

**MEDICAL IMAGING SCIENCES AND APPLICATIONS -- FALL 2022
COURSE POLICIES AND PERFORMANCE EVALUATION**

General Course Policies

The overall goal of this course is to give you the mathematical & instrumentation basics of how molecular imaging using single photon emission tomography (SPECT) and positron emission tomography (PET-CT, PET-MRI) work and provide an overview of biomedical applications in oncologic, brain and cardiac imaging.

The specific topics that will be covered are listed in the course syllabus. The instructors involved in this course are committed to helping you reach this better understanding. Please do not hesitate to contact any of us if there is any concept that you do not fully understand or if you have any questions or concerns regarding the course. If there any questions regarding these policies, please contact the course directors (Georges El Fakhri at 726-9640) or Moses Wilks (643-1625; MWILKS@mgh.harvard.edu).

Course material and schedule can be accessed via the course website:

<https://gordon.mgh.harvard.edu/gc/education-training/courses/hst-565-medical-imaging-sciences-and-applications-fall-2022/>

Due to COVID restrictions, some guest lecturers may need to give remote lectures. In these rare cases, zoom lectures will be given. A link to the zoom meeting for these is provided in the course syllabus. Notice will be given well in advance if a lecture will not be in person.

1. It is clear from the course syllabus that we are presenting a sizeable amount of material in a limited amount of time. **For this reason, your attendance at all components of the course including class discussion sessions, and problem sessions is mandatory, and, therefore, attendance will be recorded. In addition, classroom sessions will begin promptly at 4:30 PM, and thus punctuality is also mandatory.**

2. Discussion/lecture sessions: Students are expected to carefully read the assigned textbook sections and any additional handouts prior to class. Page numbers of the required reading in the text will be provided ahead of time. It may also be helpful to note any sections of the readings that are not fully understood and may require additional classroom discussion. Please ask questions in class! The more interactive these sessions are, the more effective the educational experience.

3. Homework: Homework is an educational tool that helps to solidify the understanding of the material covered in the assigned readings and the classroom discussions. The homework will consist of a mixture of problems to be solved as well as several multiple choice questions that test basic facts about the topics discussed. In many cases, the instructors will provide some generous hints about how to do some of the homework problems on the day they are handed out. You will typically have at least one week to complete the homework sets. The class discussion on the day the sets are due will be dedicated to reviewing the problems and the methods used to solve them. Please try to do the homework problems by yourself. **If you have some major conceptual problem about one or more homework problems, PLEASE contact the course director or any of the course instructors as soon as possible and we will be very happy to meet with you to try to clear things up!** Please don't feel embarrassed or intimidated. We all strongly believe that there is no such thing as a stupid question and if there is an issue that you do not understand, most likely other students are confused as well! During the homework session, please grade your work and give us your grade as it will count towards your homework grade.

4. Tutorial sessions: If there is any topic covered in course with which you do not feel comfortable, please contact one or more of the instructors. In addition, if there is a topic with which the entire class feels needs to be covered in more detail, we can arrange a special session. Please get in touch with us even if only to tell us that you think the reading material is easy, you understand all of it, and you don't have any questions! These casual, informal meetings will also provide valuable feedback to the instructors on how everyone is doing in the course so we can make adjustments, if necessary.

Performance evaluation

Lecture Participation: 10% of grade, based on attendance and participation in in-class discussions. Attendance and punctuality for lectures are mandatory. Students should come to class having read any assigned readings or handouts, prepared to partake in discussion of topics to be covered.

Homework: 20% of grade, based on attendance and participation in homework review sessions, and instructors' impressions of your understanding of how to do the problems based on your grading of your own work.

Mid-term and final exams: 35% for the mid-term and 35% for the final; These exams consist of short-answer-style questions, although there could also have some multiple-choice and true-false questions, as well as problems that require math calculations.