



Paul A. Fisher MD, PhD
Professor and Vice-Chair of Pharmacological Sciences
Associate Director, MSTP (a federally funded MD-PhD Program)
Director of Undergraduate Pharmacology
School of Medicine, BCP 405 Course Co-Director

Stephen A. Vitkun MD, MBA, PhD
SUNY Distinguished Teaching Professor
Professor and Vice-Chair of Anesthesiology
Professor of Pharmacological Sciences
School of Medicine, BCP 405 Course Co-Director

14 May 2019

Dear Adviser/Student:

Spring semester is almost over and Summer sessions (I & II) will soon be here (I officially runs from May 28 – July 7; II from July 8 – Aug 18). Registration is now open for both. For students coming from outside of Stony Brook (quite common) enrollment is freely allowed for both Summer sessions. To do so, you must first simply apply for an ID # followed 3-5 days later by actual course registration. The entire process is administrative only. **Students cannot be turned down.** First go online at <http://www.stonybrook.edu/>, click the “Admissions” tab near the top of the screen and then follow the instructions that appear. Stony Brook students are of course also completely free to enroll for Summer.

As we're sure you're aware, physician 'shadowing' is an extremely important (some might even argue, required) component of successful application to medical school. Indeed it is a significant asset for student entrance into any of the health care professions (e.g., nursing, pharmacy, dentistry and physician's assistant training). We at Stony Brook medical school have developed a program/course uniting pre- or nonclinical education (largely restricted to undergraduate campuses as well as nonclinical graduate programs) with that of the health care professional. To date, our initial course has already been offered several times. The course faculty teach extensively in undergraduate offerings on our University campus and graduate programs at both the Master's and Doctoral levels. As evidence of our long experience in this area and in the high quality of our teaching, our Molecular and Cellular Pharmacology PhD Program (nonclinical) has been supported continuously by the NIH for about 40 years. Our interprofessional course faculty are also extremely active in teaching in the Stony Brook Schools of Medicine, Dentistry, Nursing and Health Technology & Management.

For undergraduates, our online course, BCP 405, provides an opportunity to earn advanced credits, as well as **prepare for immediate and in our experience, highly productive clinical exposure (e. g., physician 'shadowing')**. **They also receive outstanding preparation for careers in multiple health-care-related disciplines, either here at Stony Brook or elsewhere. Finally there are also opportunities for nonclinical graduate students (both PhD level and Master's).**

For further information, consult the Stony Brook undergraduate course catalog (<http://sb.cc.stonybrook.edu/bulletin/current/courses/bcp/> [see BCP 405]). Please do not hesitate to call or e-mail Ms. J. Kito, our course administrator, if you have specific questions. A flyer is attached and also posted at http://www.pharm.stonybrook.edu/sites/default/files/FinalOnlineCourseRecruitmentFlyerMarch2018_0.pdf. Please post as well and request more if needed.

With best regards,

A handwritten signature in black ink, appearing to read "Paul A. Fisher".

Paul A. Fisher MD, PhD
Paul.Fisher@StonyBrook.edu

A handwritten signature in black ink, appearing to read "Stephen A. Vitkun".

Stephen A. Vitkun MD, MBA, PhD
Stephen.Vitkun@StonyBrookMedicine.edu

BE PROACTIVE!

JUMP-START YOUR HEALTH CARE PROFESSIONS EDUCATION PREPARE YOURSELF FOR CLINICIAN SHADOWING

The Stony Brook University Online Course, BCP 405, 'Pharmacology to Pharmacy'

<http://sb.cc.stonybrook.edu/bulletin/current/courses/bcp/>

(Scroll down to 'BCP 405')



INTRODUCTION: This course, offered exclusively online, is designed for undergraduates interested in health care (either basic biomedical science-oriented or clinical). After description and demonstration of common medical procedures, the class introduces many aspects of clinical pharmacology with presentations of clinical vignettes and case discussions, but geared toward students with little or no clinical experience. The inter-professional course faculty includes physicians, scientists, an educator, an advanced practice nurse, and a hospital pharmacist. Students have the opportunity to ask questions directly through online chats.

The course is offered throughout the year in semester format (twice in the summer [registration now open], once each in the fall [registration also now open; the course however is full], winter and spring). The course is valued at 3 credits, can only be taken for credit once, counts toward the SUNY Stony Brook bachelor's degree and satisfies specific SBU graduation requirements to "Prepare for Life-long Learning, Evaluate and Synthesize Researched Information (SBC-ESI)."

GRADING/COURSE FORMAT: Grades are based on student performance on fact-based quizzes offered frequently (7-15 times) throughout the course and on an equal number of formal online discussions with expert Stony Brook faculty who have broad experience as physicians, biomedical scientists, advanced practice nurses, pharmacists and educators. Each quiz is 5-10 questions in length, and like all other aspects of the course, is administered online and in an 'open-book' format. Graded discussions are formal, involving questions posed by the faculty. After completing each session, students are guided to apply this newfound knowledge within clinical scenarios. Interactions with course faculty not only provide opportunities to learn and apply this material but also to network with professionals working in an academic medical center.

Topics covered include 1) hospital culture and etiquette; 2) disease manifestation/patient-care simulation, both with high-tech mannequins and live models; 3) procedure demonstrations including intravenous line placement, lumbar puncture (spinal tap), nasogastric (feeding) tube placement, and endotracheal intubation and airway management; 4) drug development and regulatory approval; 5) research and biomedical ethics; 6) pharmacy practice, both in the hospital and in the community; 7) drugs in society as well as in the lay press; and 8) modern pharmacokinetics, pharmacodynamics and pharmacogenomics.

Students completing this course have been uniformly enthusiastic. Representative responses to "What was valuable about this course?" include: 1) "very informative, prepares you for the health sciences;" 2) "I found the course very interesting. It explained things in an easy and clear way. I was able to learn the material easily while working and commuting full time;" and 3) "From this class, I personally gained so much medical knowledge and even the laws and regulations behind the scenes. Whenever my co-workers don't feel well or something hurts, they always come to me with questions because they knew I took this class along with anatomy because I would be studying during my shift. I personally gained, honestly, an epiphany of what I wanted to do with my life, FINALLY!"

Paul A. Fisher MD, PhD
Paul.Fisher@StonyBrook.edu



Stephen A. Vitkun, MD, MBA, PhD
Stephen.Vitkun@StonyBrookMedicine.edu



Additional Student Comments

(Summer)

"I just wanted to express to you how much I enjoyed the course over the summer. I learned so much information which intrigued and excited me to begin an education and career in the medical field. After taking this course, I can't wait to be able to have some hands on experience.

"I enjoyed taking this course over the summer. The single best thing were the discussions posts.

"There are many good things I found about the course. Overall, I really enjoy how the course was managed and how it progressed over the summer. The course progressed at a good speed which did not feel overwhelming or confusing.

"It was an amazing class that was very informative and well done.

"This course helped me see the connection with undergraduate pre-med courses and actual medicine.

"Everything was FANTASTIC about this course! I loved it. It was honestly the best class I have taken. Nothing was bad about this course...

"I'm really grateful that this course was offered online."

(Fall)

"Some of the features I liked about this course include no exams, interesting material and effective lecturers. Although this was an online class, I was still able learn a great amount of material regarding medicine and health science.

"This course was very informative. The course integrated a lot of information without it being overwhelming or confusing. The professors all gave very good explanations and showed us how to demonstrate several procedures, which I truly enjoyed. For this course I can honestly say there was not a bad feature.

"The best feature of this course is the clear instructions. Online courses may be confusing because everything is virtual and there is no professor standing in front of you telling you what to do. Fortunately, Professor Fisher was extremely responsive and made numerous announcements on Blackboard. Professor Fisher made this upper level, critically engaging course, do-able.

"I very much so enjoyed this course and what was taught to us.

"for me that is super cool and interesting to have a class give you a different outlook on your favorite thing in life.

"what is good this course is its simplicity and straightforwardness. The element of the course which is contained in the class syllabus is simple, relevant, easy to grasp and understand. The course objectives and the course goals are SMART."

(Winter)

I liked this course because instead of just learning about general complications, diagnoses, and situations, we learned about specific cases. The discussion boards allowed me to perform research about a specific diagnosis (example: the GERD discussion board) and learn about treatments for common diseases.

I signed up to take this course because I have a passion for the sciences. Pharmacy is something that personally interests me, even if it's not necessarily what I intend to do.

I gained knowledge on specific diagnoses. This is especially interesting to me because I feel more confident speaking with physicians on topics that I am interested in.

I really enjoyed taking this course. I was able to learn a variety of procedures and information about the basics of pharmacology. The single best feature of this course for me was the informative lecture slides. Not only were the actual slides helpful but as well as the transcripts.

This class was very well organized and straight forward in the syllabus.

I personally gained a lot of insight into how a hospital actually works, from multiple perspectives. This class was truly interesting in a way far different from any other class I have taken here at Stony Brook.

The best feature of the course was that there were transcriptions that came with most of the videos. It helped a lot since I'm a visual learner. Another good thing was that there was an overall deadline instead of a different deadline for each session. I didn't have any issues with the way the course was administered.

I really enjoyed taking this course. The single best feature for me was the fact that I can get the work done as I wanted. I enjoyed not having to wait for each session to open up and having time to do each session on my own time, when I could.

I feel like I gained a lot of knowledge on many of the everyday things that take place in a hospital and information regarding drugs and pharmacies.

The platform the course is given on is easy to use and helped me to stay organized.

Overall I wouldn't say there was anything bad about this course. I felt the course exposed me to relevant and important topics I am excited to learn more about.

Personally I gained a profound appreciation for the amount of knowledge and experience it will take to be a successful health care practitioner, it has inspired me to keep pursuing my goal of becoming a PA. I am fascinated by the topics presented to us in this course and look forward to expanding upon my knowledge

I loved that this course was offered online; as a commuter student it is nice to be able to fulfill requirements from the comfort of my home.

(Spring)

"Everything about this course was great.

"I think taking this class will help me succeed once I am in a nursing program

"I appreciated how organized this course is and that it was online.

"This is definitely one of the top/favorite courses I have taken at Stony Brook. I wish there were more like it...

"I think what I personally gained from this course is that I definitely want to become a doctor...

"There were many things that were good about this course...

"I truly enjoyed this class and if there were a part 2 would definitely enroll in it.

"I signed up for this course because I am currently trying to decide between pursuing an MD or a PhD and was hoping to learn more about pharmacology. Thanks for a great class!

"It felt like it was a very one on one experience.

"I'm shocked at the amount of information I retained from the class. Job well done as far as online classes go. Thanks for everything!

"I loved this class... I definitely think this is an excellent course for pre-med and health students... The best feature of this class was that it is online.

"I am SO glad that I had the opportunity to take this class, and that I decided to take it. I will definitely recommend this to anyone."