7217  
4 Credits**

ELECTIVE DIRECTOR: Dr. David Feiglin  
CONTACT: nearym@upstate.edu  
PREREQUISITES: INTERNAL MEDICINE and SURGERY  
MAXIMUM NUMBER OF STUDENTS: 1  
PERIODS OFFERED: 001, 002, 003, 004, 005, 006, 007, 008, 009, 010, 011, 012

ELECTIVE DESCRIPTION: Expose student to Nuclear Medicine by correlation of clinical problems and diagnostic and therapeutic techniques. Methods include planar and tomographic imaging, computer image processing and quantitation, in vitro testing and radioiodine therapy of hyperthyroidism and thyroid cancer. Integration of various imaging modalities (nuclear, radiographic, CT, MR and ultrasound) with patient problem is stressed.

**PHYSICAL MEDICINE AND  
REHABILITATION**

**Physical Medicine & Rehabilitation  
.....RMED7605  
4 Credits**

ELECTIVE DIRECTOR: Dr. Margaret Turk  
CONTACT: hayesmi@upstate.edu  
PREREQUISITES: NONE  
MAXIMUM NUMBER OF STUDENTS: 2  
PERIODS OFFERED: 001, 002, 003, 004, 005, 006, 007, 008, 009, 010, 011, 012

ELECTIVE DESCRIPTION: Students will have the opportunity to experience the broad field of PM&R encompassing musculoskeletal medicine (neuromuscular evaluation and treatment) and medical/physical/cognitive rehabilitation (diagnosis, interventions, and outcomes). Electrodiagnosis (EMG), ultrasound, and injections will be discussed and observed. Besides typical medical diagnosis and treatment, the PM&R elective provides experiences with comprehensive evaluation of functional abilities, transitions of care, multidisciplinary team functioning, management of long-term disability, and quality of life issues. Typical patients encountered include those with stroke, spinal cord injury, concussion, brain injury, cerebral palsy, pain, arthritis, amputation, multiple trauma and other neuro-musculoskeletal disorders. The rotation is organized by weekly focused experiences within our Inpatient Rehabilitation Facility, various outpatient programs, and the VA inpatient and outpatient programs. The teaching is contemporaneous with clinical encounters and through lectures and student directed learning. Students are expected to develop a 15 minute presentation at the end of rotation, based on an interesting observed case or concept.



**RADIATION ONCOLOGY**

**Radiation Oncology .....RONC7401  
4 Credits**

ELECTIVE DIRECTOR: Dr. Paul Aridgides  
 CONTACT: ARIDGIDP@UPSTATE.EDU  
 PREREQUISITES: ALL THIRD YEAR CLERKSHIPS  
 MAXIMUM NUMBER OF STUDENTS: 1  
 PERIODS OFFERED: 001, 002, 003, 004, 005, 006, 007, 008, 009, 010, 011, 012

ELECTIVE DESCRIPTION: An intensive program in Oncology with emphasis on total patient care is offered through the mechanism of independent patient evaluation followed by discussion on a one-to-one student-faculty basis. The life history of neoplasia is illustrated by seeing patients at the time of diagnosis, during treatment and in the long-term follow-up situation. Disease oriented diagnostic evaluation and multidisciplinary treatment are taught. At the conclusion of this elective, the student will be familiar with most of the common neoplastic diseases and the considerations that go into making rational decisions regarding appropriate care for patients with cancer.

**SURGERY**

**Hepatobiliary Acting Internship .SURG8001  
4 Credits Acting Internship Selective**

ELECTIVE DIRECTOR: Dr. Marshall Dhir  
 CONTACT: DHIRM@UPSTATE.EDU  
 PREREQUISITES: ALL THIRD YEAR CLERKSHIPS  
 MAXIMUM NUMBER OF STUDENTS: 1  
 PERIODS OFFERED: 001, 002, 003, 004, 005, 006, 007, 008, 009, 010, 011, 012

ELECTIVE DESCRIPTION: This AI focuses on our "Surgery Oncology 1" pertaining to Hepatobiliary and Pancreatic Diseases (including the gallbladder, liver, bile duct, and pancreas) including benign and malignant conditions. The course is designed for the student to develop a deeper understanding of the management and treatment of surgical patients. Emphasis is placed on the pathophysiology of the surgical problem and the principles required for excellence in the care of acute and chronically ill patients. Students will be offered opportunities to gain preoperative, intraoperative, and postoperative patient management experience. Note: The course is designed for students interested in choosing surgery as a career as well as those students interested in fields other than surgery.

**Acting Internship Thoracic Surgery  
.....SURG8005  
4 Credits Acting Internship Selective**

ELECTIVE DIRECTOR: Dr. Jason Wallen  
 CONTACT: bellinir@upstate.edu  
 PREREQUISITES: INTERNAL MEDICINE and SURGERY  
 MAXIMUM NUMBER OF STUDENTS: 1  
 PERIODS OFFERED: 001, 002, 003, 004, 005, 006, 007, 008, 009, 010, 011, 012

ELECTIVE DESCRIPTION: This AI will involve the surgical management of pulmonary and thoracic

disease. Treatment of lung cancer, esophageal problems, and inflammatory disease of the lung and pleura will be presented. In order to experience longitudinal care and understanding of the basic concepts behind operative cases, students will be expected to help manage the care of thoracic patients on the floor and in the clinics. In addition, there will be significant operating room experience.

**Burns ..... SURG8008  
4 Credits**

ELECTIVE DIRECTOR: Dr. Joan Dolinak  
 CONTACT: bellinir@upstate.edu  
 PREREQUISITES: INTERNAL MEDICINE and SURGERY  
 MAXIMUM NUMBER OF STUDENTS: 1  
 PERIODS OFFERED: 001, 002, 003, 004, 005, 006, 007, 008, 009, 010, 011, 012

ELECTIVE DESCRIPTION: An introduction to critical care of thermal, electrical, chemical and environmental exposure injury; as well as requisites of therapy for complex wound closure and surgical management of burns including skin grafts, skin substitutes and exposure to exfoliative skin disorders such as TEN and SJS. Student will resuscitate individuals with burns and other injuries, establish priorities of treatment, organize therapeutic regimens. Exposure to techniques for controlling infection, maintaining nutritional balance and closing the burn wound will be provided. Although the emphasis will be on the pathophysiology of major trauma and the requirements for survival, facts pertaining to the epidemiology of burns, the prevention of thermal injury, the psychic adaptation to major stress and the multifaceted nature of rehabilitation will be presented. The student will be expected to assist in operating room and during wound therapy procedures.

**General Surgery Acting Internship - Crouse  
..... SURG8013  
4 Credits Acting Internship Selective,  
Crouse Hospital**

ELECTIVE DIRECTOR: Dr. Benjamin Sadowitz  
 CONTACT: bellinir@upstate.edu  
 PREREQUISITES: SURGERY  
 MAXIMUM NUMBER OF STUDENTS: 1  
 PERIODS OFFERED: 001, 002, 003, 004, 005, 006, 007, 008, 009, 010, 011, 012

ELECTIVE DESCRIPTION: The primary opportunity of this period would be exposure to the community hospital types of surgical problems, including early diagnosis, pre-operative evaluations and preparations, and operative and post-operative management of normal and complicated patients. This program should be helpful to any student seeking additional experience in general surgical problems in terms of a possible career choice or even as a "last" exposure for future non-surgeons.

**Pediatric Surgery ..... SURG8014  
4 Credits**

ELECTIVE DIRECTOR: Dr. Kim Wallenstein  
 CONTACT: bellinir@upstate.edu  
 PREREQUISITES: SURGERY

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## COURSE SELECTION BOOK 2019 – 2020 SYRACUSE CAMPUS ELECTIVES

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MAXIMUM NUMBER OF STUDENTS: 1  
PERIODS OFFERED: 001, 002, 003, 004, 005, 006, 007, 008, 009, 010, 011, 012

**ELECTIVE DESCRIPTION:** The emphasis in the course is placed on the diagnosis, pre-operative preparation and post-operative management of children from the newborn period to adolescence. Additional emphasis will be placed on: a) diagnosis and pre-operative preparation of the patient with neonatal congenital anomalies; b) diagnosis of common pediatric surgical problems; c) assessment and management of pediatric trauma; d) assessment and management of fluid and electrolytes in pediatric surgery patients; e) nutritional management of patients with acute and chronic surgical diseases; f) techniques for outpatient and inpatient minor surgical procedures, including the surgical placement of intravenous catheters. The student will participate in in-house patient and outpatient care as a member of the Pediatric Surgery service. Participation in Pediatric Surgery includes attendance at formal teaching rounds, clinical rounds, inpatient surgical procedures, Pediatric Surgical Clinic, and selected programs from the Department of Surgery and the section of Pediatric Surgery.

### **Plastic Surgery ..... SURG8015 4 Credits Preceptor's Site**

**ELECTIVE DIRECTOR:** Dr. Prashant Upadhyaya  
**CONTACT:** bellinir@upstate.edu  
**PREREQUISITES:** ALL THIRD YEAR CLERKSHIPS  
**MAXIMUM NUMBER OF STUDENTS:** 1  
**PERIODS OFFERED:** 001, 002, 003, 004, 005, 006, 007, 008, 009, 010, 011, 012

**ELECTIVE DESCRIPTION:** The student will rotate with the Plastic Surgeon per the surgeon's schedule. The scope of rotation includes clinics at 550 Harrison Street and Surgery at Upstate downtown and Community campuses and Crouse Hospital. The student will essentially function as an intern and participate in all aspects of patient care, both inpatient and outpatient. The objective of this rotation is to introduce to the student the scope and philosophy of Plastic Surgery. The student will be expected to educate self prior to the start of the rotation with basics of Plastic surgery and gain on that foundation by experience in a clinical setting. \*Please contact Dr. Upadhyaya, via email at upadhyap@upstate.edu, prior to rotation start.

### **Disease of the Colon, Rectum, and Anus ..... SURG8028 4 Credits**

**ELECTIVE DIRECTOR:** Dr. John Nicholson  
**CONTACT:** galle@crsurgeons.org  
**PREREQUISITES:** ALL THIRD YEAR CLERKSHIPS  
**MAXIMUM NUMBER OF STUDENTS:** 1  
**PERIODS OFFERED:** 001, 002, 003, 004, 005, 006, 007, 008, 009, 010, 011, 012

**ELECTIVE DESCRIPTION:** This course is designed for the student to learn in greater depth the presentation and management of both benign and malignant disease affecting the colon, rectum, and anus. Emphasis is placed on the primary presentation of patients with

colon and rectal diseases. The student will have the opportunity of following patients from their initial office presentation through any surgical procedures, post-operative hospital care, and in the post-discharge office care. This will include gaining skills in basic colon-rectal endoscopy, both rigid and flexible sigmoidoscopy-colonoscopy, as well as basic knowledge and skill required in the management of major surgical patients, (e.g., fluid and electrolyte balance, cardiopulmonary, renal and nutritional management of surgical patients). The student also will have the opportunity of learning about ostomy care. The course is designed both for students interested in pursuing a surgical career, as well as those entering primary medical care.

### **Critical Care for the Surgical Patient ..... SURG8030 4 Credits**

**ELECTIVE DIRECTOR:** Dr. Lucy Ruangvoravat  
**CONTACT:** RUANGVOL@UPSTATE.EDU  
**PREREQUISITES:** INTERNAL MEDICINE and SURGERY  
**MAXIMUM NUMBER OF STUDENTS:** 1  
**PERIODS OFFERED:** 001, 002, 003, 004, 005, 006, 007, 008, 009, 010, 011, 012

**ELECTIVE DESCRIPTION:** This course will cover clinical, pathophysiologic, legal and ethical ramifications of the critically ill surgical patient. The focus will be on perioperative care and planning and will provide exposure to inotrope use, ventilator management, hemodynamic assessment and emergent therapy. Exposure to procedures common to the intensive care unit will be provided.

### **General Surgery Acting Internship ..... SURG8038 4 Credits Acting Internship Selective**

**ELECTIVE DIRECTOR:** Dr. Amit Goyal  
**CONTACT:** bellinir@upstate.edu  
**PREREQUISITES:** ALL THIRD YEAR CLERKSHIPS  
**MAXIMUM NUMBER OF STUDENTS:** 1  
**PERIODS OFFERED:** 001, 005, 008, 009, 010, 011, 012

**ELECTIVE DESCRIPTION:** This course is designed for the student to learn in greater depth the management of surgical patients. Emphasis is placed on the understanding of the pathophysiology of surgical problems and the principles required for excellence in the care of acutely ill patients. The students will also gain first-hand knowledge of surgical diagnosis, fluid and electrolyte, cardiovascular renal and respiratory management of surgical patients and will participate in the O.R. The course is designed for both students interested in choosing surgery as a career as well as those students interested in fields other than surgery. Students will be expected to present a seminar on some aspect of surgical disease using medical literature to provide insight to the basic science or pathophysiology of the topic.

**Vascular Surgery and Surgical  
Interventional Radiology ..... SURG8048  
4 Credits**

ELECTIVE DIRECTOR: Dr. Kwame Amankwah  
 CONTACT: Bellinir@upstate.edu  
 PREREQUISITES: SURGERY  
 MAXIMUM NUMBER OF STUDENTS: 1  
 PERIODS OFFERED: 001, 002, 003, 004, 005, 006,  
 007, 008, 009, 010, 011, 012

ELECTIVE DESCRIPTION: The course is designed for the student who has an interest in Vascular Surgery and Interventional Procedures. The individual who completes this elective will have: 1) A better understanding of what Vascular and Endovascular Surgery entails; 2) A better understanding of the components that make up Interventional Radiology; 3) The ability to gain an understanding of imaging modalities utilized by each specialty; 4) Be actively involved in the assessment, planning and execution of patient's treatment; 5) An understanding of vascular disease as it pertains to Vascular and Endovascular Surgery; 6) An understanding of general interventions as it pertains to General Surgery; 7) Be able to perform central venous access; 9) Be able to interpret an angiogram and propose treatment plan. Students will participate in the outpatient clinic, inpatient care, Operating Theater and the Interventional Radiology Suite at University Hospital and the Veterans Administration Hospital. A two to three page report or presentation on a topic related to Vascular Surgery will be required. Each student will be assigned a preceptor for the rotation.

**Acting Internship Acute Care Surgery  
..... SURG8051  
4 Credits Acting Internship Selective**

ELECTIVE DIRECTOR: Dr. Moustafa Hassan, Dr. Richard King  
 CONTACT: bellinir@upstate.edu  
 PREREQUISITES: INTERNAL MEDICINE and SURGERY  
 MAXIMUM NUMBER OF STUDENTS: 1  
 PERIODS OFFERED: 001, 002, 003, 004, 005, 006,  
 007, 008, 009, 010, 011, 012

ELECTIVE DESCRIPTION: This Acting Internship focuses the fast paced and varied discipline of the Acute Care Service. The course is designed to expose students to the wide variety of emergency surgical patients and procedures. The purpose of this course is to developing a more in depth knowledge and understanding of a wide variety of surgical diseases pathologies across multiple organ systems. Students will actively participate in the initial evaluation of acutely ill surgical patients, as well as in their pre, peri, and post-operative care. In addition, students will be expected to participate one-two weekend nights of night float.

**Acting Internship General Surgery Upstate  
Community General ..... SURG8053  
4 Credits Acting Internship Selective**

ELECTIVE DIRECTOR: Dr. Jesse Gutnick  
 CONTACT: bellinir@upstate.edu

PREREQUISITES: ALL THIRD YEAR CLERKSHIPS  
 MAXIMUM NUMBER OF STUDENTS: 1  
 PERIODS OFFERED: 001, 002, 003, 004, 005, 006,  
 007, 008, 009, 010, 011, 012

ELECTIVE DESCRIPTION: This Acting Internship is designed to give students clinical exposure to a variety of diseases which may include obesity, breast and breast oncology, endocrine, thyroid, parathyroid, and adrenal. Surgery procedures may be performed using minimally invasive general surgery techniques such as laparoscopic surgery as well as other common bariatric surgery procedures such as gastric bypass, sleeve gastrectomy, adjustable gastric band, and biliopancreatic diversion with duodenal switch. In addition, the course will offer opportunities for students to evaluate patients pre-operatively, intra-operatively, and post-operatively, and to participate in diagnostic and management strategies.

**Acting Internship - Colorectal... SURG8054  
4 Credits Acting Internship Selective**

ELECTIVE DIRECTOR: Dr. Jeffry Albright  
 CONTACT: bellinir@upstate.edu  
 PREREQUISITES: ALL THIRD YEAR CLERKSHIPS  
 MAXIMUM NUMBER OF STUDENTS: 1  
 PERIODS OFFERED: 001, 002, 003, 004, 005, 006,  
 007, 008, 009, 010, 011, 012

ELECTIVE DESCRIPTION: This Acting Internship focuses on our Division of Surgical Oncology pertaining to colorectal diseases. It is designed to give students an in-depth exposure to the clinical management of a broad range of conditions and ailments that patients with colon and rectal diseases experience. Students will work closely with the attending and residents in the operating room, but also find many opportunities to gain experience in pre-operatively and post-operatively under faculty/resident guidance.

**Acting Internship in Trauma Surgery  
..... SURG8055  
4 Credits Acting Internship Selective**

ELECTIVE DIRECTOR: Dr. Amie Lucia  
 CONTACT: LUCIAA@UPSTATE.EDU  
 PREREQUISITES: ALL THIRD YEAR CLERKSHIPS  
 MAXIMUM NUMBER OF STUDENTS: 1  
 PERIODS OFFERED: 001, 002, 003, 004, 005, 006,  
 007, 008, 009, 010, 011, 012

ELECTIVE DESCRIPTION: In this Acting Internship, students will be considered integral members of the Trauma service, caring and assisting in the operative care of the injured or critically ill trauma surgery patient. Students will be expected to: 1) Gain a basic knowledge of the anatomy and physiology of all body systems affected by trauma, including the initial evaluation of the patient's cardiovascular and pulmonary physiology and the nervous, gastrointestinal and genitourinary systems; 2) Develop an understanding of the indications for basic surgical procedures: ultrasound (of FAST) and thoracotomy (or EDT) and closed tube thoracostomy (or chest tube) as well as an understanding of resuscitative pharmacology as it relates to why certain cardiac and pain

medications are used; 3) Learn basic principles of hemorrhage control, from time of injury all the way through the trauma bay and towards definitive operative and non-operative treatment modalities. Students will have opportunities to gain awareness of the diagnostic challenges involved with assessing the bleeding patient including exposure to the why and when modalities are used (FAST, DPL, and CT scan). Students will also gain insight into stabilization measures in the trauma bay, such as the use of REBOA and EDT, as well as blood products and how adjunctive medications like TXA and anticoagulant reversal agents like Kcentra and FFP and Praxbind are used with a focus on how the need for these blood products, adjuncts, and reversal agents is assessed (history, clinical picture, hematocrit, use of TEG). Finally, how a decision for operative vs. non-operative management, including IR techniques, is undertaken for definitive treatment of the bleeding patient. Students will also be exposed to trauma evaluation and resuscitation utilizing American College of Surgeons ATLS guidelines.

**UROLOGY**

**Urology Acting Internship..... UROL8401  
4 Credits            Acting Internship Selective**

ELECTIVE DIRECTOR:                            Dr. Matthew Mason

CONTACT:    schulzes@upstate.edu

PREREQUISITES:                            ALL THIRD YEAR CLERKSHIPS

MAXIMUM NUMBER OF STUDENTS:                            1

PERIODS OFFERED:    001, 002, 003, 004, 005, 006,  
007, 008, 009, 010, 011, 012

This course is not available in the elective lottery.

ELECTIVE DESCRIPTION: The acting internship is designed for clinical work. During this elective, the student will perform all the duties of a house officer in Urology and will be part of a team consisting of two Urology residents plus a small number of fourth year students. At frequent intervals, the student will be expected to meet with individual members and discuss assigned reading and problems. The purpose of this elective is to give the student in depth experience in the field of Urology. NOTE: Special requests may be accommodated for scheduling rotations during times that do not strictly align with the upstate block schedule.



**ANESTHESIOLOGY**

**Introduction to Anesthesiology . ANES0803  
2 Credits Preceptor's Site**

ELECTIVE DIRECTOR: Dr. Robert Patterson, Dr. Kenneth Mintz  
 CONTACT: ccstuaff@upstate.edu  
 PREREQUISITES: INTERNAL MEDICINE and SURGERY  
 MAXIMUM NUMBER OF STUDENTS: 1  
 PERIODS OFFERED: 01B, 02B, 04B, 05B, 06A, 06B, 08A, 10A, 11B

This course is not available in the elective lottery.

ELECTIVE DESCRIPTION: The two-week elective course is designed to further explain aspects of anesthesiology which have relevance to all medical practice; to include physiology and pharmacological interaction of drugs with emphasis on basic technical maneuvers and airway management. At the conclusion of the two weeks, the student is expected to demonstrate basic anesthesia technical skills and knowledge of perioperative patient care. Weekly activities include inpatient contacts. Preceptors' Sites: Dr. Mintz-Our Lady of Lourdes Memorial or Dr. Patterson-Wilson Memorial Hospital

**EMERGENCY MEDICINE**

**Clinical Elective in Emergency Medicine  
..... EMED1315  
4 Credits Wilson Memorial Hospital**

ELECTIVE DIRECTOR: Dr. Stephen Gomez  
 CONTACT: ccstuaff@upstate.edu  
 PREREQUISITES: SURGERY  
 MAXIMUM NUMBER OF STUDENTS: 1  
 PERIODS OFFERED: 003, 007, 010, 011, 012

This course is not available in the elective lottery.

ELECTIVE DESCRIPTION: Exposure to the complete Emergency Department practice. Students will be scheduled for a variety of shifts including weekends. Several preceptors participate with each student, so various styles of practice are presented. Scheduling is flexible, but 40 hours per week is typical. Emphasis is placed on the evaluation of the acute patient and minor surgical procedures such as suturing skills. Weekly activities include patient contact (inpatient & outpatient).

**FAMILY MEDICINE**

**Doctoring ..... FAMP1607  
4 Credits Preceptor's Site**

ELECTIVE DIRECTOR: Dr. John Wacendak  
 CONTACT: ccstuaff@upstate.edu  
 PREREQUISITES: FAMILY MEDICINE  
 MAXIMUM NUMBER OF STUDENTS: 2  
 PERIODS OFFERED: 001, 002, 003, 004, 005, 006, 007, 008, 009, 010, 011, 012

ELECTIVE DESCRIPTION: "Providing health care" seems to be the catch phrase of the times. But many patients prefer the word doctoring, as in "We've been doctoring with so-and-so for fifteen years." This brief phrase encapsulates the complex nature of the deep

and lasting relationship between a family and their caring and committed physician. Doctoring will be the focus of this elective, which will provide an introduction to Family Medicine as a comprehensive system of care. For those who have had significant previous experience in Family Medicine, higher level skills in interviewing, clinical reasoning and family assessment will be emphasized. Specific goals include: 1) Further development of interview and examination skills that can be used for the initial evaluation of any patient, irrespective of age, sex or presenting complaint; 2) Learning the efficient and effective work-up of the most common chief complaints in Primary Care; 3) Learning the therapeutic options for a selection of common Primary Care diagnosis; 4) Learning family systems theory and how family dynamics affect illness; 5) Trying, under supervision, a variety of procedural skills; 6) Learning to communicate effectively with other medical personnel. Weekly activities include interviewing, examining and writing notes on outpatients and inpatients, home visits, school visits, family counseling, some minor surgery and suturing, didactic sessions, reading. Having a car during this rotation is advantageous, although not required. Preceptor's Site: Family Care Center, 507 Main Street, Johnson City

**Palliative Care ..... FAMP1647  
2 Credits Wilson Memorial Hospital**

ELECTIVE DIRECTOR: Dr. Philip Dzwonczyk  
 CONTACT: ccstuaff@upstate.edu  
 PREREQUISITES: FAMILY MEDICINE  
 MAXIMUM NUMBER OF STUDENTS: 1  
 PERIODS OFFERED: 01A, 01B, 02A, 02B, 04A, 04B, 05A, 05B, 06A, 06B, 08A, 08B, 09A, 09B, 10A, 10B, 11A, 11B, 12A, 12B

This course is not available in the elective lottery.

ELECTIVE DESCRIPTION: Students will work with palliative medicine physicians, advanced practice nurses and social workers as part of an interdisciplinary team. They will see inpatient consults, outpatient consults and participate in educational presentations as part of the palliative medicine team. In addition, they will attend and participate in weekly interdisciplinary team meetings. Educational goals include familiarization with approach to management of common issues in symptom control, discussions about goals of care and life sustaining treatment options, and how to conduct family meetings with patients and their loved ones.

**INTERNAL MEDICINE**

**Clinical Cardiology ..... MDCN2126  
4 Credits Preceptor's Site**

ELECTIVE DIRECTOR: Dr. John Dimenna  
 CONTACT: ccstuaff@upstate.edu  
 PREREQUISITES: INTERNAL MEDICINE  
 MAXIMUM NUMBER OF STUDENTS: 2  
 PERIODS OFFERED: 005, 007, 008, 009, 010

ELECTIVE DESCRIPTION: The student's time will involve clinical consultative cardiology. This would involve EKG readings, echocardiography, and

arrhythmia management . There would be participation in daily rounds, EKG and echocardiogram reading. There will be occasional organized conferences and informal teaching at the bedside and on rounds. Textbooks include internal medicine. An introductory textbook of EKG reading should also be used (Dubin, Thaler or Chou). The clinical service would include patients with myocardial infarction, angina, congestive heart failure, atrial and ventricular arrhythmias and hyperlipidemia. Reading also includes NEJM reviews and ECGs. Criteria for evaluation of performance consists of oral examinations (informal), patient work-ups, research papers (optional), seminar and conference presentations (optional). ECG interpretation. Preceptor's site: 169 Riverside Dr., Suite 205, Binghamton, NY 13905

**General Dermatology ..... MDCN2130  
1 Credits Concurrent Elective, Preceptor's Site**

ELECTIVE DIRECTOR: Dr. Genadij Sienkiewicz  
CONTACT: ccstuaff@upstate.edu  
PREREQUISITES: ALL THIRD YEAR CLERKSHIPS  
MAXIMUM NUMBER OF STUDENTS: 1  
PERIODS OFFERED: 001, 005, 006, 007, 008, 009, 010, 011, 012

This course is not available in the elective lottery.

ELECTIVE DESCRIPTION: Concurrent elective offered part-time Tuesday and Wednesday afternoons 1-5 pm and Thursday mornings 8:00-12n. Experience in general medical/surgical dermatology including diagnosis and management of skin diseases and skin cancer. The student will be seeing and discussing patients with the instructor. He/She will be introduced to online dermatology resources which will be integrated into the teaching plan, and also used for self-study and reference.

**Clinical Endocrinology and Hospital Medicine..... MDCN2131  
4 Credits Our Lady of Lourdes Memorial**

ELECTIVE DIRECTOR: Dr. Timothy Howland  
CONTACT: ccstuaff@upstate.edu  
PREREQUISITES: INTERNAL MEDICINE  
MAXIMUM NUMBER OF STUDENTS: 1  
PERIODS OFFERED: 003, 004, 005, 007, 009, 011, 012

This course is not available in the elective lottery.

ELECTIVE DESCRIPTION: 1) Out-patient care in a general endocrine practice will emphasize history and physical examination skills as well as use of laboratory testing appropriate to the spectrum of a general adult endocrinology consultative practice. 2) Out-patient testing procedures include hormonal stimulation testing and fine needle aspiration biopsy of thyroid nodules. 3) Out-patient diabetes care will include instruction in the use of insulin pump therapy and continuous glucose monitoring. 4) In-patient consultations will be limited to telephone consultations and infrequent bedside consultations. 5) Opportunities will be provided to observe out-patient diabetes education and diet instruction sessions. Outpatient

management of gestational diabetes also will be included. 7) Activities include weekly inpatient case conference, monthly journal club, weekly video conference. Selected reading will be recommended. Performance evaluation will be based on patient evaluations, assessment during rounds and informal discussions, presentation.

**Critical Care .....MDCN2132  
2 Credits Wilson Memorial Hospital**

ELECTIVE DIRECTOR: Dr. Regina Frants  
CONTACT: ccstuaff@upstate.edu  
PREREQUISITES: ALL THIRD YEAR CLERKSHIPS  
MAXIMUM NUMBER OF STUDENTS: 2  
PERIODS OFFERED: 01A, 01B, 02A, 02B, 03A, 03B, 04A, 04B, 05A, 05B, 06A, 06B, 07A, 07B, 08A, 08B, 09A, 09B, 10A, 10B, 11A, 11B, 12A, 12B

This course is not available in the elective lottery.

ELECTIVE DESCRIPTION: Familiarity with the care of the medically critically ill patient including some surgical patients in consultation. Special emphasis on pulmonary critical care – ventilator management and procedures. Direct working relationship with the medical residents including night call 4-5 nights. Attend morning report, grand rounds and all noon lectures in general medicine.

**Clinical Dermatology.....MDCN2150  
2 Credits Preceptor's Site**

ELECTIVE DIRECTOR: Dr. Joseph Newmark  
CONTACT: ccstuaff@upstate.edu  
PREREQUISITES: INTERNAL MEDICINE  
MAXIMUM NUMBER OF STUDENTS: 1  
PERIODS OFFERED: 01A, 01B, 02A, 02B, 03A, 03B, 04A, 04B, 05A, 05B, 06A, 06B, 07A, 07B, 08A, 08B, 09A, 09B, 10A, 10B, 11A, 11B, 12A, 12B

This course is not available in the elective lottery.

ELECTIVE DESCRIPTION: The goals of this course are: 1) To learn to take an insightful Dermatology history; 2) To learn to examine the skin properly; 3) To learn how to evaluate skin diseases and tumors with the aim of making the correct diagnosis; 4) To learn management of common dermatoses; 5) To learn the basics of cutaneous surgery, cosmetic dermatology and laser surgery. Preceptor's Site: Vestal Exec. Park, 4104 Old Vestal Rd., Ste 203, Vestal, NY.

**A G.I. Experience .....MDCN2166  
4 Credits Preceptor's Site**

ELECTIVE DIRECTOR: Dr. Leslie Bank  
CONTACT: ccstuaff@upstate.edu  
PREREQUISITES: ALL THIRD YEAR CLERKSHIPS  
MAXIMUM NUMBER OF STUDENTS: 1  
PERIODS OFFERED: 001, 002, 003, 004, 005, 006, 007, 008, 009, 010, 011, 012

ELECTIVE DESCRIPTION: To expose 3rd and 4th year students to the intricacies of an Inpatient/Outpatient Gastroenterology Practice. To show and teach the students about all the modern technology available as related to G.I. Preceptor's Site: Binghamton

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## COURSE SELECTION BOOK 2019 – 2020 BINGHAMTON CAMPUS ELECTIVES

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Gastroenterology Assoc., 40 Mitchell Ave.,  
Binghamton, NY.

### **Cardiology..... MDCN2179** **4 Credits Wilson Memorial Hospital**

ELECTIVE DIRECTOR: Dr. Owais Ahmed  
CONTACT: ccstuaff@upstate.edu  
PREREQUISITES: INTERNAL MEDICINE  
MAXIMUM NUMBER OF STUDENTS: 1  
PERIODS OFFERED: 001, 002, 003, 004, 005, 006,  
007, 008, 009, 010, 011, 012

This course is not available in the elective lottery.

ELECTIVE DESCRIPTION: This elective is intended to provide the student with an understanding of the basics of general cardiology, the diagnosis and treatment options available, indications for various diagnostic cardiac procedures and the reading and interpretation of EKGs. Wilson Memorial Hospital.

### **NEUROSURGERY**

#### **Acting Internship in Neurosurgery** .....NSUG3206 **4 Credits Acting Internship Selective,** **Wilson Memorial Hospital**

ELECTIVE DIRECTOR: Dr. Adesh Tandon  
CONTACT: ccstuaff@upstate.edu  
PREREQUISITES: NEUROLOGY  
MAXIMUM NUMBER OF STUDENTS: 1  
PERIODS OFFERED: 002, 003, 004, 005, 006, 011,  
012

ELECTIVE DESCRIPTION: Students will be assigned to a major Neurosurgery service, average 10-15 inpatients, 15-20 major neurosurgery cases a week, and work as an Acting Intern. The student will be required to work up some neurosurgery patients admitted to the neurosurgery service and selected consult patients. The student will be given responsibility for the day-to-day ward work, including pre-operative and post-operative neurosurgical care and neurodiagnostic studies. Operating room experience will be provided with the student being able to scrub on all major neurosurgical cases. Out-patient experience will also be provided with approximately 250 out-patient visits a week. Student will be expected to participate in some night call, and the student's attendance will be required at lectures, seminars and conferences as they relate to the neurosciences. Goals: To develop basic knowledge and skills required to carry out and understand the neurological history and examination. The student should also develop an understanding of the diagnostic and therapeutic approaches used for common neurological and neurosurgical diseases. This elective is designed to compliment and amplify the third year clinical experience in neuroscience. There are a number of ongoing clinical research projects at the Binghamton neurosurgical site which a student may choose to become involved with. These projects tend to entail participation lasting more than the elective itself and may be an important part of a student's preparation for choosing a career in neurosurgery.

### **OPHTHALMOLOGY**

#### **Ophthalmology and Ambulatory Surgery** ..... OPTH4008

**2 Credits**  
ELECTIVE DIRECTOR: Dr. Charles Rubin, Dr. Daniel Sambursky, Dr. John Meehan, Dr. Michael Herceg, Dr. Lloyd Suter  
CONTACT: ccstuaff@upstate.edu  
PREREQUISITES: ALL THIRD YEAR CLERKSHIPS  
MAXIMUM NUMBER OF STUDENTS: 2  
PERIODS OFFERED: 01A, 01B, 02A, 02B, 03A, 03B,  
04A, 04B, 05A, 05B, 06A, 06B, 07A, 07B, 08A, 08B,  
09A, 09B, 10A, 10B, 11A, 11B, 12A, 12B

This course is not available in the elective lottery.

ELECTIVE DESCRIPTION: This elective will provide the student exposure in office problems and management in ophthalmology. Students will develop diagnostic and therapeutic skills and learn to recognize and manage acute medical and surgical emergencies.

### **ORTHOPEDIC SURGERY**

#### **Orthopedics-Office & Surgery ... ORTH4411** **4 Credits Preceptor's Site**

ELECTIVE DIRECTOR: Dr. Eric Seybold  
CONTACT: ccstuaff@upstate.edu  
PREREQUISITES: SURGERY  
MAXIMUM NUMBER OF STUDENTS: 1  
PERIODS OFFERED: 001, 002, 003, 004, 005, 006,  
007, 008, 009, 010, 011, 012

ELECTIVE DESCRIPTION: To give 3rd and 4th year students exposure to orthopedic problems, both office based and hospital/surgical based. The student may choose to concentrate on one area, i.e. hand, spine, sports medicine, joint replacement or choose to rotate between the subspecialties.

### **PATHOLOGY**

#### **Community Hospital Pathology..PATH5203** **4 Credits Basic Science Selective, Our Lady** **of Lourdes Memorial**

ELECTIVE DIRECTOR: Dr. Michael Zur  
CONTACT: ccstuaff@upstate.edu  
PREREQUISITES: INTERNAL MEDICINE and SURGERY  
MAXIMUM NUMBER OF STUDENTS: 1  
PERIODS OFFERED: 001, 002, 003, 004, 005, 006,  
007, 008, 009, 010, 011, 012

ELECTIVE DESCRIPTION: Through this elective, the student will gain a complete understanding of routine anatomic pathology-clinical disease correlation. The student will review basic anatomy at autopsies, will learn appropriate use of the clinical laboratory, will review and gain added appreciation for the ability of histology and histopathology to define disease, and will learn to correlate routine Gyn and non-Gyn cytology with clinical data and anatomic/ histologic specimens. Preceptor's Site: 169 Riverside Dr., Binghamton, NY.

**Pathology for your Chosen Specialty**  
 ..... **PATH5216**  
**2 Credits Basic Science Selective, Our Lady of Lourdes Memorial**

ELECTIVE DIRECTOR: Dr. Michael Zur  
 CONTACT: ccstuaff@upstate.edu  
 PREREQUISITES: INTERNAL MEDICINE and SURGERY  
 MAXIMUM NUMBER OF STUDENTS: 1  
 PERIODS OFFERED: 01A, 01B, 02A, 02B, 03A, 03B, 04A, 04B, 05A, 05B, 06A, 06B, 07A, 07B, 08A, 08B, 09A, 09B, 10A, 10B, 11A, 11B, 12A, 12B

ELECTIVE DESCRIPTION: Through this elective the student will gain first-hand appreciation of the correlation between clinical disease and anatomic-pathologic findings. The proper use of clinical lab studies will be related to the student's specialty of interest. Both normal and abnormal histology for the organ system will be reviewed as it pertains to specific cases of interest to the selected specialty.

**General and Special Pathology.. PATH5219**  
**4 Credits Basic Science Selective, Wilson Memorial Hospital**

ELECTIVE DIRECTOR: Dr. Jagmohan Sidhu  
 CONTACT: ccstuaff@upstate.edu  
 PREREQUISITES: ALL THIRD YEAR CLERKSHIPS  
 MAXIMUM NUMBER OF STUDENTS: 1  
 PERIODS OFFERED: 001, 002, 003, 004, 005, 006, 007, 008, 011, 012

This course is not available in the elective lottery.

ELECTIVE DESCRIPTION: This elective offers six options to students: dermatopathology, hematopathology, cytopathology, microbiology, transfusion services, or neuropathology. All options will include experiences in general pathology where students will rotate through all of the sections of pathology and laboratory medicine. Students will also attend autopsies and be involved in all steps of signing and diagnosis. During the special pathology or laboratory medicine rotation, the student will either follow the biopsy or the specimen from the patient to the pathology/lab medicine department or follow the result of the biopsy or special specimen from the pathology/laboratory medicine department to the patient. An opportunity will be available to create manuscripts of rare case reports and submit for publication.

**Forensic Pathology..... PATH5225**  
**4 Credits Basic Science Selective**

ELECTIVE DIRECTOR: Dr. James Terzian  
 CONTACT: ccstuaff@upstate.edu  
 PREREQUISITES: INTERNAL MEDICINE  
 MAXIMUM NUMBER OF STUDENTS: 1  
 PERIODS OFFERED: 001, 002, 003, 004, 005, 006, 007, 008, 009, 010, 011, 012

ELECTIVE DESCRIPTION: This two week course is designed to introduce medical students to the subspecialty of pathology, which involves forensics, specifically death investigation. By spending time in

the morgue, in histology, in the clinical laboratory, at scenes of death, and in the courtroom, the student will gain an appreciation for the determination of causes, mechanisms and manners of death. In the process, subjects such as anatomy, physiology, histology and pharmacology (toxicology) will be reviewed.

**PEDIATRICS**

**Neonatal-Perinatal Acting Internship**  
 ..... **PEDS5610**  
**4 Credits Acting Internship Selective, Wilson Memorial Hospital**

ELECTIVE DIRECTOR: Dr. Paula Farrell  
 CONTACT: ccstuaff@upstate.edu  
 PREREQUISITES: ALL THIRD YEAR CLERKSHIPS  
 MAXIMUM NUMBER OF STUDENTS: 1  
 PERIODS OFFERED: 001, 002, 003, 004, 005, 006, 007, 008

ELECTIVE DESCRIPTION: To understand physiology and pathophysiology of newborn, term and pre-term infants. Understand resuscitation physiology and pathophysiology of asphyxia. Monitor and correlate perinatal period with outcome. Identify, manage and counsel for congenital anomalies/syndromes. Weekly activities: Conferences, Inpatient Contacts, with night call. Textbook required: "Care of High-Risk Newborn", by Klaus and Fararnoff. Performance evaluation based on patient workups, conference presentations and daily rounds presentation.

**Pediatric GI ..... PEDS5618**  
**4 Credits Preceptor's Site**

ELECTIVE DIRECTOR: Dr. Gregory Scagnelli  
 CONTACT: ccstuaff@upstate.edu  
 PREREQUISITES: PEDIATRICS  
 MAXIMUM NUMBER OF STUDENTS: 1  
 PERIODS OFFERED: 001, 002, 003, 004, 005, 006, 007, 008, 011, 012

ELECTIVE DESCRIPTION: All aspects of Pediatrics GI. Inpatient and outpatient.

**PSYCHIATRY**

**Preceptorship in Adult Inpatient Psychiatry**  
 ..... **PSYCH6812**  
**4 Credits Preceptor's Site**

ELECTIVE DIRECTOR: Dr. Leslie Major  
 CONTACT: ccstuaff@upstate.edu  
 PREREQUISITES: PSYCHIATRY  
 MAXIMUM NUMBER OF STUDENTS: 1  
 PERIODS OFFERED: 001, 002, 003, 004, 005, 006, 007, 008

ELECTIVE DESCRIPTION: In general, student responsibility would involve initial work-up and care for patients admitted with acute psychiatric disturbances. The student would be expected to learn the appropriate use of the various illnesses, as well as to learn the appropriate use of the various therapeutic modalities. The student would also do a limited amount of consultation and outpatient work under the direction of



his/her supervisor. Preceptor's Site: General Hospital Psychiatric Unit

**Addiction Medicine..... PSYCH6836  
4 Credits**

ELECTIVE DIRECTOR: Dr. Julia Hunter, Dr. Peter Ronan  
CONTACT: ccstuaff@upstate.edu  
PREREQUISITES: ALL THIRD YEAR CLERKSHIPS  
MAXIMUM NUMBER OF STUDENTS: 1  
PERIODS OFFERED: 008, 009, 007

ELECTIVE DESCRIPTION: Students will spend four weeks learning how to diagnose and treat substance use disorders. They will see patients on the inpatient alcohol withdrawal consultation service and in UHS's opioid treatment program (OTP) and office based opioid treatment program (OBOT). They will participate in treatment team meetings for New Horizon's inpatient, IOP, OTP, and OBOT programs and will observe both individual and group counseling across New Horizons' spectrum of services. They will receive training in treating special populations, including pregnant patients with opioid use disorder. Students will also attend the monthly Addiction Medicine journal club and will be expected to complete an assigned reading list.

**RADIOLOGY**

**Diagnostic Radiology ..... RADL7214  
2 Credits Wilson Memorial Hospital**

ELECTIVE DIRECTOR: Dr. Zafar Bajwa, Dr. Thomas Gudas  
CONTACT: ccstuaff@upstate.edu  
PREREQUISITES: INTERNAL MEDICINE and SURGERY  
MAXIMUM NUMBER OF STUDENTS: 1  
PERIODS OFFERED: 01A, 01B, 02A, 02B, 03A, 03B, 04A, 04B, 05A, 05B, 06A, 06B, 07A, 07B, 08A, 08B, 09A, 09B, 10A, 10B, 11A, 11B, 12A, 12B

ELECTIVE DESCRIPTION: A joint program at the two hospitals: Wilson and Binghamton General. The student will participate in daily interpretation of imaging studies in association with staff radiologists. He/She will be assigned on a half-day rotation basis to various subspecialties in Radiology. He/She will be expected to attend all radiological interdisciplinary conferences at the various hospitals when feasible.

**PHYSICAL MEDICINE AND  
REHABILITATION**

**Osteopathic Recognition ..... RMED7608  
4 Credits Preceptor's Site**

ELECTIVE DIRECTOR: Dr. Marita Powell  
CONTACT: ccstuaff@upstate.edu  
PREREQUISITES: ALL THIRD YEAR CLERKSHIPS  
MAXIMUM NUMBER OF STUDENTS: 1  
PERIODS OFFERED: 001, 002, 003, 004, 005, 006, 007, 008, 009, 010, 011, 012

This course is not available in the elective lottery.

ELECTIVE DESCRIPTION: Hands-on medical treatment based on understanding the musculoskeletal, circulatory, lymphatic and nervous systems of the

body. In-depth review of anatomy with emphasis on developing the student's palpatory skills to diagnose tissue texture changes, asymmetry, and restrictions of motion of musculoskeletal structures in the body that cause disease. The student will be taught specific techniques targeted to anatomically manipulate fascia, muscle and bone to improve circulation, joint mobility, restore normal range of motion and/or decrease pain caused by various musculoskeletal strain patterns and disease entities with an emphasis on neurology, orthopedics, and sports medicine.

**SURGERY**

**Advanced Surgical Techniques . SURG8052  
4 Credits Preceptor's Site**

ELECTIVE DIRECTOR: Dr. Nirupama Anne, Dr. Ratnakishore Pallapothu  
CONTACT: ccstuaff@upstate.edu  
PREREQUISITES: SURGERY  
MAXIMUM NUMBER OF STUDENTS: 1  
PERIODS OFFERED: 001, 004, 005, 006, 007, 008, 009, 010, 011, 012

ELECTIVE DESCRIPTION: The objective of advanced surgical techniques is to provide a comprehensive educational exposure to surgical oncology techniques in breast surgery as well as advanced laparoscopy and head and neck surgery. It is for medical students who are interested in learning about the diverse range of surgical techniques and are interested in pursuing a career in general surgery or surgical specialties.