

COLUMBIA UNIVERSITY

IN THE CITY OF NEW YORK

DEPARTMENT OF APPLIED PHYSICS AND APPLIED MATHEMATICS

July 13, 2012

To: Graduate Students in the Department of Applied Physics and Applied Mathematics

On behalf of the faculty and staff of the Department of Applied Physics and Applied Mathematics (APAM), I'd like to welcome you to the start of a new academic year.

We have scheduled times when you can meet with faculty advisors who will help you with the logistics of registration and program approvals. Please take the time to read the information below and plan to arrive at the Departmental office at the specified times. MS students (who are not in the Medical Physics Program) will have an opportunity to meet with their advisors at 11:30 a.m. All new Medical Physics graduate students meet with their advisor following the Medical Physics Orientation which begins at 1:30 p.m. on Wednesday, August 29, in room 214 Mudd.

Continuing students who did not register last April may register on-line from July 30 - August 10 AND August 28 - August 30. Before being allowed to register, each student must see an advisor to have his/her program approved, signed and submitted to the APAM Department staff.

Faculty advisors will be available to meet with students on **Wednesday, August 29.**

First year *Master of Science* students in:

Applied Mathematics (AM) see *Prof Weinstein (11:30am-2:50pm, 210 Mudd)*

Applied Physics (AP) see *Prof Mauel (11:30am-2:50pm, 213 Mudd)*

Materials Science and Engineering (MSE) see *Prof Marianetti (11:30am-2:50pm, 1106B Mudd)*

Medical Physics (MP) see *Prof Arbo (3:00pm-4:00pm, 214 Mudd)*

Continuing students may arrange to have their programs approved during the summer. To avoid late fees and have program approval before classes begin, it is important to meet with an advisor sometime before August 30.

Your liaison in the APAM office is the Student Services Coordinator, Montserrat Fernandez-Pinkley. New students should contact Montserrat (and not the advisor) with any questions before registration day. Medical Physics students should contact Marlene Arbo, the Medical Physics Program Coordinator. Before seeing your advisor, check in the APAM office (200 Mudd) to make sure the location of the advisor meeting has not changed.

New Students are required to attend the events of the School of Engineering and Applied Sciences (SEAS) Orientation from Tuesday, August 28 through Friday, August 30 (RSVP at http://www.surveymonkey.com/s/Fall2012_NewGraduateStudentOrientation.) Please consult the new student check-list at the following link if you haven't already done so <http://engineering.columbia.edu/files/engineering/new-student-checklist.pdf>

International graduate students are also required to attend the International Students and Scholars Office (ISSO) orientation, which will be held on Friday, August 24. The schedule can be found at http://www.columbia.edu/cu/isso/incoming/New_International_Student_Orientation_Program.pdf

Classes begin on Tuesday, September 4. A list of courses offered by the Department during the fall semester is enclosed, along with a list of the faculty. If you have any questions, the staff in the Department office will be happy to help you. The Department telephone number is 212-854-4457.

Finally, I would like to invite you to a welcoming party for faculty, students, and staff on Tuesday, September 11, at 3:30 p.m. in Room 200 Mudd. Subsequently, an informal afternoon tea for all students will be held every Friday that classes are in session at 3:00 p.m. In addition to our Friday teas, APAM has also instituted an APAM Friday Social (Happy) Hour that takes place approximately once a month at 4:30 p.m. during the academic year, featuring free beer and snacks, the first of which is scheduled for Friday, August 31. I look forward to meeting with all of you, see you soon.

Postscript

English Proficiency:

Language proficiency is the responsibility of the student. English communication skills are of critical importance to your current and future academic and/or professional career.

NYC Fire Department Certificate of Fitness and Laboratory Safety Training:

All second year and later non-theory graduate students who are doing experimental research and do not have a NYC Fire Department Certificate of Fitness Card MUST take and pass the Certificate of Fitness Exam by the last day of October in the Fall term. The Certificate of Fitness must be renewed every 3 years. In addition, all second year and later non-theory graduate students who are doing experimental research and have not yet received the initial training session specific to their lab activities must attend a safety training session each Fall term.

Housing:

Students who have been assigned to University housing should have already been informed and given instructions directly by the Housing Office. If you have not heard by now, please contact Jonathan Stark in the Office of Graduate Student Services (phone: 212-854-8930; email: jrs2139@columbia.edu).

Students who have elected to view a university apartment (not a dorm room), rather than accept an assignment by mail, will participate in a lottery process through the Office of University Apartment Housing (UAH).

FAFSA:

Unfortunately, at this time, Departmental Financial Aid is not available for Master of Science students. For alternative funding sources, please consult the following website <http://engineering.columbia.edu/financial-aid-2>. Graduate students (who are US citizens or permanent residents) desiring financial aid can also complete the 2012-2013 FAFSA prior to the start of the fall term (you can apply online at www.fafsa.ed.gov). The school code to be used on the form is E00120.

Immunizations:

New York State requires that all Columbia students taking 6 or more points show proof of immunity to measles, mumps and rubella. Documentation must be presented to the Columbia Health Services by July 30.

Meningococcal Meningitis Vaccination Decision: New York State public health law requires that college and university students receive information from their institutions about meningococcal meningitis and the vaccine that protects against most strains of the disease that can occur on university campuses.

Columbia students must make an informed decision about being vaccinated and certify their decision online <https://ssol.columbia.edu/ssv/crt/menIntro.html>. Full instructions are given online, and the process takes two to three minutes. Students must formally indicate their decision about being vaccinated before they will be permitted to register for classes.

General Assistance:

After arriving in New York, new students are encouraged to contact one of the continuing graduate students listed below for answers to questions—academic or otherwise, directions, or friendly advice.

FIELD	NAME	E-MAIL
APPLIED MATHEMATICS	Mike Jenkinson	mjj2122@columbia.edu
APPLIED PHYSICS	Chris Stoafer	ccs2142@columbia.edu
MATERIALS SCIENCE	Mikhail Treger	mat2170@columbia.edu
MEDICAL PHYSICS	Brian Helbig	bh2396@columbia.edu

I wish all of you success in your studies,



Ismail C. Noyan
Chair, Department of Applied Physics and Applied Mathematics
Professor, Materials Science and Engineering

New Graduate Students
APAM DEPARTMENT ORIENTATION
Wednesday, August 29, 2012

**APPLIED MATH, APPLIED PHYSICS, MATERIALS SCIENCE &
ENGINEERING**

**NEW MASTER OF SCIENCE STUDENTS IN APPLIED MATHEMATICS,
APPLIED PHYSICS AND MATERIALS SCIENCE AND ENGINEERING**

11:30 AM-2:30 PM	Applied Mathematics MS students meet with <i>Prof. Michael Weinstein (for Guillaume Bal)</i>	210 Mudd 212 Mudd (office)
12:30 AM-2:30 PM	Applied Physics students meet with advisor <i>Prof. Michael Mauel</i>	213 Mudd
11:30 AM-2:30 PM	Materials Science MS students meet with advisor <i>Prof. Chris Marianetti (for William Bailey)</i>	1106B Mudd 1144 Mudd (office)

All new students should register on Wednesday, August 29

12:30 PM-1:30 PM	LUNCH	200 Mudd
2:45-3:15 PM	Department Tea	200 Mudd

NEW MASTER OF SCIENCE STUDENTS IN MEDICAL PHYSICS

12:30 PM-1:30 PM	LUNCH	200 Mudd
1:30 PM	Medical Physics Orientation	214 Mudd
3:00-4:00 PM	Medical Physics students meet with advisor <i>Prof. John Arbo</i>	214 Mudd
2:45-3:15 PM	Department Tea	200 Mudd

Columbia University
Department of Applied Physics and Applied Mathematics

Medical Physics Courses 2012-2013

Course Registration	Points	Days/Time	Instructor	Room	Call Number
Fall 2012 Term – 1st YEAR STUDENTS					
APPH E4010x	3	Tu 7-9:30	Ostrow	TBA	67148
APPH E4330x	3	W 7-9:30 or W 5:30-8:20	Zaider	TBA	28647
APPH E4600x	3	Th 4:10-6:40	Meli	214 Mudd	15820
APPH E4710x	3	M 5-10:00	Arbo	214 Mudd/174 Terrace	20308
Fall 2012 Term – CONTINUING STUDENTS					
APPH E4500x	3	Th 7-9:30	Christman	214 Mudd	72850
APBM E4650x	3	TuTh 4:10-5:25	Rozenshtein &	Radiology Conf. 3-303	86782
APPH varies	6	varies	Lignelli		
		E6333x Radiation therapy (prereq: E6335)	Wuu	TBA	87191
		E6340x Diagnostic radiology (prereq: E6330)	Nickoloff	TBA	67796
		E6365x Nuclear medicine (prereq: E6319)	Esser	TBA	81498
		E6380x Health physics (pre/coreq: E4500)	Christman	TBA	77350
<i>Electives:</i>					
APPH E4990/001	1	Th 12:30-2:30	Amols	TBA	26833
APAM E6650x	1-6	varies	Staff		
APAM E4999x	1	varies	Staff		
Spring 2013 Term – 1st YEAR STUDENTS					
APPH E4550y	0	Th 4:15-5:15	Arbo	214 Mudd	
APPH E4711y	3	M 5-10:00	Arbo	214 Mudd/174 Terrace	
APPH E6319y	3	Tu 5:30-7:30	Esser	Radiology Conf. Rm. 3-303	
APPH E6330y	3	W 4:10-6:40	TBA	TBA	
APPH E6335y	3	Th 6:30-9:30	Wuu	Radiation Oncology Conf. Rm. 11	
*APPH E4501y	0	M-F 9-5	TBA	TBA	

Summer 2013 Term *Two-week Medical Health Physics Tutorial, taken at the end of May
Full-length Practicum(s)
Comprehensive Exam, mid August

No Summer Registration

C O L U M B I A U N I V E R S I T Y
MEDICAL PHYSICS PROGRAM

DEPARTMENT OF APPLIED PHYSICS AND APPLIED MATHEMATICS

Faculty and Staff Academic and Clinical Research Interests

I. C. Noyan, Professor (APAM) and Program Co-Director: x-ray and neutron scattering, radiation sources and detectors.

Cheng-Shie Wu, Professor (Radiation Oncology), Program Co-Director, and Professional Advisor: microdosimetry, biophysical modeling, image-guided radiation therapy, gel dosimetry, dosimetry for radiation-induced secondary cancer.

Howard Amols, Adjunct Professor (Radiation Oncology); Attending Physicist (Medical Physics, MSKCC): intensity modulated and image guided radiation therapy, hypofractionated radiation therapy, quality assurance for advanced technology radiation therapy.

John C. Arbo, Associate (APAM) and Academic Advisor: radiation detectors, radiation transport, *in vivo* neutron activation.

Edward A. Christman, Adjunct Professor (APAM): health physics, radiation safety, radiation dosimetry, microdosimetry, occupational health and safety.

Peter D. Esser, Professor (Radiology): molecular imaging (PET, nuclear medicine, nuclear cardiology), clinical medical physics, clinical image processing and communications.

Jerome A. Meli, Adjunct Associate Professor (APAM): brachytherapy, dosimetry, clinical applications of brachytherapy.

Edward L. Nickoloff, Professor (Radiology): radiation dosimetry, CT dosimetry and digital imaging systems, image quality assessments, x-ray spectrum analysis, quality control measurements.

Stephen L. Ostrow, Adjunct Professor (APAM): radiological engineering; standoff detection of explosives, toxic chemicals, and nuclear materials; THz radiation applications.

Lawrence N. Rothenberg, Adjunct Professor (APAM), former Associate Professor of Physics (Radiology, Weill Cornell Medical College), Clinical Member *Emeritus* (MSKCC), past President (AAPM): diagnostic x-ray image quality assessments, mammography and CT dosimetry, radiation protection.

Marco Zaider, Senior Lecturer (Radiation Oncology); Attending Physicist and Head of Brachytherapy Physics (MSKCC); Professor of Physics, (Radiology, Weill Cornell Medical College): medical physics, biophysical modeling, microdosimetry, quantum chemistry, radiation transport.

Anatomy Faculty

Angela Lignelli, Assistant Professor (Radiology): radiology, neuroradiology.

Anna Rozenstein, Associate Clinical Professor (Radiology): radiology, thoracic imaging, imaging of pulmonary vascular diseases.

APAM ACADEMIC CALENDAR 2012-2013

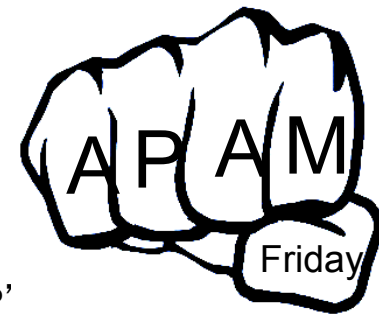
Fall 2012

Friday, August 31	APAM Friday!
Monday, Sep 3	Labor Day - University Holiday
Tuesday, Sep 4	First Day of Classes
Tuesday, Sep 11	APAM Welcome Party!
Friday, Sep 14	End of Change of Program Period, <u>Last Day to Add Class</u> , Last Day to Receive Tuition Refund for Class Dropped
Tuesday, Oct 9	Last Day to Drop Class for Barnard, Columbia College, General Studies, SIPA, GSAS, and Continuing Education.
Wednesday, Oct 17	October Degrees Conferred
Thursday, Oct 18	Midterm Date
Monday, Nov 5	Academic Holiday
Tuesday, Nov 6	Election Day - University Holiday
Thursday, Nov 15	Last Day to Pass/Fail And Last Day to Drop Class for Schools Not Noted Above
Thursday, Nov 22	Thanksgiving Day - University Holiday
Friday, Nov 23	University Holiday
Friday, Dec 7	APAM Holiday Party!
Monday, Dec 10	Last Day of Classes
Tue, Dec 11-Thurs, Dec 13	Study Days
Fri, Dec 14-Fri, Dec 21	Final Examinations

Spring 2013

Monday, Jan 21	Martin Luther King Jr. Birthday Observed - University Holiday
Tuesday, Jan 22	First Day of Classes
Friday, Feb 1	End of Change of Program Period, Last Day to Add Class, Last Day to Receive Tuition Refund for Class Dropped
Wednesday, Feb 13	February Degrees Conferred
Tuesday, Feb 26	Last Day to Drop Class for Barnard, Columbia College, General Studies, SIPA, GSAS, and Continuing Education.
Monday, Mar 11	Midterm Date
Mon, Mar 18-Fri, Mar 22	Spring Break
Thursday, Mar 28	Last Day to Pass/Fail And Last Day to Drop Class for Schools Not Noted Above
Monday, May 6	Last Day of Classes
Tue, May 7-Thur, May 9	Study Days
Fri, May 10-Fri, May 17	Final Examinations
Wednesday, May 22	May Degrees Conferred, Commencement

APAM Friday Announcement



Please take the following survey:

Are you a new student?

Are you unsure what APAM is all about and how super sweet we are?

Do you want to experience the mind-blowingly awesome event that is “APAM Friday?”

Do you still need to learn what APAM Friday even is?

Do you want to get awesome?

If you answered “Yes” to any of the above questions, answered “No” to any of them, or didn’t even read them, you *need* to clear your calendar for **Friday, August 31st**, the semester’s first APAM Friday.

According to the Oxford English Dictionary:

APAM Friday (ā’ pām frī’ dā) *noun*:

1. the departmental social hour that occurs one Friday every month for the Applied Physics and Applied Math Department at Columbia University
2. informal gathering of students, faculty, and administrators in room 200 Mudd
3. an event organized by grad students with free beer, snacks, and other delightful beverages to promote awesomeness
4. a time to meet and socialize with people within the Department, as well as get awesome
5. the talk of the town among the entire University as being the premiere jammy thrown by anybody, ever, in the history of the world.

Details

What: APAM Friday

Where: Room 200 Mudd

When: Friday, August 31st, 4:30 pm

Who: YOU and the rest of APAM

Why: Because if you are reading this, then you are a new student, and you want to meet everyone in the department. Seriously, let’s throw down.