UNIVERSITY OF KENTUCKY

Current Course Report

6/17/2014 5:06:10 PM

RECEIVED
SEP 26 2014
OFFICE OF THE SENATE COUNCIL

Course Information

Date Submitted: 6/17/2014

Current Prefix and Number: PAS - Physician Assistant Studies , PAS 656 PATIENT EVALUATION AND MANAGEMENT

Other Course:

Proposed Prefix and Number: PAS 656

What type of change is being proposed?

Major Change

Should this course be a UK Core Course? No

1. General Information

a. Submitted by the College of: HEALTH SCIENCES

b. Department/Division: Physician Assistant Studies

c. Is there a change in 'ownership' of the course? No

If YES, what college/department will offer the course instead: Select...

e. Contact Person

Name: Kevin Schuer

Email: Kevin.Schuer@uky.edu

Phone: 859-218-0838

Responsible Faculty ID (if different from Contact)

Name:

Email:

Phone:

f. Requested Effective Date

Semester Following Approval: Yes OR Effective Semester:

2. Designation and Description of Proposed Course

a. Current Distance Learning (DL) Status: Already approved for DL*

b. Full Title: PATIENT EVALUATION AND MANAGEMENT

Proposed Title: Patient Evaluation and Management

c. Current Transcript Title: PATIENT EVALUATION AND MANAGEMENT

Proposed Transcript Title: Patient Evaluation and Management

d. Current Cross-listing: none

Proposed – ADD Cross-listing :

Proposed – REMOVE Cross-listing:

e. Current Meeting Patterns

LECTURE: 32

LABORATORY: 16

Proposed Meeting Patterns

LECTURE: 48

LABORATORY: 16

f. Current Grading System: ABC Letter Grade Scale

Proposed Grading System: *Letter (A, B, C, etc.)*

g. Current number of credit hours: 3

Proposed number of credit hours: 4

h. Currently, is this course repeatable for additional credit? No

Proposed to be repeatable for additional credit? No

If Yes: Maximum number of credit hours:

If Yes: Will this course allow multiple registrations during the same semester? No

2i. Current Course Description for Bulletin: A combination of formal presentations, laboratory practice sessions, and supervised patient care experiences involving patient evaluation and management skills. Lecture, two hours; laboratory, three hours per week.

Proposed Course Description for Bulletin: The PAS 656 course is combination of lecture, formal presentations, laboratory practice sessions, and supervised patient care experiences involving patient evaluation and management skills. Prereq: Enrollment in Physician Assistant Program or consent of instructor.

2j. Current Prerequisites, if any: Prereq: Enrollment in Physician Assistant Program or consent of instructor.

Proposed Prerequisites, if any: Prereq: Enrollment in Physician Assistant Program or consent of instructor.

2k. Current Supplementary Teaching Component:

Proposed Supplementary Teaching Component: No Change

3. Currently, is this course taught off campus? Yes

Proposed to be taught off campus? Yes

If YES, enter the off campus address: via Distance learning

4. Are significant changes in content/student learning outcomes of the course being proposed? Yes

If YES, explain and offer brief rational: RATIONALE We are proposing significant changes in content/student learning outcomes for the PAS 656 course (when approved) that will increase the course credit hours for PAS 656 from 3.0 to 4.0. The UKPAS program has maintained the PAS 656 course at 3.0 credit hours since 2000 when the program was converted to a Masters program. Since 2000, new instructional techniques as well as new content areas designed to meet the needs of the 21st century health sciences student have been, and continue to be, developed. The additional credit hour in PAS 656 will allow the primary course instructor to utilize as well as explore teaching techniques to include small group learning as well as peer-to-peer instruction during lecture. Further, the additional credit hour will allow the course instructor to not only cover course material in more depth, but allow for additional instruction and simulation in areas such as patient communication as well as to develop student hands-on skills requisite for physician Assistant practice. This increase will also allow for the utilization of clinical and practice case scenarios. Programmatic feedback generated both from external as well as internal reflection has identified student limitations in communication skills as well as hands on skills (ie: suturing,i.v. placement, ect). It is our belief that the additional credit hour used to cover the above content areas will not only address the aforementioned limitations, but also enhance student preparedness to successfully enter the clinical phase of training.

5a. Are there other depts. and/or pgms that could be affected by the proposed change? No

If YES, identify the depts. and/or pgms:

5b. Will modifying this course result in a new requirement of ANY program? Yes

If YES, list the program(s) here: The addition of 1 credit hour to this course will raise the credit hours for the Physician Assistant Studies Master's Degree program from a total of 93 hours to a total of 94 hours. A curriculum change form is being submitted with this proposed course change.

6. Check box if changed to 400G or 500: No

Distance Learning Form

Instructor Name:

Instructor Email:

Internet/Web-based: No

Interactive Video: No

Hybrid: No

1.How does this course provide for timely and appropriate interaction between students and faculty and among students? Does the course syllabus conform to University Senate Syllabus Guidelines, specifically the Distance Learning Considerations?

2.How do you ensure that the experience for a DL student is comparable to that of a classroom-based student's experience? Aspects to explore: textbooks, course goals, assessment of student learning outcomes, etc.

3.How is the integrity of student work ensured? Please speak to aspects such as password-protected course portals, proctors for exams at interactive video sites; academic offense policy; etc.

4.Will offering this course via DL result in at least 25% or at least 50% (based on total credit hours required for completion) of a degree program being offered via any form of DL, as defined above?

If yes, which percentage, and which program(s)?

5.How are students taking the course via DL assured of equivalent access to student services, similar to that of a student taking the class in a traditional classroom setting?

6.How do course requirements ensure that students make appropriate use of learning resources?

7.Please explain specifically how access is provided to laboratories, facilities, and equipment appropriate to the course or program.

8.How are students informed of procedures for resolving technical complaints? Does the syllabus list the entities available to offer technical help with the delivery and/or receipt of the course, such as the Information Technology Customer Service Center (http://www.uky.edu/UKIT/)?

9.Will the course be delivered via services available through the Distance Learning Program (DLP) and the Academic Technology Group (ATL)? NO

If no, explain how student enrolled in DL courses are able to use the technology employed, as well as how students will be provided with assistance in using said technology.

10.Does the syllabus contain all the required components? NO

11.I, the instructor of record, have read and understood all of the university-level statements regarding DL.

Instructor Name:

SIGNATURE|KOSKAF0|Karen O Skaff|PAS 656 CHANGE Dept Review|20140603

SIGNATURE|PNASH|Phyllis J Nash|PAS 656 CHANGE College Review|20140603

SIGNATURE|JEL224|Janie S Ellis|PAS 656 CHANGE Senate Council Review|20140604

SIGNATURE|ZNNIKO0|Roshan N Nikou|PAS 656 CHANGE Graduate Council Review|20140604

SIGNATURE|KOSKAF0|Karen O Skaff|PAS 656 CHANGE Approval Returned to Dept|20140616

Courses | Request Tracking

Course Change Form

https://myuk.uky.edu/sap/bc/soap/rfc?services=

Open in full window to print or save

[redacted]

Attachments:

Browse... No file selected. [redacted]

	ID	Attachment
Delete	3510	PAS 656 combined proposalRev2.pdf
Delete	3530	PAS 656 2015 Spring Syllabus Final.pdf

First 1 Last

Select saved project to retrieve... [redacted]

NOTE: Start form entry by choosing the Current Prefix and Number
(*denotes required fields)

	Current Prefix and Number:	PAS - Physician Assistant Studies PAS 656 PATIENT EVALUATION AND MANAGEMENT	*Proposed Prefix & Number:* (example: PHY 401G) ☐ Check if **same** as current	PAS 656

*	What type of change is being proposed?	◉ Major Change ○ Major – Add Distance Learning ○ Minor - change in number within the same hundred series, exception 600-799 is the same "hundred series" ☐ Minor - editorial change in course title or description which does not imply change in content or emphasis ○ Minor - a change in prerequisite(s) which does not imply a change in course content or emphasis, or which is made necessary by the elimination or significant alteration of the prerequisite(s) ○ Minor - a cross listing of a course as described above

Should this course be a UK Core Course? ○ Yes ◉ No

If YES, check the areas that apply:

☐ Inquiry - Arts & Creativity	☐ Composition & Communications - II
☐ Inquiry - Humanities	☐ Quantitative Foundations
☐ Inquiry - Nat/Math/Phys Sci	☐ Statistical Inferential Reasoning
☐ Inquiry - Social Sciences	☐ U.S. Citizenship, Community, Diversity
☐ Composition & Communications - I	☐ Global Dynamics

1. General Information

a. Submitted by the College of: HEALTH SCIENCES Submission Date: 6/20/2014

b. Department/Division: Physician Assistant Studies

c.* Is there a change in "ownership" of the course?

○ Yes ◉ No If YES, what college/department will offer the course instead? Select...

e.* * Contact Person Name: Kevin Schuer Email: Kevin.Schuer@uky.edu Phone: 859-218-0838
* Responsible Faculty ID (if different from Contact) Email: Phone:

f.* Requested Effective Date: ◉ Semester Following Approval OR Specific Term: 2

2. Designation and Description of Proposed Course.

a. Current Distance Learning(DL) Status:
○ N/A
◉ Already approved for DL*
○ Please Add
○ Please Drop

*If already approved for DL, the Distance Learning Form must also be submitted unless the department affirms (by checking this box) that the proposed changes do not affect DL delivery.

b.	**Full Title:**	PATIENT EVALUATION AND MANAGEMENT	*Proposed Title: **	Patient Evaluation and Management

c.	**Current Transcript Title** (if full title is more than 40 characters):	PATIENT EVALUATION AND MANAGEMENT
c.	*Proposed Transcript Title (if full title is more than 40 characters):*	Patient Evaluation and Management

d.	**Current Cross-listing:**	☑ N/A	OR	Currently[3] Cross-listed with (Prefix & Number):	none
	Proposed – ADD[3] Cross-listing (Prefix & Number):				
	Proposed – REMOVE[3,4] Cross-listing (Prefix & Number):				

e.	**Courses must be described by at least one of the meeting patterns below. Include number of actual contact hours[5] for each meeting pattern type.**				
Current:	Lecture 32	Laboratory[5] 16	Recitation	Discussion	Indep. Study
	Clinical	Colloquium	Practicum	Research	Residency
	Seminar	Studio	Other	Please explain:	
Proposed: *	Lecture 48	Laboratory[5] 16	Recitation	Discussion	Indep. Study
	Clinical	Colloquium	Practicum	Research	Residency
	Seminar	Studio	Other	Please explain:	

f.	**Current Grading System:**	ABC Letter Grade Scale		
	*Proposed Grading System:**	◉ *Letter (A, B, C, etc.)* ○ *Pass/Fail* ○ *Medicine Numeric Grade (Non-medical students will receive a letter grade)* ○ *Graduate School Grade Scale*		
g.	**Current number of credit hours:**	3	*Proposed number of credit hours:**	4
h.*	**Currently, is this course repeatable for additional credit?**			○ Yes ◉ No
*	*Proposed to be repeatable for additional credit?*			○ Yes ◉ No
	If YES:	*Maximum number of credit hours:*		
	If YES:	*Will this course allow multiple registrations during the same semester?*		○ Yes ◉ No

i. **Current Course Description for Bulletin:**

A combination of formal presentations, laboratory practice sessions, and supervised patient care experiences involving patient evaluation and management skills. Lecture, two hours; laboratory, three hours per week.

* *Proposed Course Description for Bulletin:*

The PAS 656 course is combination of lecture, formal presentations, laboratory practice sessions, and supervised patient care experiences involving patient evaluation and management skills. Prereq: Enrollment in Physician Assistant Program or consent of instructor.

j. **Current Prerequisites, if any:**

Prereq: Enrollment in Physician Assistant Program or consent of instructor.

* *Proposed Prerequisites, if any:*

Prereq: Enrollment in Physician Assistant Program or consent of instructor.

k.	**Current Supplementary Teaching Component, if any:**	○ Community-Based Experience ○ Service Learning ○ Both
	Proposed Supplementary Teaching Component:	○ Community-Based Experience ○ Service Learning

		○ Both ● No Change
3.	**Currently, is this course taught off campus?**	● Yes ○ No
*	*Proposed to be taught off campus?*	● Yes ○ No
	If YES, enter the off campus address: via Distance learning	
4.*	**Are significant changes in content/student learning outcomes of the course being proposed?**	● Yes ○ No
	If YES, explain and offer brief rationale:	
	RATIONALE We are proposing significant changes in content/student learning outcomes for the PAS 656 course (when approved) that will increase the course credit hours for PAS 656 from 3.0 to 4.0. The UKPAS program has maintained the PAS 656 course at 3.0 credit hours since 2000 when the program was converted to a Masters program. Since 2000, new instructional techniques as well as new content areas designed to meet the needs of the 21st century health sciences student have been, and continue to be, developed. The additional credit hour in PAS 656 will allow the primary course instructor to utilize as well as explore teaching techniques to include small group learning as well as peer-to-peer instruction during lecture. Further, the additional credit hour will allow the course instructor to not only cover course material in more depth, but allow for additional instruction and simulation in areas such as patient communication as well as to develop student	
5.	**Course Relationship to Program(s).**	
a.*	**Are there other depts and/or pgms that could be affected by the proposed change?**	○ Yes ● No
	If YES, identify the depts. and/or pgms:	
b.*	**Will modifying this course result in a new requirement[7] for ANY program?**	● Yes ○ No
	If YES[7], list the program(s) here:	
	The addition of 1 credit hour to this course will raise the credit hours for the Physician Assistant Studies Master's Degree program from a total of 93 hours to a total of 94 hours. A curriculum change form is being submitted with this proposed course change.	
6.	**Information to be Placed on Syllabus.**	
a.	☐ Check box if changed to 400G or 500.	If changed to 400G- or 500-level course you must send in a syllabus and *you must include the differentiation* between undergraduate and graduate students by: (i) requiring additional assignments by the graduate students; and/or (ii) establishing different grading criteria in the course for graduate students. (See *SR 3.1.4.*)

[1] See comment description regarding minor course change. *Minor changes are sent directly from dean's office to Senate Council Chair.* If Chair deems the change as "not minor," the form will be sent to appropriate academic Council for normal processing and contact person is informed.
[2] Courses are typically made effective for the semester following approval. No course will be made effective until all approvals are received.
[3] Signature of the chair of the cross-listing department is required on the Signature Routing Log.
[4] Removing a cross-listing does not drop the other course – it merely unlinks the two courses.
[5] Generally, undergrad courses are developed such that one semester hr of credit represents 1 hr of classroom meeting per wk for a semester, exclusive of any lab meeting. Lab meeting generally represents at least two hrs per wk for a semester for 1 credit hour. (See *SR 5.2.1.*)
[6] You must *also* submit the Distance Learning Form in order for the course to be considered for DL delivery.
[7] In order to change a program, a program change form must also be submitted.

Submit a New Proposal | Save Current Changes

UNIVERSITY OF KENTUCKY

Division of Physician Assistant Studies
Department of Clinical Science
College of Health Sciences
900 S. Limestone Street
Lexington, KY 40536-0200
(859) 323-1100 Ext. 80495
Fax: (859) 257-2454
www.mc.uky.edu/pa

May 29, 2014

Karen O. Skaff, Ph.D., Chair
University Of Kentucky
College of Health Sciences
Department of Clinical Sciences

RE: PAS Course / Programmatic Change – PAS 656

Dear Dr. Skaff,

I am writing this letter regarding a proposed course change and subsequent program change in the Division of Physician Assistant Studies. Along with this cover letter you will find both the University required "Change Master Degree Program Form," the current course report generated from eCATS, as well as an updated syllabus for PAS 656.

We are proposing significant changes in content/student learning outcomes for the PAS 656 course (when approved) that will increase the course credit hours for PAS 656 from 3.0 to 4.0. The UKPAS program has maintained the PAS 656 course at 3.0 credit hours since 2000 when the program was converted to a Master's program. Since that time, new instructional techniques as well as new content areas designed to meet the needs of the 21st century health sciences student have been, and continue to be, developed. The additional credit hour in PAS 656 will allow the primary course instructor to utilize teaching techniques to include small group learning as well as peer-to-peer instruction during lecture. Further, the additional credit hour will allow the course instructor to not only cover course material in more depth, but allow for additional instruction and simulation in areas such as patient communication as well as to develop student hands-on skills requisite for Physician Assistant practice. This increase will also allow for the utilization of clinical and practice case scenarios. Programmatic feedback generated both from external as well as internal reflection has identified student limitations in communication skills as well as hands on skills (ie: suturing, i.v. placement, ect).

It is our belief that the additional credit hour used to cover the above content areas will not only address the aforementioned limitations, but also enhance student preparedness to successfully enter the clinical phase of training.

Warmest regards,

Kevin M. Schuer, PA-C, MPH
Associate Professor and Academic Coordinator
University Of Kentucky Physician Assistant Program

Bradford W. Schwarz, M.S., PA-C, DFAAPA
Associate Professor and Division Director
University Of Kentucky Physician Assistant Program

MEMO

June 19, 2014

TO: Bradford W. Schwarz, M.S., PA-C, DFAAPA
FROM: Travis Thomas – Chair Academic Affairs
RE: AA approval of PAS 656

Brad,

The Academic Affairs (AA) Committee has thoroughly reviewed your responses to reviewer inquiries and the Committee recommends approval of the course change proposal and the proposal to change the PAS master's program to include an additional credit hour for *PAS 656 Patient Evaluation and Management*. Please remember to use the revised syllabus submitted to the AA committee on June 17th 2014. Thanks for the opportunity to review this proposal. Please let me know if I can help clarify anything regarding this approval.

Sincerely,

Travis Thomas

Travis Thomas, PhD, RD, CSSD, *Chair – CHS Academic Affairs Committee (2013-14)*

I support the Committee's recommendation.
Sharon Stewart
Interim Dean
6-20-2014

CHANGE MASTERS DEGREE PROGRAM FORM

1. GENERAL INFORMATION

College:	HEALTH SCIENCES	Department:	CLINICAL SCIENCES
Current Major Name:	MASTER OF SCIENCE IN PHYSICIAN ASSISTANT STUDIES	*Proposed Major Name:*	*NO CHANGE*
Current Degree Title:	MSPAS	*Proposed Degree Title:*	*NO CHANGE*
Formal Option(s):		*Proposed Formal Option(s):*	
Specialty Fields w/in Formal Option:		*Proposed Specialty Fields w/in Formal Options:*	
Date of Contact with Associate Provost for Academic Administration[1]:			
Bulletin (yr & pgs):	GR BULL 303-309	CIP Code[1]:	51.0912
Today's Date:	5/29/14		
Accrediting Agency (if applicable):	ACCREDITATION REVIEW COMMISSION ON EDUCATION FOR THE PHYSICIAN ASSISTANT, INC.		
Requested Effective Date:	☒ Semester following approval.	OR	☐ Specific Date[2]:
Dept. Contact Person:	KEVIN SCHUER	Phone:	218-0838
Email:	kevin.schuer@uky.edu		

2. CHANGE(S) IN PROGRAM REQUIREMENTS

		Current	*Proposed*
1.	Number of transfer credits allowed		
	(Maximum is Graduate School limit of 9 hours or 25% of course work)		
2.	Residence requirement (if applicable)		
3.	Language(s) and/or skill(s) required		
4.	Termination criteria		
5.	Plan A Degree Plan requirements[3] (thesis)		
6.	Plan B Degree Plan requirements[3] (non-thesis)	93 credit hours	*94 credit hours*
7.	Distribution of course levels required		
	(At least one-half must be at 600+ level & two-thirds must be in organized courses.)		
8.	Required courses (if applicable)		
9.	Required distribution of courses within program (if applicable)		
10.	Final examination requirements		

[1] Prior to filling out this form, you MUST contact the Associate Provost for Academic Administration (APAA). If you do not know the CIP code, the APAA can provide you with that during the contact.

[2] Program changes are typically made effective for the semester following approval. No changes will be made effective until all approvals are received.

[3] If there is only one plan for the degree, plans involving a thesis (or the equivalent in studio work, etc.) should be discussed under Plan A and those not involving a thesis should be discussed under Plan B.

CHANGE MASTERS DEGREE PROGRAM FORM

11.	Explain whether the proposed changes to the program (as described in sections 1 to 10) involve courses offered by another department/program. Routing Signature Log must include approval by faculty of additional department(s).
	NA
12.	List any other requirements not covered above?
	Course change proposal to change PAS 656 (required course) from 3 credit hours to 4 credit hours
13.	Please explain the rationale for changes. If the rationale involves accreditation requirements, please include specific references to those requirements.
	We are proposing significant changes in content/student learning outcomes for the PAS 656 course (when approved) that will increase the course credit hours for PAS 656 from 3.0 to 4.0 and, thus, the total required credits for the degree from 93 to 94. The UKPAS program has maintained the PAS 656 course at 3.0 credit hours since 2000 when the program was converted to a master's program. Since that time, new instructional techniques as well as new content areas designed to meet the needs of the 21st century health sciences student have been, and continue to be, developed. The additional credit hour in PAS 656 will allow the primary course instructor to utilize teaching techniques to include small group learning as well as peer-to-peer instruction during lecture. Further, the additional credit hour will allow the course instructor to cover course material in more depth and allow for additional instuction and simulation in areas such as patient communication as well as to develop student hands-on skills requisite for physician assistant practice. This increase will also allow for the utilization of clinical and practice case scenarios. Programmatic feedback generated both from eternal as well as internal reflection has identified student limitations in communication skills as well as hands-on skills (e.g., suturing, IV placement, etc.). It is our belief that the additional credit hour used to cover the content areas will address the aforementioned limitations and also enhance student preparedness to successfully enter the clinical phase of training.

CHANGE MASTERS DEGREE PROGRAM FORM
Signature Routing Log

General Information:

Proposal Name: PAS 656

Proposal Contact Person Name: KEVIN M. SCHUER Phone: 218-0838 Email: KEVIN.SCHUER@UKY.EDU

INSTRUCTIONS:
Identify the groups or individuals reviewing the proposal; note the date of approval; offer a contact person for each entry; and obtain signature of person authorized to report approval.

Internal College Approvals and Course Cross-listing Approvals:

Reviewing Group	Date Approved	Contact Person (name/phone/email)	Signature
DEPARTMENT CHAIR	6/2/14	Dr. KAREN SKAFF / 80585 / KOSKAF0@UKY.EDU	
CHS INTERIM DEAN'S Acad Affairs Comm	6/19/14	Sharon Stewart 80560 srstew01@uky.edu	
		/ /	
		/ /	
		/ /	

External-to-College Approvals:

Council	Date Approved	Signature	Approval of Revision[4]
Undergraduate Council			
Graduate Council			
Health Care Colleges Council			
Senate Council Approval		University Senate Approval	

Comments:

[4] Councils use this space to indicate approval of revisions made subsequent to that council's approval, if deemed necessary by the revising council.

University of Kentucky
Department of Clinical Sciences
Division of Physician Assistant Studies
PAS 656: Patient Evaluation and Management

Spring 2015
Lecture: Tuesday 9-11am
Lab: Wednesday 1-4pm (Morehead)
Tuesday 1-4pm or Thursday 8-11am (Lexington)

Course Director: Bradford W. Schwarz, M.S., PA-C
Contact Information: Office: (859) 218-0514 Email: bradford.schwarz@uky.edu
Office Hours: 9 A.M. – 5:00 P.M. M-F unless otherwise posted
Room Location: 900 S. Limestone, CTW Bldg. Rm. 205B .

Course Instructor & Patient Encounter Coordinator: Shea Lambirth, M.D.
Contact Information: Office: (859) 323-1100 ext 80490 Email: pspoynter@uky.edu
Office Hours: By appointment on Tuesdays or Wednesdays
Office Location: 900 S. Limestone, CTW Bldg., Rm. 207A

Module Instructors:
David Fahringer, MPH, PA-C
Module 2: Radiology
Office: 900 S. Limestone, Rm. 201C
Phone: 859-218-0586
Email: David.Fahringer@uky.edu

Sam Powdrill, M.Phil, PA-C
Module 3: Procedures
Office: 900 S. Limestone, Rm. 201A
Phone: 859-323-1100 ext. 80522
Email: spowd2@uky.edu

Course Description:

The purpose of this course is to provide you with the cognitive and hands on skills necessary to perform and interpret medical procedures expected of a practicing Physician Assistant. Throughout the course you will continue to practice and hone your physical examination skills learned during PAS 650 and will further enhance your patient assessment and management skills through regular patient assignments with your assigned patient encounter teams.

This course is developed in 3 distinct blocks of instruction which initiates with an in-depth four week ECG course where you will learn to read, interpret, and develop a follow-up plan based on the ECG findings. You will also be expected to perform an ECG on a fellow classmate and interpret the results of the 12-Lead. ECG interpretation will be followed by a 4 week radiology block in which you will learn to evaluate radiology films and formulate a treatment plan. The final 7 weeks will focus on teaching you surgical techniques and office and hospital procedures that you will need to be proficient at to practice as a Physician Assistant. While demonstrating your technical abilities you will also learn to formulate

your treatment plan and management of the surgical patient. Throughout the course, you will have patient contact through small groups similar to your experience in PAS 650.

This 4 hour course will provide the student with a number of formal presentations, laboratory sessions, and in-patient clinical experiences involving a variety of patient evaluation and management skills.

COMPETENCIES FOR THE PHYSICIAN ASSISTANT STUDENT

Medical Knowledge

Medical knowledge includes the synthesis of pathophysiology, patient presentation, differential diagnosis, patient management, surgical principles, health promotion, and disease prevention. Physician assistants must demonstrate core knowledge about established and evolving biomedical and clinical sciences and the application of this knowledge to patient care in their area of practice. In addition, physician assistants are expected to demonstrate an investigative and analytic thinking approach to clinical situations. Physician assistants are expected to understand, evaluate, and apply the following to clinical scenarios:

1) signs and symptoms of medical and surgical conditions
2) appropriate diagnostic studies
3) management of general medical and surgical conditions to include pharmacologic and other treatment modalities
4) interventions for prevention of disease and health promotion/maintenance

Patient Care

Patient care includes patient- and setting-specific assessment, evaluation, and management. Physician assistants must demonstrate care that is effective, safe, high quality, and equitable. Physician assistants are expected to:

1) work effectively with physicians and other health care professionals to provide patient-centered care
2) demonstrate compassionate and respectful behaviors when interacting with patients and their families
3) make decisions about diagnostic and therapeutic interventions based on patient
4) information and preferences, current scientific evidence, and informed clinical judgment
5) develop and implement patient management
6) counsel and educate patients and their families
7) perform medical and surgical procedures essential to their area of practice

8) provide health care services and education aimed at disease prevention and health maintenance
9) use information technology to support patient care decisions and patient education

Professionalism

Professionalism is the expression of positive values and ideals as care is delivered. Foremost, it involves prioritizing the interests of those being served above one's own. Physician assistants must acknowledge their professional and personal limitations. Professionalism also requires that PAs practice without impairment from substance abuse, cognitive deficiency or mental illness. Physician assistants must demonstrate a high level of responsibility, ethical practice, sensitivity to a diverse patient population, and adherence to legal and regulatory requirements. Physician assistants are expected to demonstrate:

1) understanding of legal and regulatory requirements, as well as the appropriate role of the physician assistant
2) professional relationships with physician supervisors and other health care providers
3) respect, compassion, and integrity
4) accountability to patients, society, and the profession
5) commitment to excellence and on-going professional development
6) commitment to ethical principles pertaining to provision or withholding of clinical care, confidentiality of patient information, informed consent, and business practices
7) sensitivity and responsiveness to patients' culture, age, gender, and abilities
8) self-reflection, critical curiosity, and initiative
9) healthy behaviors and life balance
10) commitment to the education of students and other health care professionals

ARC-PA STANDARDS FOR PHYSICIAN ASSISTANT EDUCATION (4thEd.)

B2.06 The program curriculum *must* include instruction in the provision of clinical medical care across the life span.
ANNOTATION: Preclinical instruction prepares PAs to provide preventive, emergent, acute, chronic, rehabilitative, palliative and end-of-life care. It includes content relevant to prenatal, infant, children, adolescent, adult and elderly populations.

B2.07 The program curriculum *must* include instruction in technical skills and procedures based on current professional practice.

Student Learning Outcomes:

After completing this course, the student will be able to:
1. Demonstrate the skill to elicit accurate, comprehensive, and problem based medical histories from patients by employing techniques that facilitate the patient's sharing of information.
2. Demonstrate the ability to organize, record, research, orally present, and manage clinical information.
3. Evaluate a patient's medical conditions and to formulate accurate hypotheses that serve as the basis for making diagnostic and treatment decisions.
4. Associate the appropriate use of laboratory tests and radiographic studies in making diagnostic and treatment decisions.
5. Formulate an effective and appropriate assessment and treatment plan following evaluation and interpretation of an ECG or radiology film.
6. Demonstrate the ability to perform a variety of surgical and procedural skills with proper technique and sterility.
7. Demonstrate the ability to perform a focused and complete physical exam.

Required Materials:
Fast & Easy ECG's A Self-Paced Learning Program by Bruce Shade and Keith Wesley ISBN: 0072974095

Practical Radiology: A Symptom-Based Approach; Weber, E., Vilensky J., Fog A., F. A. Davis, ISBN 978-0-8036-2832-8

Clinical Radiology Made Ridiculously Simple; Ouellette, Hugh. Medmaster, ISBN 0-94078-41-0

The Essential Guide to Primary Care Procedures by E.J. Mayeaux ISBN 0781773903

Procedures Consult online access available through Medical Center Library (http://libraries.uky.edu/MCL)

Block Instruction (60%)
Each of the three modules will be worth 20% of the final grade. Each module instructor will be responsible for his or her own grade allocation (e.g., exams, quizzes). Please see each instructor module objectives/assignments following the tentative course schedule.

Assignments (20%)
Each student is required to complete three (3) patient write-ups and one (1) oral patient presentation from the patient encounters. Rubrics will be provided on Blackboard.

Assignment #1: Comprehensive history and physical examination +/- assessment and plan.
Assignment #2: Focused history and physical examination from the same patient as assignment #1 with an assessment and plan. Also turn in graded copy of Assignment #1.
Assignment #3: Focused history and physical examination with assessment and plan

Assignment #4: Oral presentation

Patient write-ups (Assignments #1, #2, and #3) due via Blackboard by 9am on **Feb 11, March 4, and April 1**.
Assignment #4 will be completed during course weeks 13, 14, and 15. Sign-ups will be available at a later date.

Late submissions will be lowered by 20 percent.

Lab Practicum (10%)
While PAS650 was designed to teach you a comprehensive history and physical exam, you will be expected to perform focused history and physical exams often in your clinical years and future career as a physician assistant. In order to help you with that transition, eight to ten common patient clinical diagnoses will be posted on blackboard within the first two weeks of class. During the practicum on **Friday, March 28**, each student will be expected to complete an appropriate focused history and physical exam and complete appropriate documentation based on these eight scenarios (assignment to a specific scenario during the practicum will be random).

Patient Encounters (5%)
Arrangements will be made in Lexington and Morehead for each student to have patient contact hours under the supervision of an attending physician, resident physician, or experienced PA-C from the Chandler Medical Center, St. Claire Medical Center or other affiliated sites.

This is a course requirement. Failure to participate will result in failure of the course. Each group will be responsible for scheduling weekly meetings with their assigned preceptor to review selected cases for history and physical exam findings as well as actual and proposed diagnostic evaluations and management strategies. During these weekly meetings, students may be called upon to deliver oral case presentations on assigned patients.

Each group will designate a team leader who will coordinate weekly meeting times with the preceptor and periodic meetings with the course instructor. Meeting times are scheduled at the availability of the preceptor and *may be held on the weekend or during evening hours if necessary.* Patient encounters will occur from **Week 3 and through Week 15**. Student may be off Week 10 for Spring Break. A minimum of 25 hours is expected though these should be distributed throughout the course. Students will be expected to log the hours spent weekly on patient encounters. This will be done via Blackboard and will include specific information to each week's activity and one to three sentences of reflection on a patient seen that week.

Bedside manner and professionalism are just as important as your technical skills. You will be representing the University of Kentucky Physician Assistant program and professionalism is expected at **ALL** times. An important part of professionalism is your physical appearance. Clinical waist length white coat or scrubs with UK ID badge, instruments, and notepad are required items. Purses, book-bags and other personal items

should **not** be brought into medical areas. *It is essential that patient confidentiality be maintained - always. Official UK identification badges must be worn at all times when in patient areas.*

Professionalism (5%)
We know that each of you care greatly about your ability to care for your future patients. Learning how to professionally care for patients will allow you to make a long term difference in their lives. Thus, it is our expectation that all students will act professionally and will be graded on their ability to: attend class/lab as scheduled, not using electronic devises during class/lab unless instructed to do so, completing patient encounter hours and treating the instructors, fellow classmates and supervising residents/MD/PA with respect.

See grading rubric on blackboard. A failing grade in any one of these five components may lead to a review by the Standards committee and failure of the course.

Final Course Grades
Each graded component will be weighed as follows in calculating the final grade:

ECG Module	20%
Radiology Module	20%
Procedures Module	20%
Lab Practicum	10%
Assignments	20%
Patient Encounters	5%
Professionalism	5%

Course Expectations:

Testing Policy

- The Testing policy is described in the UKPAS Policy and Procedures Manual on Academic Integrity and is briefly described here:
- Make-up exams may be given at the discretion of the instructor in the case of an "Unexcused absence."
- Students who are late for a scheduled exam will not be allowed additional time to complete the exam.
- Students who are late for a scheduled exam will not be allowed to enter the room and start the exam once another student has completed the exam and left the room.

ATTENDANCE POLICY

The PA curriculum requires students to master a large amount of information and skills in a very short period of time. Although excellent intellectual and psychomotor skills are helpful, they are not enough by themselves. Therefore, the PA Program subscribes to an attendance and testing policy that includes the following rules:

- Students are expected to attend all scheduled lectures, laboratory sessions, and student meetings.

- Courses taught by PA faculty will utilize an attendance and grade reduction policy that may result in a reduced or failing course grade for unexcused absences.
- Students will typically be given an incomplete grade for a course if they fail to complete all the required work by the conclusion of the semester. An "I" grade will require the approval of the course director and the DGS.
- Students will typically be given a reduced or failing grade for a course if they miss more than 10% of the scheduled contact hours. All course syllabi will specify their attendance and grade reduction policies.
- Absence will typically be defined as being 15 or more minutes late for a class.
- Make-up exams will be given in the event of an "Excused Absence," as defined by the University of Kentucky Bulletin, available: http://www.uky.edu/Registrar/Bulletin.htm.

The attendance policy will be in compliance with the University of Kentucky Student Rights and Responsibilities. Excused absences will be given only for those reasons listed by the university senate regulations (below). S.R. 5.2.4.2 defines the following as acceptable reasons for excused absences: (a) serious illness, (b) illness or death of family member, (c) University-related trips, (d) major religious holidays, and (e) other circumstances found to fit "reasonable cause for nonattendance" by the professor.
Students anticipating an absence for a major religious holiday are responsible for notifying the instructor in writing of anticipated absences due to their observance of such holidays no later than the last day in the semester to add a class. Information regarding dates of major religious holidays may be obtained through the religious liaison, who can be reached at 859-257-2754
Students are expected to withdraw from the class if more than 20% of the classes scheduled for the semester are missed (excused or unexcused) per university policy.

Verification of Absences
Students may be asked to verify their absences in order for them to be considered excused. Senate Rule 5.2.4.2 states that faculty have the right to request "appropriate verification" when students claim an excused absence because of illness or death in the family. Appropriate notification of absences due to university-related trips is required prior to the absence.

Any make-up exams or labs will be allowed only at the discretion of the course director (see excused absences above). Student tardiness to lecture or lab will not be tolerated. Consistent tardiness will result in a reduction of your grade (below).

ACCOMMODATIONS DUE TO DISABILITY
If you have a documented disability that requires academic accommodations, please contact the course instructor as soon as possible (PRIOR to the start of the semester where accommodations are being requested) during scheduled office hours. In order to receive

accommodations in this course, you must provide me with a Letter of Accommodation from the Disability Resource Center (Room 2, Alumni Gym, 257-2754, email address: jkarnes@email.uky.edu for coordination of campus disability services available to students with disabilities.

UNIVERSITY SENATE PROCEDURES AND SENATE DEFINITIONS RELATED TO ACADEMIC HONESTY

University Senate Rules (USR) are available at:
http://www.uky.edu/Faculty/Senate/rules_regulations/index.htm

6.3.0 ACADEMIC OFFENSES AND PROCEDURES
Students shall not plagiarize, cheat, or falsify or misuse academic records. (US: 3/7/88; 3/20/89) If the academic offense involves research and/or extramural funding the administrative rule for handling the offense is outlined in Administrative Regulation II - 4.0.2. [US: 2/10/97]

6.3.1 PLAGIARISM
All academic work, written or otherwise, submitted by students to their instructors or other academic supervisors, is expected to be the result of their own thought, research, or self-expression.

Academic Integrity
Per university policy, students shall not plagiarize, cheat, or falsify or misuse academic records. Students are expected to adhere to University policy on cheating and plagiarism in all courses. The minimum penalty for a first offense is a zero on the assignment on which the offense occurred. If the offense is considered severe or the student has other academic offenses on their record, more serious penalties, up to suspension from the university may be imposed.

Plagiarism and cheating are serious breaches of academic conduct. Each student is advised to become familiar with the various forms of academic dishonesty as explained in the Code of Student Rights and Responsibilities. Complete information can be found at the following website: http://www.uky.edu/Ombud. A plea of ignorance is not acceptable as a defense against the charge of academic dishonesty. It is important that you review this information as all ideas borrowed from others need to be properly credited.

Part II of *Student Rights and Responsibilities* (available online http://www.uky.edu/StudentAffairs/Code/part2.html) states that all academic work, written or otherwise, submitted by students to their instructors or other academic supervisors, is expected to be the result of their own thought, research, or self-expression. In cases where students feel unsure about the question of plagiarism involving their own work, they are obliged to consult their instructors on the matter before submission.

When students submit work purporting to be their own, but which in any way borrows ideas, organization, wording or anything else from another source without appropriate acknowledgement of the fact, the students are guilty of plagiarism. Plagiarism includes reproducing someone else's work, whether it be a published article, chapter of a book, a paper

from a friend or some file, or something similar to this. Plagiarism also includes the practice of employing or allowing another person to alter or revise the work which a student submits as his/her own, whoever that other person may be.

Students may discuss assignments among themselves or with an instructor or tutor, but when the actual work is done, it must be done by the student, and the student alone. When a student's assignment involves research in outside sources of information, the student must carefully acknowledge exactly what, where and how he/she employed them. If the words of someone else are used, the student must put quotation marks around the passage in question and add an appropriate indication of its origin. Making simple changes while leaving the organization, content and phraseology intact is plagiaristic. However, nothing in these Rules shall apply to those ideas which are so generally and freely circulated as to be a part of the public domain (Section 6.3.1).

Please note: Any assignment you turn in may be submitted to an electronic database to check for plagiarism.

6.3.2 CHEATING

Cheating is defined by its general usage. It includes, but is not limited to, the wrongfully giving, taking, or presenting any information or material by a student with the intent of aiding himself/herself or another on any academic work which is considered in any way in the determination of the final grade. The fact that a student could not have benefited from an action is not by itself proof that the action does not constitute cheating. Any question of definition shall be referred to the University Appeals Board. [US: 12/12/05]

6.3.3 FALSIFICATION OR MISUSE OF ACADEMIC RECORDS [US: 3/20/89; US 4/10/00]

Maintaining the integrity, accuracy, and appropriate privacy of student academic records is an essential administrative function of the University and a basic protection of all students. Accordingly, the actual or attempted falsification, theft, misrepresentation or other alteration or misuse of any official academic record of the University, specifically including knowingly having unauthorized access to such records or the unauthorized disclosure of information contained in such records, is a serious academic offense. As used in this context, "academic record" includes all paper and electronic versions of the partial or complete permanent academic record, all official and unofficial academic transcripts, application documents and admission credentials, and all academic record transaction documents. The minimum sanction for falsification, including the omission of information, or attempted falsification or other misuse of academic records as described in this section is suspension for one semester.

CLASSROOM CONDUCT

As you are students preparing for a medical profession, it is expected that your behavior reflect this in the classroom. Please provide the utmost respect for lecturers and classmates. Cell phones should be turned "OFF", not just muted, as they interfere with the communication system between Lexington and Morehead. Tardiness and disruptive behavior will not be tolerated and will impact your final course grade.

PROFESSIONALISM

University Health Care Colleges Code of Student Professional Conduct can be found at:
http://www.uky.edu/Regs/files/HCCcode.pdf
We expect our students to aspire to the qualities outlined in the University Health Care College's Code of Student Professional Conduct. Further, students will be evaluated regularly by faculty in the program on items such as punctuality, honesty, and interpersonal skills/ behavior. We also expect our students to employ good listening and communication skills; Possess and emote a positive attitude; Demonstrate strong conflict resolution skills, etc, etc. Much of the previous should be understood, but we find it necessary to describe. Faculty members of this program reserve the right to intervene when non-professional conduct is demonstrated by a PA student during his/ her time in the UKPAS program. Professional conduct, as loosely described above, is expected at all times and is considered conduct required for successful completion of this course. Professional conduct will be evaluated throughout this course. A failure in the professionalism component during this course can constitute a failing grade (at a minimum). All questions/ concerns regarding professional behavior and expectations herein should be directed to Professor Schuer. Owning strong 'professional' skills makes the difference between good students and exceptional students; good clinicians and life-changing clinicians. I challenge each one of you to improve yourself professionally during your time in this course/ in this program. At the very least, your future patients deserve this.

Technology for Distance Learning Course
Maximum timeframe for responding to student communications will be 48 hours unless instructor is out and alternative contact will be provided.
Students will have 1 days of class meetings on campus every month. Those will be listed in the student clerkship manual.

The technological requirements for the course are located at:
http://www.uky.edu/DistanceLearning/faculty/technology/techReqs.html
Contact information for Distance Learning programs (http://www.uky.edu/DistanceLearning) and Information Technology Customer Service Center (http://www.uky.edu/UKIT/Help/; 859-218-HELP).
For technical issues, call 859-218-HELP, if not resolved, then contact instructor via email.
If you have a documented disability that requires academic accommodations in this course, please make your request to the University Disability Resource Center. The Center will require current disability documentation. When accommodations are approved, the Center will provide a Letter of Accommodation which details the recommended accommodations. Contact the Disability Resource Center Director, Jake Karnes, at 859-257-2754 or jkarnes@email.uky.edu.
Information on Distance Learning Library Services (http://www.uky.edu/Libraries/DLLS)
Carla Cantagallo, DL Librarian. Can be reached via phone: 859 257-0500, ext. 2171; long-distance phone number: (800) 828-0439 (option #6). Email: dllservice@email.uky.edu
DL Interlibrary Loan Service:
http://www.uky.edu/Libraries/libpage.php?lweb_id=253&llib_id=16

PAS 656 Evaluation & Management

2014 Spring Lecture Schedule

Lecture: Tuesday 9-11AM

Labs: Tuesday 1-4pm, Wednesday 1-4pm, Thursday 8-11am

Subject to change at module instructor's discretion

Week	Module	Lecture (T9-11)	Lab (TWR)		Notes
1 – 1/14	ECG	*No class*	T 1-4PM	*No class*	
			W 1-4PM	Intro Exam Chapter 2	
			R 9-11AM	Chapter 4 and 5	
2 – 1/21		Chapter 6-8	T 1-4PM	Chapter 11-12	
			W 1-4PM	Chapter 13-15	
			R 9-11AM	Quiz #1 Chapter 17-19	
3 – 1/28		Chapter 20	T 1-3PM	Clinical ECG *Optional*	Begin patient encounters
			W 1-4PM	Quiz #2 Chapter 21	
			R 8-11AM	Review *Lexington only (2 groups)*	
4 – 2/4		*KAPA Legislative Day – No class*	T 1-4PM	Exam prep	
			W 1-4PM	Review *Morehead only*	
			R 9-11AM	ECG MODULE EXAM	
5 – 2/11	Radiology	Medical imaging Chest radiology	Medical imaging Chest radiology		Assignment #1 due
6 – 2/18		Abdomen GU/GI Female Pelvic	Abdomen GU/GI Female Pelvic		
7 – 2/25		C-Spine Skeletal	C-Spine Skeletal		
8 – 3/4		Head EENT Bone and Endocrine	Head EENT Bone and Endocrine		Assignment #2 due

9 – 3/11	Procedures	PFTs Sterile technique	PFTs Sterile technique for gowning and gloving	RADIOLOGY MODULE EXAM Thursday 3/14 2PM-4:30PM
10 -3/18	Spring Break			
11 – 3/25		Lines, tubes, & drains Injections & anesthesia	Central lines NG placement IM/IV/subcutaneous/IO	LAB PRACTICUM Friday 3/28
12 – 4/1		OR scrub, instruments, & suture material Knot tying	OR scrub Knot tying (two, instrument) Simple interrupted Simple continuous	Assignment #3 due HIV Training Friday, April 4 2-4PM
13 – 4/8		Wounds Suturing	Knot tying (one) Deep dermal Vertical and horizontal mattress Subcuticular	Assignment #4 oral presentations begin this week IPE Event Friday, April 11
14 – 4/15		Airway management Postoperative care	Simulation	
15 – 4/22		Splint, casting, and taping	Splinting, casting, taping	End patient encounters Assignment #4 oral presentations should be completed
16 – 4/29		Simulation debriefing Clinical cases	T 1-4PM W 1-4PM R 8-11AM	PROCEDURES MODULE EXAM
17 – 5/8	Written Final Exam Thursday 8AM-10AM			
TBD	SP male and female GU			

2014 Spring ECG Module Schedule

Bradford W. Schwarz, M.S., PA-C

**No additional lab sessions, only what is listed below.*

1. **Wednesday, January 15, 2014 1-4 P.M.**
   a. Pre-course examination
   b. Course Review/Expectations
   c. Chapter 2 PPT – *The Electrocardiogram*

2. **Thursday, January 16, 2014 9-11 A.M.**
   a. Chapter 4 PPT – *Heart Rate*
   b. Chapter 5 PPT – *ECG Regularity*

3. **Tuesday, January 21, 2014 9-11 A.M..**
   a. Chapter 6 PPT – *P Waves*
   b. Chapter 7 PPT – *QRS Complexes*
   c. Chapter 8 PPT – *PR Intervals*

4. **Tuesday, January 21, 2014 1-4 P.M.**
   a. Chapter 11 PPT – *Sinus Dysrhythmia*
   b. Chapter 12 PPT - *Atrial Dysrhythmias*

5. **Wednesday, January 22, 2014 1-4 P.M.**
   a. Chapter 13 - *Junctional Dysrhythmias*
   b. Chapter 14 – *Ventricular Dysrhythmias*
   c. Chapter 15 - *AV Heart Blocks*

6. **Thursday, January 23, 2014 9-11 A.M.**
   a. **Quiz #1 – Chapters 1-7**
   b. Chapter 17 – *Overview of 12-Lead ECGs and Electrical Axis*
   c. Chapter 18 – *Atrial Enlargement and Ventricular Hypertrophy,*
   d. Chapter 19 - *Bundle Branch Blocks*

7. **Tuesday, January 28, 2014 9-11 A.M.**
   a. Chapter 20 – *Myocardial Ischemia and Infarction*

8. **Wednesday, January 29, 2014 1-4 P.M.**
   a. **Quiz #2 – Chapters 8-14**
   b. Chapter 21 – *Other Cardiac Conditions and the ECG*
   c. Review of 12-Lead ECG's

9. **Thursday, January 30, 2014 8-11 A.M.**
   a. ECG Laboratory Review with *Lex students* only

b. Group A- 8-9:30 am & Group B- 10-11am

10. Wednesday, February 5,, 2014 1-4 P.M.

a. ECG Laboratory Review with *MH students* only

11. Thursday, February 6, 2014 9-11 A.M.

a. Final Written Examination

Practical Exam- See instructions for completing practical ECG on blackboard, Due on **2/25** by 9am via blackboard.

EKG Module Grading:

Quiz 1 – 10%
Quiz 2 - 10%
Participation - 10%
Practical Exam- 20%
Final Exam - 50%
Total Score - 100%

*ECG Module is worth 20% of PAS 656 grade

ECG Module Objectives

Heart Rate/ECG Regularity

By the end of the lecture, students should be able to:
Determine the heart rate using the following methods:

- 6-second interval
- 300, 150, 100, 75, 60, 50 method
- 1500 method
- Using rate calculators
- Demonstrate ability to count both atrial and ventricular rates
- Identify rates that are slow (bradycardia), normal, and fast (tachycardia)
- Explain the Five-Step process for analyzing the ECG
- Determine rhythm regularity using the R-R interval and P-P interval

Demonstrate the following methods of determining regularity to include:

- Caliper Method
- Paper and Pen Method
- Counting the small squares method
- Describe the different types of irregularity to include:
- Occasionally or Very Irregular
- Slight Irregularity

Patterned Irregularity
Irregularly irregular
Irregularity due to varying conduction ratios

P Waves/QRS Complexes

By the end of the lecture, students should be able to:

Identify P wave configuration in different leads
Demonstrate understanding of P waves having different appearances
Define atrial P waves
Explain varying atrial P waves
Identify and describe flutter and fibrillatory atrial waves
Describe presence of inverted or absent P waves
Explain the presence of more P waves than QRS complexes
Describe QRS complex characteristics
Identify variations in QRS configuration
Describe normal QRS complexes in different leads
Demonstrate ability to properly measure QRS complexes
Identify the following abnormal QRS complexes:
Tall and low amplitude QRS complexes
Wide QRS complexes of supraventricular origin
Wide, bizarre QRS complexes of ventricular origin
Absent QRS complexes

PR Intervals/Origin of Sinus Node Dysrhythmias

By the end of the lecture, students should be able to:

Explain what a normal PR interval represents
Demonstrate proper measurement of the PR interval
Identify and describe PR intervals demonstrating the following qualities:
Shorter PR intervals
Longer PR intervals
Varying PR intervals
Absent or not measureable PR intervals
Constant PR intervals
Properly measure and define the QT interval
Identify the following rhythms originating from the sinus node:
Normal sinus rhythm
Sinus bradycardia
Sinus tachycardia
Sinus dysrhythmia
Sinus arrest

Atrial Dysrhythmias/Junctional Dysrhythmias

By the end of the lecture, students should be able to:

Identify and describe the following rhythms originating in the atria:
Wandering atrial pacemaker
Premature atrial complexes
Atrial tachycardia
Multifocal atrial tachycardia
Supraventricular tachycardia
Atrial flutter
Atrial fibrillation
Identify and describe the following rhythms originating in the AV junction:
Premature junctional complexes
Junctional escape rhythm
Accelerated junctional rhythm
Junctional tachycardia

Ventricular Dysrhythmias/AV Heart Blocks

By the end of the lecture, students should be able to:

Distinguish between the ECG characteristics, possible causes, signs and symptoms, and management for the following ventricular dysrhythmias:
Premature ventricular complexes
Idioventricular rhythms
Accelerated idioventricular rhythm
Ventricular tachycardia
Ventricular fibrillation
Asystole
Define the terms bigeminy, trigeminy, quadrageminy, and "run" when used to describe ventricular premature complexes
Describe the terms monomorphic and polymorphic ventricular tachycardia
Describe the purpose and procedure for defibrillation
Identify and define the presence of pulseless electrical activity
Describe the ECG characteristics, possible causes, signs and symptoms for the following atrioventricular heart blocks:
1st-degree AV heart block
2nd-degree AV heart block – Type I
2nd-degree AV heart block – Type II
3rd-degree AV heart block
Atrioventricular Dissociation

Electrical Axis/Hypertrophy, Bundle Branch Block, and Preexcitation

By the end of the lecture, students should be able to:

Describe vectors and how they are used in the interpretation of the ECG
Define electrical axis

Identify and apply understanding of waveform direction
Analyze ventricular depolarization and mean QRS axis
Calculate the electrical axis
Describe normal QRS axis
Identify altered QRS axis and list causes of altered electrical axis
Properly identify and describe hypertrophy leading to:
Atrial enlargement
Ventricular enlargement
Explain the mechanism of ventricular conduction disturbances involving the bundle branches
Identify Right Bundle Branch Block, Left Bundle Branch Block, and Hemiblocks
Define and identify the following preexcitation syndromes:
Wolff-Parkinson White (WPW) Syndrome
Lown-Ganong-Levine (LGL) Syndrome

Myocardial Ischemia, Injury, and Infarction

By the end of the lecture, students should be able to:

Define the coronary circulation and the areas of the heart involved
Describe ECG changes that may reflect evidence of myocardial ischemia, injury, or infarction
Explain the mechanism of a ST-segment elevation and non-ST segment elevation myocardial infarction
Describe the sequence of normal R-wave progression
Identify myocardial infarctions of the following locations:
Anterior Infarction
Lateral Infarction
Inferior Infarction
Posterior Infarction

Other Cardiac Conditions

By the end of the lecture, students should be able to:

Describe the mechanism of pericarditis and the associated changes observed on the ECG
Identify ECG changes related to pulmonary embolism
Define the types of artificial pacemakers and describe their appearance on the ECG

Radiology Module PAS 656

Diagnostic Radiology: Imaging in Medicine for the PA student

This module is designed to give you didactic and essential basic clinical skills in radiographic interpretation. The goal is to teach basic radiographic interpretation skills commensurate with generalist- emergency medicine, urgent care, family practice, internal medicine (ambulatory and hospital). There are core skills in diagnostic radiology which all practitioners must have to be competent. You will be given this information in lecture format, lab practice sessions, and internet-based exercises requiring you to practice recognizing key radiologic images in medicine. Emphasis will be in plain radiography and CT, with little arteriography, nuclear medicine, MRI or ultrasound.

Instructor:
David Fahringer, MSPH, PA-C
Assistant Professor, University of Kentucky
Clinical Sciences Department
College of Health Sciences: PA Studies
Office: CTW 201C Lexington Campus
859-218-0586

Textbooks

1. Practical Radiology: A symptom-based approach; Weber, E., Vilensky J., Fog A., F. A. Davis, ISBN 978-0-8036-2832-8

2. Clinical Radiology made ridiculously simple; Ouellette, Hugh. Medmaster ISBN 0-94078-41-0

Methodology

There will be two hours of lecture weekly (8 hours) in formal didactic format. Lab sessions for the week will review concepts covered in lecture and your reading assignments from both textbooks. In addition, there will be self-paced internet-based study assigned (highly recommended) which will work to assure core competency in diagnostic radiology. Textbook reading assignments are carefully chosen and are not optional. Grades will be based on your ability to integrate

pathophysiology, case-based presentations, radiographic interpretation, and both memorization and application of didactic information. You will be provided with an objective list of essential images which you must be able to identify. The lecture and lab sessions will center on these but are not limited to these core images. In order to excel in the course you will need to pay close attention and take notes in lecture, attend and be involved in lab sessions, complete all reading assignments, internet practice sessions, and continue to be curious.

Exam / Assessment

There will be one final exam which includes two parts: 1) Multiple Choice objective exam (50 questions-includes PFT) and 2) Practical Exam with case scenarios and x-rays to interpret (20 images). The objective exam will contain primarily information from the lectures and from readings in both cased-based scenarios and straight-forward informational questions. Radiology is a highly technical and ever evolving specialty of medicine. The goal is not to make a radiologist out of you. The goal is that you develop essential clinical interpretive skills, understand how x-rays work, gain understanding in radiographic utility, and very importantly learn to describe in appropriate terminology what you see (or don't see) in a given film. Focus will be on plain radiography with introductory CT- again based on the skills of a generalist.
Exam date: March 14th 2014 (Thursday) 2:00 to 4:30pm (Written and Practical)

Schedule

Feb 11: Lecture 9:00-10:50- Modalities of Medical Imaging & Chest Practical Radiology (Chapters 1,6); (pp. 1-19, 125-145) Quellette (Chapters 1,2)

Feb 18: Lecture 9:00-10:50- Abdomen / GU & GI / Female Pelvic Imaging

Readings: Practical Radiology (Chapters 8,9,10); (pp. 163-176, 181-195, 199-208) Quellette (Chapters 34)

Feb 25: Lecture 9:00-10:50- C-Spine & Skeletal

Readings: Practical Radiology (Chap 2,3,); (pp. 21-57, 65-78) Quellette (Chapters 5,6,7,8)

March4: Lecture 9:00-10:50- EENT Imaging, Head CT, Imaging of bone disease and Endocrine Disorders, Clinical Practice Issues in imaging

Readings: Practical Radiology (Chap 4,5,11,12) (pp. 85-100, 105-119,215-221, 223-229) Quellette (Chapter 9)

Core Radiology Goals, Objectives, Standards & Competencies

By the end of the module the student will be able to:

1. Have a basic understanding of Radiology imaging
2. Give interpretation of findings from different imaging modalities
3. Know the difference between a normal and abnormal image
4. Understand the difference between each of the imaging modalities: X-ray, CT, MRI, Ultrasound and Special procedures
5. Know the Cardinal Rule of Radiation and the risks of imaging procedures
6. Have a working knowledge of pharmacologic agents commonly used in radiology

Objectives:

1.0 The master's physician assistant student shall demonstrate knowledge and skill to properly diagnose medical diseases and conditions with imaging studies (General Diagnostic, CT, US, MRI, Angiography, and Nuclear Medicine). In the following: **ARC-PAC Standards (B2.05, B2.07)**

a. Obtaining a pertinent age specific history

b. Selecting the appropriate examination

c. Selecting the appropriate preparation for examination

d. Analyzing clinical and imaging data

e. Establishing a logical diagnosis and differential diagnosis

f. Describing indications for referral, consultation, and ancillary services

2.0 The master's physician assistant student shall demonstrate knowledge and skill in basic evaluation, and interpretation of imaging studies (General Diagnostic, CT, US, MRI, Angiography, and Nuclear Medicine) for abnormalities and common variants for the following systems: **ARC-PA Standards (B2.05, B2.07)**

Cardiac
Endocrine
Gastrointestinal
Neurologic
Peripheral Vascular

Pulmonary
Skeletal/Muscular
Soft Tissue
Urinary Tract

3.0 The master's physician assistant student shall demonstrate knowledge of the exposure risk of doing radiology procedures and know how to protect their self and the patient. **ARC-PA Standards (B2.13)**

4.0 The master's physician assistant student shall demonstrate knowledge of the actions, indications, and contra-indications of pharmacologic agents commonly used in radiology. **ARC-PA Standards (B2.02.d)**

Competencies

1. The PA student will identify normal anatomical structures on the different modalities in radiology by demonstrating their knowledge in lab through practical exams. This will be a written lab assignment. **(1.a,b,d) (2.a.e) (4.g)**

2. The PA student will identify abnormal findings on X-ray by oral presentation or written assignment in the lab. **(1.a,b,d) (2.a) (4.g)**

3. The PA student will write up a written report on a given x-ray to be turned in as a lab assignment. **(1.a,b,c) (2.a,b,e)**

4. The PA student will be given a case scenario and will order the correct radiology imaging for that patient in a written assignment in class.**(2.b) (4.d)**

Medical conditions that will be covered are:

Pneumothorax
Subcutaneous Emphysema
Emphysema
Pleural Effusion
Pulmonary Edema (cardiogenic & non-cardiogenic)
Pneumonia (interstitial vs. air-space)
Pneumonitis
Pulmonary Fibrosis (Interstitial Lung Dz)

Pulmonary TB
Lung Abscess
Atelectasis Aspiration
Foreign Body
Pulmonary mass (lung cancer vs. benign nodule) Aortic
Dissection
Diaphragmatic Rupture
Cardiomegly
Small Bowel Obstruction
Ileus
Large Bowel Obstruction Cecal &
Sigmoid Volvulus Ascites
Hydronephrosis
Ureteronephrosis Kidney
Stone Normal IVP
Misplaced lines and tubes Normal
ET-tube placement Child Abuse
Intracranial bleed / hematoma
CNS space occupying lesion
C-spine fractures (Flexion Teardrop, Hangman's , Burst, Jefferson's, Odontoid, Clay-Shoveler's, Wedge or Compression)
Cervical vertebrae subluxation
Thoraco-lumbar vertebral fractures / subluxations
Major pelvic fractures Shoulder
dislocation / fracture AC-separation
Clavicular fracture Humeral
shaft fracture Elbow fracture
Fat pad sign
Radial & Ulna fracture
````Colles fracture Scaphoid /
Wrist fractures Hand fractures
````Boxer fracture
````Finger fractures
````Phalanx dislocations
Hip fractures
Femur fractures

Tibial Plateau fractures
Patella fracture
Tibial & Fibular shaft fractures
Ankle Fractures
````Lateral malleolus
````Medial malleolus
````Bi-malleolar fracture
````Tri-malleolar fracture
Fifth Metatarsal fracture
Marching fracture
Phalanx (digit) fracture or dislocation

**CT**

Recognition of major normal anatomical landmarks on Chest CT & Abdominal CT (as explained in lecture and power points)

Lung abscess
Pneumothorax
Pneumomediastinum Pleural
Effusion Pneumonia
Pulmonary Fibrosis

Aortic aneurysm (Thoracic and Abdominal)
Pericardial tamponade
Lung Cancer/Mass
Hepatic mass (hepatoma) AAA
Pancreatitis Ascites
Pneumoperitoneum Small Bowel
obstruction Large Bowel
Obstruction Hydronephrosis
Ureteral obstruction
Urolithiasis
Ovarian mass
Subdural hematoma Epidural
hematoma Intracerebral
hemorrhage Hydrocephalus
Brain mass with midline shift

# Pulmonary Function Test: Module PAS 656

**Pulmonary Function Test: PFT performance and evaluation in Medicine for the PA student**

This module is designed to give you didactic and essential basic clinical skills in Pulmonary Function Test (PFT) performance and interpretation. The goal is to teach basic performance and interpretation skills commensurate with generalist- emergency medicine, urgent care, family practice, internal medicine (ambulatory and hospital). There are core skills in PFT which all practitioners must have to be competent. You will be given this information in lecture format, and lab practice session, to recognized the different pulmonary diseases in medicine. Emphasis will be in how to preform, when to order and how to interpret a PFT.

Instructor:
David Fahringer, MSPH, PA-C
Assistant Professor, University of Kentucky
Clinical Sciences Department
College of Health Sciences: PA Studies
Office: CTW 201C Lexington Campus
859-218-0586

Textbooks : None handouts

Methodology
There will be two hours of lecture one week in formal didactic format. Lab session for the week will review concepts covered in lecture. Grades will be based on your ability to integrate pathophysiology, case-based presentations, PFTs interpretation, and both memorization and application of didactic information. The lecture and lab session will center on these but are not limited to these core images. You will have hands on practice in the lab to demonstrate how to set up a for a PFT, preform, coach and interpretation

# Exam / Assessment

There will be one final exam which includes two parts: Multiple Choice PFT strips, and cases on the objective exam (5-10 questions). This will be added in with the radiology

module. The exam questions will contain primarily information from the lecture and from cased-based scenarios (Class and lab) and straight-forward informational questions. The goal is to develop essential clinical interpretive skills, understand how to set up and preform a PFT, and gain understanding of when to order a PFT.

# Schedule

March 11: Lecture 9:00-10:50: Introduction to PFT and overview of use of PFTs in medicine.

# Core Radiology Goals, Objectives, Standards & Competencies

**By the end of the module the student will be able to:**

1. Have a basic understanding of Pulmonary Function Test (PFT)
2. Give interpretation of findings from different PFTs
3. Know the difference between a normal and abnormal PFT
4. Understand the different medical pulmonary disease that will require a PFT

**Objectives:**

1.0 The master's physician assistant student shall demonstrate knowledge and skill to properly diagnose medical diseases and conditions with the use of a PFT exam in the following: **ARC-PAC Standards (B2.05, B2.07)**

   a. Obtaining a pertinent specific history for the PFT

   b. Selecting the appropriate preparation for PFT examination

   c. Analyzing clinical and PFT findings

   d. Establishing a logical diagnosis and differential diagnosis

   e. Describing indications for referral, consultation, and ancillary services

2.0 The master's physician assistant student shall demonstrate knowledge and skill in basic PFT evaluation, and interpretation of PFTs for abnormalities and common variants for the following systems: **ARC-PA Standards (B2.05, B2.07)**

   a. Emphysema
   b. Asthma
   c. Mixed obstruction/restrictive airway disease

3.0 The master's physician assistant student shall demonstrate knowledge to calibrate, preform, and coach for a PFT exam. **ARC-PA Standards (B2.07, B2.09)**

4.0 The master's physician assistant student shall demonstrate knowledge of how to clinically tie in the results of the PFT to the patient's condition. **ARC-PA Standards (B2.05, B2.07)**

**Competencies**

1. The PA student will identify normal and abnormal PFTs by demonstrating their knowledge in lab through practical exams. **(1.a,b,d) (2.a.d,e) (4.g)**
2. The PA student will demonstrate by demonstration of preforming a PFT in the lab setting. **(1.a,b,d) (2.a) (4.g)**
3. The PA student will be given a case scenario and will determine what the medical condition of the patient from reading the PFT. **(1.a,b,d) (2.a,b,e) (4.d,e,f)**

# 2014 Spring Procedure Module

Description

The third module of PAS 656 takes place during weeks 9-16 and will cover common procedures you are expected to know for current clinical practice. You should become familiar with the indications, contraindications, required equipment, procedure steps, and complications for each of these procedures over the course of the module.

The module will consist of lectures, hands-on labs, videos, reading, and simulation exercises. You will be graded on participation, quizzes, a module examination, simulation exercise, and successful demonstration of several skills and procedures. You will be responsible for reading the textbook and/or watching videos online prior to lecture and lab. You are responsible for supplemental material and material covered in class. You may be tested on material not explicitly stated in class. Look to the objectives for guidance as you study.

This module is 20% of your total PAS 656 grade. There will be quizzes over weekly topics and one cumulative procedures exam during lab time the final week of the module. A skills assessment form must be completed; the form contains skills that the student must satisfactorily perform in front of one of the course instructors. All skills must have a course instructor signature and date by the final week of the course. There will be a simulation lab toward the end of the module in which you will be expected to fully participate and complete a brief reflective piece. Those who do not satisfactorily pass the procedures module exam or do not have the skills assessment form complete will be required to come to lab on the Thursday afternoon of final exam week for remediation. More details about module components and grading will be provided in class and on Blackboard.

Instructors

| | | |
|---|---|---|
| Shea Lambirth, M.D. | Sam Powdrill, M.Div, PA-C | Bradford W. Schwarz, M.S., PA-C |
| Office CTW 207A | Office CTW 201A | Office 205B |
| pspoynter@uky.edu | spowd2@uky.edu | bradford.schwarz@uky.edu |

Text and Videos

*The Essential Guide to Primary Care Procedures* by E.G. Mayeaux ISBN 0781773903

Procedures Consult http://app.proceduresconsult.com.ezproxy.uky.edu/Learner/Default.aspx

Procedures Module Grading

5% Quizzes
5% Skills assessment form
5% Simulation
5% Module exam

Objectives These may be updated before or during the module with notification.

Week 9 – Sterile Technique and PFTs

- Perform and interpret a pulmonary function test using correct technique
- Compare and contrast aseptic technique and sterile technique
- Demonstrate the correct surgical technique for gowning and gloving without assistance
- Recognize common surgical instruments including adson forcep, hemostat, suture scissors, and needle driver.
- Demonstrate how to correctly pass and hold surgical instruments

Week 11 – Lines, Tubes, & Drains; Injections & Anesthesia

- Demonstrate how to administer medication via the following routes: intramuscular, intravenous, intraosseus, subcutaneous, and intradermal
- Demonstrate how to safely draw up medications into a syringe from an ampule and/or vial
- Demonstrate ability to calculate dosages, IV drip rate and infusion time
- Discuss common antiseptics and describe how to correctly cleanse the skin in anticipation of a procedure
- Describe common local anesthetics including lidocaine and bupivicaine
- Discuss common local anesthetic agents and understand procedure for administering a local anesthesia or common regional anesthetic block such as a digital block
- Recognize which areas are inappropriate for a digital block
- Discuss the indications and contraindications in using epinephrine in local anesthetics.
- Understand the principles and essential techniques, equipment required, when each procedure should (or should not) be used, and common complications: arterial line, central line, nasogastric tube, urinary catheter, lumbar puncture, thoracentesis, and paracentesis
- Know the three locations for a central line and the anatomical landmarks for each
- Demonstrate how to correctly remove a JP drain
- Discuss how to record inputs and outputs
- Outline the indications and steps for joint aspiration and joint injection

Week 12 – OR Scrub, Instruments, & Suture Material; Knot Tying

- Recognize and correctly demonstrate use of surgical instruments, sutures and suture needles depending on the type of tissue or closure being used
- Recognize and discuss the characteristics of common types of suture material including chromic, vicryl, silk, prolene, and nylon (e.g., absorbable, braided, tensile strength duration) and know when it is appropriate to use a particular suture
- Understand suture size and choose the size of suture to use on various places on the body particularly face, trunk and extremities
- Observe, practice and demonstrate two hand tying and instrument tying technique
- Recognize and describe how to make an incision with regard to skin lines of tension in order to promote wound closure and reduce scar visibility
- Demonstrate the following suture methods: simple interrupted and continuous

Week 13 – Wounds and Suturing

- Describe a wound by surgical wound classification (I-IV)
- Describe when to use and how to perform punch, shave, and excisional biopsy
- Compare and contrast healing via primary, secondary, and tertiary intention and recognize reasons one might be selected over another
- Explain techniques for wound management and healing promotion

- Discuss how to clean a wound including abrasion, burn, laceration, puncture (e.g., bite), pressure wound, or incision
- Know the stages of wound healing
- Recognize and be able to discuss types of wound dressings
- Explain the fundamental principles of wound care and tissue management
- Demonstrate the correct technique for donning gloves and opening a sterile field
- Demonstrate the correct technique for scrubbing in preparation for surgery
- Discuss prepping skin for surgery
- Recognize and understand principles of patient positioning and safety in the operating room
- Explain the treatment principles and rationale for draining an abscess
- Demonstrate correct technique for incising, breaking up loculations, and drainage of an abscess
- Outline the steps to draining a epidermal cyst
- Discuss methods of wound closure include suture, staples, steri-strips, and dermabond
- Discuss indications and contraindications of using a wound vac
- Demonstrate the following suture methods: horizontal mattress, vertical mattress,, subcuticular, buried knot

Week 14 – Airway Management; Postoperative Care

- Demonstrate chin lift and jaw thrust and understand reason for their use
- Discuss the different types of airway management and understand the procedure for placement: nasopharyngeal, oropharyngeal, LMA, endotracheal tube
- Outline the steps and pharmacologic means of rapid sequence intubation
- Demonstrate bag-mask ventilation
- Recognize utility of needle decompression and describe correct procedure
- Discuss the indications for chest tube placement, procedure for removal, and significance of water seal
- Understand the basics of ventilator settings: pressure control, volume control, peak airway pressure, PEEP, IPAP, EPAP, CPAP, and bivalve
- Discuss the following types of oxygen delivery: room air, nasal cannula, and masks
- Understand the following more invasive forms of airway mangament: needle cricothyroidotomy (angiocath), surgical cricothyroidotomy, and tracheostomy
- Know the considerations for appropriate postoperative care
- Discuss the evaluation of postoperative fever
- Understand the indications and demonstrate how to correctly perform incentive spirometry

Week 15 – Splinting, Casting, and Taping

- Recognize splinting and casting material and be able to use
- Identify when to use a cast and when to use a splint
- Describe potential complications of casting and splinting and describe how to avoid these complications
- Outline the six Ps for assessing extremity integrity and safety
- Describe how to correctly apply the following splints: volar arm splint, sugar tong splint, finger splint, thumb spica, knee splint, and ankle stirrup

Week 16 – Simulation Feedback and Case Scenarios

- Interpret and use an ECG in a clinical situation
- Interpret and use imaging in a clinical situation
- Identify and perform the correct procedure in a clinical situation

**University of Kentucky**
**Department of Clinical Sciences**
**Division of Physician Assistant Studies**
**PAS 656: Patient Evaluation and Management**

Spring 2015
Lecture: Tuesday 9-11am
Lab: Wednesday 1-4pm (Morehead)
Tuesday 1-4pm or Thursday 8-11am (Lexington)

**Course Director:** Bradford W. Schwarz, M.S., PA-C
**Contact Information:** Office: (859) 218-0514 Email: bradford.schwarz@uky.edu
**Office Hours:** 9 A.M. – 5:00 P.M. M-F unless otherwise posted
**Room Location:** 900 S. Limestone, CTW Bldg. Rm. 205B .

**Course Instructor & Patient Encounter Coordinator:** Shea Lambirth, M.D.
**Contact Information:** Office: (859) 323-1100 ext 80490 Email: pspoynter@uky.edu
**Office Hours:** By appointment on Tuesdays or Wednesdays
**Office Location:** 900 S. Limestone, CTW Bldg., Rm. 207A

**Module Instructors:**

David Fahringer, MPH, PA-C
Module 2: Radiology
Office: 900 S. Limestone, Rm. 201C
Phone: 859-218-0586
Email: David.Fahringer@uky.edu

Sam Powdrill, M.Phil, PA-C
Module 3: Procedures
Office: 900 S. Limestone, Rm. 201A
Phone: 859-323-1100 ext. 80522
Email: spowd2@uky.edu

**Course Description:**

The purpose of this course is to provide you with the cognitive and hands on skills necessary to perform and interpret medical procedures expected of a practicing Physician Assistant. Throughout the course you will continue to practice and hone your physical examination skills learned during PAS 650 and will further enhance your patient assessment and management skills through regular patient assignments with your assigned patient encounter teams.

This course is developed in 3 distinct blocks of instruction which initiates with an in-depth four week ECG course where you will learn to read, interpret, and develop a follow-up plan based on the ECG findings. You will also be expected to perform an ECG on a fellow classmate and interpret the results of the 12-Lead. ECG interpretation will be followed by a 4 week radiology block in which you will learn to evaluate radiology films and formulate a treatment plan. The final 7 weeks will focus on teaching you surgical techniques and office and hospital procedures that you will need to be proficient at to practice as a Physician Assistant. While demonstrating your technical abilities you will also learn to formulate

your treatment plan and management of the surgical patient. Throughout the course, you will have patient contact through small groups similar to your experience in PAS 650.

This 4 hour course will provide the student with a number of formal presentations, laboratory sessions, and in-patient clinical experiences involving a variety of patient evaluation and management skills.

## COMPETENCIES FOR THE PHYSICIAN ASSISTANT STUDENT

### Medical Knowledge

Medical knowledge includes the synthesis of pathophysiology, patient presentation, differential diagnosis, patient management, surgical principles, health promotion, and disease prevention. Physician assistants must demonstrate core knowledge about established and evolving biomedical and clinical sciences and the application of this knowledge to patient care in their area of practice. In addition, physician assistants are expected to demonstrate an investigative and analytic thinking approach to clinical situations. Physician assistants are expected to understand, evaluate, and apply the following to clinical scenarios:

1) signs and symptoms of medical and surgical conditions
2) appropriate diagnostic studies
3) management of general medical and surgical conditions to include pharmacologic and other treatment modalities
4) interventions for prevention of disease and health promotion/maintenance

### Patient Care

Patient care includes patient- and setting-specific assessment, evaluation, and management. Physician assistants must demonstrate care that is effective, safe, high quality, and equitable. Physician assistants are expected to:

1) work effectively with physicians and other health care professionals to provide patient-centered care
2) demonstrate compassionate and respectful behaviors when interacting with patients and their families
3) make decisions about diagnostic and therapeutic interventions based on patient
4) information and preferences, current scientific evidence, and informed clinical judgment
5) develop and implement patient management
6) counsel and educate patients and their families
7) perform medical and surgical procedures essential to their area of practice

8) provide health care services and education aimed at disease prevention and health maintenance
9) use information technology to support patient care decisions and patient education

**Professionalism**

Professionalism is the expression of positive values and ideals as care is delivered. Foremost, it involves prioritizing the interests of those being served above one's own. Physician assistants must acknowledge their professional and personal limitations. Professionalism also requires that PAs practice without impairment from substance abuse, cognitive deficiency or mental illness. Physician assistants must demonstrate a high level of responsibility, ethical practice, sensitivity to a diverse patient population, and adherence to legal and regulatory requirements. Physician assistants are expected to demonstrate:

1) understanding of legal and regulatory requirements, as well as the appropriate role of the physician assistant
2) professional relationships with physician supervisors and other health care providers
3) respect, compassion, and integrity
4) accountability to patients, society, and the profession
5) commitment to excellence and on-going professional development
6) commitment to ethical principles pertaining to provision or withholding of clinical care, confidentiality of patient information, informed consent, and business practices
7) sensitivity and responsiveness to patients' culture, age, gender, and abilities
8) self-reflection, critical curiosity, and initiative
9) healthy behaviors and life balance
10) commitment to the education of students and other health care professionals

**ARC-PA STANDARDS FOR PHYSICIAN ASSISTANT EDUCATION (4thEd.)**

**B2.06** The program curriculum *must* include instruction in the provision of clinical medical care across the life span.
ANNOTATION: Preclinical instruction prepares PAs to provide preventive, emergent, acute, chronic, rehabilitative, palliative and end-of-life care. It includes content relevant to prenatal, infant, children, adolescent, adult and elderly populations.

**B2.07** The program curriculum *must* include instruction in technical skills and procedures based on current professional practice.

## Student Learning Outcomes:

*After completing this course, the student will be able to:*
1. Demonstrate the skill to elicit accurate, comprehensive, and problem based medical histories from patients by employing techniques that facilitate the patient's sharing of information.
2. Demonstrate the ability to organize, record, research, orally present, and manage clinical information.
3. Evaluate a patient's medical conditions and to formulate accurate hypotheses that serve as the basis for making diagnostic and treatment decisions.
4. Associate the appropriate use of laboratory tests and radiographic studies in making diagnostic and treatment decisions.
5. Formulate an effective and appropriate assessment and treatment plan following evaluation and interpretation of an ECG or radiology film.
6. Demonstrate the ability to perform a variety of surgical and procedural skills with proper technique and sterility.
7. Demonstrate the ability to perform a focused and complete physical exam.

**Required Materials:**
*Fast & Easy ECG's A Self-Paced Learning Program* by Bruce Shade and Keith Wesley
ISBN: 0072974095

*Practical Radiology: A Symptom-Based Approach*; Weber, E., Vilensky J., Fog A., F. A. Davis, ISBN 978-0-8036-2832-8

*Clinical Radiology Made Ridiculously Simple*; Ouellette, Hugh. Medmaster, ISBN 0-94078-41-0

*The Essential Guide to Primary Care Procedures* by E.J. Mayeaux ISBN 0781773903

*Procedures Consult* online access available through Medical Center Library (http://libraries.uky.edu/MCL)

**Block Instruction (60%)**
Each of the three modules will be worth 20% of the final grade. Each module instructor will be responsible for his or her own grade allocation (e.g., exams, quizzes). Please see each instructor module objectives/assignments following the tentative course schedule.

**Assignments (20%)**
Each student is required to complete three (3) patient write-ups and one (1) oral patient presentation from the patient encounters. Rubrics will be provided on Blackboard.

Assignment #1: Comprehensive history and physical examination +/- assessment and plan.
Assignment #2: Focused history and physical examination from the same patient as assignment #1 with an assessment and plan. Also turn in graded copy of Assignment #1.
Assignment #3: Focused history and physical examination with assessment and plan

Assignment #4: Oral presentation

Patient write-ups (Assignments #1, #2, and #3) due via Blackboard by 9am on **Feb 11, March 4, and April 1**.
Assignment #4 will be completed during course weeks 13, 14, and 15. Sign-ups will be available at a later date.

*Late submissions will be lowered by 20 percent.*

**Lab Practicum (10%)**
While PAS650 was designed to teach you a comprehensive history and physical exam, you will be expected to perform focused history and physical exams often in your clinical years and future career as a physician assistant. In order to help you with that transition, eight to ten common patient clinical diagnoses will be posted on blackboard within the first two weeks of class. During the practicum on **Friday, March 28**, each student will be expected to complete an appropriate focused history and physical exam and complete appropriate documentation based on these eight scenarios (assignment to a specific scenario during the practicum will be random).

**Patient Encounters (5%)**
Arrangements will be made in Lexington and Morehead for each student to have patient contact hours under the supervision of an attending physician, resident physician, or experienced PA-C from the Chandler Medical Center, St. Claire Medical Center or other affiliated sites.

This is a course requirement. Failure to participate will result in failure of the course. Each group will be responsible for scheduling weekly meetings with their assigned preceptor to review selected cases for history and physical exam findings as well as actual and proposed diagnostic evaluations and management strategies. During these weekly meetings, students may be called upon to deliver oral case presentations on assigned patients.

Each group will designate a team leader who will coordinate weekly meeting times with the preceptor and periodic meetings with the course instructor. Meeting times are scheduled at the availability of the preceptor and *may be held on the weekend or during evening hours if necessary.* Patient encounters will occur from **Week 3 and through Week 15**. Student may be off Week 10 for Spring Break. A minimum of 25 hours is expected though these should be distributed throughout the course. Students will be expected to log the hours spent weekly on patient encounters. This will be done via Blackboard and will include specific information to each week's activity and one to three sentences of reflection on a patient seen that week.

Bedside manner and professionalism are just as important as your technical skills. You will be representing the University of Kentucky Physician Assistant program and professionalism is expected at **ALL** times. An important part of professionalism is your physical appearance. Clinical waist length white coat or scrubs with UK ID badge, instruments, and notepad are required items. Purses, book-bags and other personal items

should **not** be brought into medical areas. *It is essential that patient confidentiality be maintained - always. Official UK identification badges must be worn at all times when in patient areas.*

**Professionalism (5%)**

We know that each of you care greatly about your ability to care for your future patients. Learning how to professionally care for patients will allow you to make a long term difference in their lives. Thus, it is our expectation that all students will act professionally and will be graded on their ability to: attend class/lab as scheduled, not using electronic devises during class/lab unless instructed to do so, completing patient encounter hours and treating the instructors, fellow classmates and supervising residents/MD/PA with respect.

*See grading rubric on blackboard. A failing grade in any one of these five components may lead to a review by the Standards committee and failure of the course.*

**Final Course Grades**

Each graded component will be weighed as follows in calculating the final grade:

| | |
|---|---|
| ECG Module | 20% |
| Radiology Module | 20% |
| Procedures Module | 20% |
| Lab Practicum | 10% |
| Assignments | 20% |
| Patient Encounters | 5% |
| Professionalism | 5% |

**Course Expectations:**

**Testing Policy**

- The Testing policy is described in the UKPAS Policy and Procedures Manual on Academic Integrity and is briefly described here:
- Make-up exams may be given at the discretion of the instructor in the case of an "Unexcused absence."
- Students who are late for a scheduled exam will not be allowed additional time to complete the exam.
- Students who are late for a scheduled exam will not be allowed to enter the room and start the exam once another student has completed the exam and left the room.

**ATTENDANCE POLICY**

The PA curriculum requires students to master a large amount of information and skills in a very short period of time. Although excellent intellectual and psychomotor skills are helpful, they are not enough by themselves. Therefore, the PA Program subscribes to an attendance and testing policy that includes the following rules:

- Students are expected to attend all scheduled lectures, laboratory sessions, and student meetings.

- Courses taught by PA faculty will utilize an attendance and grade reduction policy that may result in a reduced or failing course grade for unexcused absences.
- Students will typically be given an incomplete grade for a course if they fail to complete all the required work by the conclusion of the semester. An "I" grade will require the approval of the course director and the DGS.
- Students will typically be given a reduced or failing grade for a course if they miss more than 10% of the scheduled contact hours. All course syllabi will specify their attendance and grade reduction policies.
- Absence will typically be defined as being 15 or more minutes late for a class.
- Make-up exams will be given in the event of an "Excused Absence," as defined by the University of Kentucky Bulletin, available: http://www.uky.edu/Registrar/Bulletin.htm.

The attendance policy will be in compliance with the University of Kentucky Student Rights and Responsibilities. Excused absences will be given only for those reasons listed by the university senate regulations (below). S.R. 5.2.4.2 defines the following as acceptable reasons for excused absences: (a) serious illness, (b) illness or death of family member, (c) University-related trips, (d) major religious holidays, and (e) other circumstances found to fit "reasonable cause for nonattendance" by the professor.
Students anticipating an absence for a major religious holiday are responsible for notifying the instructor in writing of anticipated absences due to their observance of such holidays no later than the last day in the semester to add a class. Information regarding dates of major religious holidays may be obtained through the religious liaison, who can be reached at 859-257-2754
Students are expected to withdraw from the class if more than 20% of the classes scheduled for the semester are missed (excused or unexcused) per university policy.

**Verification of Absences**
Students may be asked to verify their absences in order for them to be considered excused. Senate Rule 5.2.4.2 states that faculty have the right to request "appropriate verification" when students claim an excused absence because of illness or death in the family. Appropriate notification of absences due to university-related trips is required prior to the absence.

*Any make-up exams or labs will be allowed only at the discretion of the course director (see excused absences above). Student tardiness to lecture or lab will not be tolerated. Consistent tardiness will result in a reduction of your grade (below).*

**ACCOMMODATIONS DUE TO DISABILITY**
If you have a documented disability that requires academic accommodations, please contact the course instructor as soon as possible (PRIOR to the start of the semester where accommodations are being requested) during scheduled office hours. In order to receive

accommodations in this course, you must provide me with a Letter of Accommodation from the Disability Resource Center (Room 2, Alumni Gym, 257-2754, email address: jkarnes@email.uky.edu for coordination of campus disability services available to students with disabilities.

**UNIVERSITY SENATE PROCEDURES AND SENATE DEFINITIONS RELATED TO ACADEMIC HONESTY**

*University Senate Rules (USR) are available at:*
*http://www.uky.edu/Faculty/Senate/rules_regulations/index.htm*

6.3.0 ACADEMIC OFFENSES AND PROCEDURES
Students shall not plagiarize, cheat, or falsify or misuse academic records. (US: 3/7/88; 3/20/89) If the academic offense involves research and/or extramural funding the administrative rule for handling the offense is outlined in Administrative Regulation II - 4.0.2. [US: 2/10/97]

6.3.1 PLAGIARISM
All academic work, written or otherwise, submitted by students to their instructors or other academic supervisors, is expected to be the result of their own thought, research, or self-expression.

**Academic Integrity**

Per university policy, students shall not plagiarize, cheat, or falsify or misuse academic records. Students are expected to adhere to University policy on cheating and plagiarism in all courses. The minimum penalty for a first offense is a zero on the assignment on which the offense occurred. If the offense is considered severe or the student has other academic offenses on their record, more serious penalties, up to suspension from the university may be imposed.

Plagiarism and cheating are serious breaches of academic conduct. Each student is advised to become familiar with the various forms of academic dishonesty as explained in the Code of Student Rights and Responsibilities. Complete information can be found at the following website: http://www.uky.edu/Ombud. A plea of ignorance is not acceptable as a defense against the charge of academic dishonesty. It is important that you review this information as all ideas borrowed from others need to be properly credited.

Part II of *Student Rights and Responsibilities* (available online http://www.uky.edu/StudentAffairs/Code/part2.html) states that all academic work, written or otherwise, submitted by students to their instructors or other academic supervisors, is expected to be the result of their own thought, research, or self-expression. In cases where students feel unsure about the question of plagiarism involving their own work, they are obliged to consult their instructors on the matter before submission.

When students submit work purporting to be their own, but which in any way borrows ideas, organization, wording or anything else from another source without appropriate acknowledgement of the fact, the students are guilty of plagiarism. Plagiarism includes reproducing someone else's work, whether it be a published article, chapter of a book, a paper

from a friend or some file, or something similar to this. Plagiarism also includes the practice of employing or allowing another person to alter or revise the work which a student submits as his/her own, whoever that other person may be.

Students may discuss assignments among themselves or with an instructor or tutor, but when the actual work is done, it must be done by the student, and the student alone. When a student's assignment involves research in outside sources of information, the student must carefully acknowledge exactly what, where and how he/she employed them. If the words of someone else are used, the student must put quotation marks around the passage in question and add an appropriate indication of its origin. Making simple changes while leaving the organization, content and phraseology intact is plagiaristic. However, nothing in these Rules shall apply to those ideas which are so generally and freely circulated as to be a part of the public domain (Section 6.3.1).

Please note: Any assignment you turn in may be submitted to an electronic database to check for plagiarism.

**6.3.2 CHEATING**

Cheating is defined by its general usage. It includes, but is not limited to, the wrongfully giving, taking, or presenting any information or material by a student with the intent of aiding himself/herself or another on any academic work which is considered in any way in the determination of the final grade. The fact that a student could not have benefited from an action is not by itself proof that the action does not constitute cheating. Any question of definition shall be referred to the University Appeals Board. [US: 12/12/05]

**6.3.3 FALSIFICATION OR MISUSE OF ACADEMIC RECORDS [US: 3/20/89; US 4/10/00]**

Maintaining the integrity, accuracy, and appropriate privacy of student academic records is an essential administrative function of the University and a basic protection of all students. Accordingly, the actual or attempted falsification, theft, misrepresentation or other alteration or misuse of any official academic record of the University, specifically including knowingly having unauthorized access to such records or the unauthorized disclosure of information contained in such records, is a serious academic offense. As used in this context, "academic record" includes all paper and electronic versions of the partial or complete permanent academic record, all official and unofficial academic transcripts, application documents and admission credentials, and all academic record transaction documents. The minimum sanction for falsification, including the omission of information, or attempted falsification or other misuse of academic records as described in this section is suspension for one semester.

**CLASSROOM CONDUCT**

*As you are students preparing for a medical profession, it is expected that your behavior reflect this in the classroom. Please provide the utmost respect for lecturers and classmates. Cell phones should be turned "OFF", not just muted, as they interfere with the communication system between Lexington and Morehead. Tardiness and disruptive behavior will not be tolerated and will impact your final course grade.*

*PROFESSIONALISM*

*University Health Care Colleges Code of Student Professional Conduct can be found at:*
*http://www.uky.edu/Regs/files/HCCcode.pdf*
*We expect our students to aspire to the qualities outlined in the University Health Care College's Code of Student Professional Conduct. Further, students will be evaluated regularly by faculty in the program on items such as punctuality, honesty, and interpersonal skills/ behavior. We also expect our students to employ good listening and communication skills; Possess and emote a positive attitude; Demonstrate strong conflict resolution skills, etc, etc. Much of the previous should be understood, but we find it necessary to describe. Faculty members of this program reserve the right to intervene when non-professional conduct is demonstrated by a PA student during his/ her time in the UKPAS program. Professional conduct, as loosely described above, is expected at all times and is considered conduct required for successful completion of this course. Professional conduct will be evaluated throughout this course. A failure in the professionalism component during this course can constitute a failing grade (at a minimum). All questions/ concerns regarding professional behavior and expectations herein should be directed to Professor Schuer. Owning strong 'professional' skills makes the difference between good students and exceptional students; good clinicians and life-changing clinicians. I challenge each one of you to improve yourself professionally during your time in this course/ in this program. At the very least, your future patients deserve this.*

Technology for Distance Learning Course
Maximum timeframe for responding to student communications will be 48 hours unless instructor is out and alternative contact will be provided.
Students will have 1 days of class meetings on campus every month. Those will be listed in the student clerkship manual.

The technological requirements for the course are located at:
http://www.uky.edu/DistanceLearning/faculty/technology/techReqs.html
Contact information for Distance Learning programs (http://www.uky.edu/DistanceLearning) and Information Technology Customer Service Center (http://www.uky.edu/UKIT/Help/; 859-218-HELP).
For technical issues, call 859-218-HELP, if not resolved, then contact instructor via email.
If you have a documented disability that requires academic accommodations in this course, please make your request to the University Disability Resource Center. The Center will require current disability documentation. When accommodations are approved, the Center will provide a Letter of Accommodation which details the recommended accommodations. Contact the Disability Resource Center Director, Jake Karnes, at 859-257-2754 or jkarnes@email.uky.edu.
Information on Distance Learning Library Services (http://www.uky.edu/Libraries/DLLS)
Carla Cantagallo, DL Librarian. Can be reached via phone: 859 257-0500, ext. 2171; long-distance phone number: (800) 828-0439 (option #6). Email: dllservice@email.uky.edu
DL Interlibrary Loan Service:
http://www.uky.edu/Libraries/libpage.php?lweb_id=253&llib_id=16

# PAS 656 Evaluation & Management

## 2014 Spring Lecture Schedule

## Lecture: Tuesday 9-11AM

## Labs: Tuesday 1-4pm, Wednesday 1-4pm, Thursday 8-11am

Subject to change at module instructor's discretion

| Week | Module | Lecture (T9-11) | Lab (TWR) | | Notes |
|---|---|---|---|---|---|
| 1 – 1/14 | ECG | *No class* | T 1-4PM | *No class* | |
| | | | W 1-4PM | Intro Exam Chapter 2 | |
| | | | R 9-11AM | Chapter 4 and 5 | |
| 2 – 1/21 | | Chapter 6-8 | T 1-4PM | Chapter 11-12 | |
| | | | W 1-4PM | Chapter 13-15 | |
| | | | R 9-11AM | Quiz #1 Chapter 17-19 | |
| 3 – 1/28 | | Chapter 20 | T 1-3PM | Clinical ECG *Optional* | Begin patient encounters |
| | | | W 1-4PM | Quiz #2 Chapter 21 | |
| | | | R 8-11AM | Review *Lexington only (2 groups)* | |
| 4 – 2/4 | | *KAPA Legislative Day – No class* | T 1-4PM | Exam prep | |
| | | | W 1-4PM | Review *Morehead only* | |
| | | | R 9-11AM | ECG MODULE EXAM | |
| 5 – 2/11 | Radiology | Medical imaging Chest radiology | Medical imaging Chest radiology | | Assignment #1 due |
| 6 – 2/18 | | Abdomen GU/GI Female Pelvic | Abdomen GU/GI Female Pelvic | | |
| 7 – 2/25 | | C-Spine Skeletal | C-Spine Skeletal | | |
| 8 – 3/4 | | Head EENT Bone and Endocrine | Head EENT Bone and Endocrine | | Assignment #2 due |

| | | | | | |
|---|---|---|---|---|---|
| 9 – 3/11 | Procedures | PFTs<br>Sterile technique | PFTs<br>Sterile technique for gowning and gloving | | RADIOLOGY MODULE EXAM<br>Thursday 3/14<br>2PM-4:30PM |
| 10 -3/18 | Spring Break | | | | |
| 11 – 3/25 | | Lines, tubes, & drains<br>Injections & anesthesia | Central lines<br>NG placement<br>IM/IV/subcutaneous/IO | | LAB PRACTICUM<br>Friday 3/28 |
| 12 – 4/1 | | OR scrub, instruments, & suture material<br>Knot tying | OR scrub<br>Knot tying (two, instrument)<br>Simple interrupted<br>Simple continuous | | Assignment #3 due<br><br>HIV Training<br>Friday, April 4<br>2-4PM |
| 13 – 4/8 | | Wounds<br>Suturing | Knot tying (one)<br>Deep dermal<br>Vertical and horizontal mattress<br>Subcuticular | | Assignment #4 oral presentations begin this week<br><br>IPE Event<br>Friday, April 11 |
| 14 – 4/15 | | Airway management<br>Postoperative care | Simulation | | |
| 15 – 4/22 | | Splint, casting, and taping | Splinting, casting, taping | | End patient encounters<br><br>Assignment #4 oral presentations should be completed |
| 16 – 4/29 | | Simulation debriefing<br>Clinical cases | T 1-4PM<br>W 1-4PM<br>R 8-11AM | PROCEDURES MODULE EXAM | |
| 17 – 5/8 | Written Final Exam Thursday 8AM-10AM | | | | |
| TBD | SP male and female GU | | | | |

# 2014 Spring ECG Module Schedule

Bradford W. Schwarz, M.S., PA-C

**No additional lab sessions, only what is listed below.*

1. **Wednesday, January 15, 2014 1-4 P.M.**
   - **a.** Pre-course examination
   - **b.** Course Review/Expectations
   - **c.** Chapter 2 PPT – *The Electrocardiogram*

2. **Thursday, January 16, 2014 9-11 A.M.**
   - **a.** Chapter 4 PPT – *Heart Rate*
   - **b.** Chapter 5 PPT – *ECG Regularity*

3. **Tuesday, January 21, 2014 9-11 A.M..**
   - **a.** Chapter 6 PPT – *P Waves*
   - **b.** Chapter 7 PPT – *QRS Complexes*
   - **c.** Chapter 8 PPT – *PR Intervals*

4. **Tuesday, January 21, 2014 1-4 P.M.**
   - **a.** Chapter 11 PPT – *Sinus Dysrhythmia*
   - **b.** Chapter 12 PPT - *Atrial Dysrhythmias*

5. **Wednesday, January 22, 2014 1-4 P.M.**
   - **a.** Chapter 13 - *Junctional Dysrhythmias*
   - **b.** Chapter 14 – *Ventricular Dysrhythmias*
   - **c.** Chapter 15 - *AV Heart Blocks*

6. **Thursday, January 23, 2014 9-11 A.M.**
   - **a. Quiz #1 – Chapters 1-7**
   - **b.** Chapter 17 – *Overview of 12-Lead ECGs and Electrical Axis*
   - **c.** Chapter 18 – *Atrial Enlargement and Ventricular Hypertrophy,*
   - **d.** Chapter 19 - *Bundle Branch Blocks*

7. **Tuesday, January 28, 2014 9-11 A.M.**
   - **a.** Chapter 20 – *Myocardial Ischemia and Infarction*

8. **Wednesday, January 29, 2014 1-4 P.M.**
   - **a. Quiz #2 – Chapters 8-14**
   - **b.** Chapter 21 – *Other Cardiac Conditions and the ECG*
   - **c.** Review of 12-Lead ECG's

9. **Thursday, January 30, 2014 8-11 A.M.**
   - **a.** ECG Laboratory Review with *Lex students* only

**b.** Group A- 8-9:30 am & Group B- 10-11am

**10. Wednesday, February 5,, 2014 1-4 P.M.**

**a.** ECG Laboratory Review with *MH students* only

**11. Thursday, February 6, 2014 9-11 A.M.**

**a. Final Written Examination**

Practical Exam- See instructions for completing practical ECG on blackboard, Due on **2/25** by 9am via blackboard.

**EKG Module Grading:**

Quiz 1 – 10%
Quiz 2 - 10%
Participation - 10%
Practical Exam- 20%
Final Exam - 50%
Total Score - 100%

*ECG Module is worth 20% of PAS 656 grade

## ECG Module Objectives

**Heart Rate/ECG Regularity**

*By the end of the lecture, students should be able to:*
Determine the heart rate using the following methods:
- 6-second interval
- 300, 150, 100, 75, 60, 50 method
- 1500 method
- Using rate calculators
- Demonstrate ability to count both atrial and ventricular rates
- Identify rates that are slow (bradycardia), normal, and fast (tachycardia)
- Explain the Five-Step process for analyzing the ECG
- Determine rhythm regularity using the R-R interval and P-P interval

Demonstrate the following methods of determining regularity to include:
- Caliper Method
- Paper and Pen Method
- Counting the small squares method
- Describe the different types of irregularity to include:
- Occasionally or Very Irregular
- Slight Irregularity

Patterned Irregularity
Irregularly irregular
Irregularity due to varying conduction ratios

**P Waves/QRS Complexes**

*By the end of the lecture, students should be able to:*

Identify P wave configuration in different leads
Demonstrate understanding of P waves having different appearances
Define atrial P waves
Explain varying atrial P waves
Identify and describe flutter and fibrillatory atrial waves
Describe presence of inverted or absent P waves
Explain the presence of more P waves than QRS complexes
Describe QRS complex characteristics
Identify variations in QRS configuration
Describe normal QRS complexes in different leads
Demonstrate ability to properly measure QRS complexes
Identify the following abnormal QRS complexes:
Tall and low amplitude QRS complexes
Wide QRS complexes of supraventricular origin
Wide, bizarre QRS complexes of ventricular origin
Absent QRS complexes

**PR Intervals/Origin of Sinus Node Dysrhythmias**

*By the end of the lecture, students should be able to:*

Explain what a normal PR interval represents
Demonstrate proper measurement of the PR interval
Identify and describe PR intervals demonstrating the following qualities:
Shorter PR intervals
Longer PR intervals
Varying PR intervals
Absent or not measureable PR intervals
Constant PR intervals
Properly measure and define the QT interval
Identify the following rhythms originating from the sinus node:
Normal sinus rhythm
Sinus bradycardia
Sinus tachycardia
Sinus dysrhythmia
Sinus arrest

## Atrial Dysrhythmias/Junctional Dysrhythmias

*By the end of the lecture, students should be able to:*

Identify and describe the following rhythms originating in the atria:
Wandering atrial pacemaker
Premature atrial complexes
Atrial tachycardia
Multifocal atrial tachycardia
Supraventricular tachycardia
Atrial flutter
Atrial fibrillation
Identify and describe the following rhythms originating in the AV junction:
Premature junctional complexes
Junctional escape rhythm
Accelerated junctional rhythm
Junctional tachycardia

## Ventricular Dysrhythmias/AV Heart Blocks

*By the end of the lecture, students should be able to:*

Distinguish between the ECG characteristics, possible causes, signs and symptoms, and management for the following ventricular dysrhythmias:
Premature ventricular complexes
Idioventricular rhythms
Accelerated idioventricular rhythm
Ventricular tachycardia
Ventricular fibrillation
Asystole
Define the terms bigeminy, trigeminy, quadrageminy, and "run" when used to describe ventricular premature complexes
Describe the terms monomorphic and polymorphic ventricular tachycardia
Describe the purpose and procedure for defibrillation
Identify and define the presence of pulseless electrical activity
Describe the ECG characteristics, possible causes, signs and symptoms for the following atrioventricular heart blocks:
1st-degree AV heart block
2nd-degree AV heart block – Type I
2nd-degree AV heart block – Type II
3rd-degree AV heart block
Atrioventricular Dissociation

## Electrical Axis/Hypertrophy, Bundle Branch Block, and Preexcitation

*By the end of the lecture, students should be able to:*

Describe vectors and how they are used in the interpretation of the ECG
Define electrical axis

Identify and apply understanding of waveform direction
Analyze ventricular depolarization and mean QRS axis
Calculate the electrical axis
Describe normal QRS axis
Identify altered QRS axis and list causes of altered electrical axis
Properly identify and describe hypertrophy leading to:
Atrial enlargement
Ventricular enlargement
Explain the mechanism of ventricular conduction disturbances involving the bundle branches
Identify Right Bundle Branch Block, Left Bundle Branch Block, and Hemiblocks
Define and identify the following preexcitation syndromes:
Wolff-Parkinson White (WPW) Syndrome
Lown-Ganong-Levine (LGL) Syndrome

**Myocardial Ischemia, Injury, and Infarction**

*By the end of the lecture, students should be able to:*

Define the coronary circulation and the areas of the heart involved
Describe ECG changes that may reflect evidence of myocardial ischemia, injury, or infarction
Explain the mechanism of a ST-segment elevation and non-ST segment elevation myocardial infarction
Describe the sequence of normal R-wave progression
Identify myocardial infarctions of the following locations:
Anterior Infarction
Lateral Infarction
Inferior Infarction
Posterior Infarction

**Other Cardiac Conditions**

*By the end of the lecture, students should be able to:*

Describe the mechanism of pericarditis and the associated changes observed on the ECG
Identify ECG changes related to pulmonary embolism
Define the types of artificial pacemakers and describe their appearance on the ECG

# Radiology Module PAS 656

## Diagnostic Radiology: Imaging in Medicine for the PA student

This module is designed to give you didactic and essential basic clinical skills in radiographic interpretation. The goal is to teach basic radiographic interpretation skills commensurate with generalist- emergency medicine, urgent care, family practice, internal medicine (ambulatory and hospital). There are core skills in diagnostic radiology which all practitioners must have to be competent. You will be given this information in lecture format, lab practice sessions, and internet-based exercises requiring you to practice recognizing key radiologic images in medicine. Emphasis will be in plain radiography and CT, with little arteriography, nuclear medicine, MRI or ultrasound.

Instructor:
David Fahringer, MSPH, PA-C
Assistant Professor, University of Kentucky
Clinical Sciences Department
College of Health Sciences: PA Studies
Office: CTW 201C Lexington Campus
859-218-0586

Textbooks

1. Practical Radiology: A symptom-based approach; Weber, E., Vilensky J., Fog A., F. A. Davis, ISBN 978-0-8036-2832-8

2. Clinical Radiology made ridiculously simple; Ouellette, Hugh. Medmaster ISBN 0-94078-41-0

Methodology

There will be two hours of lecture weekly (8 hours) in formal didactic format. Lab sessions for the week will review concepts covered in lecture and your reading assignments from both textbooks. In addition, there will be self-paced internet-based study assigned (highly recommended) which will work to assure core competency in diagnostic radiology. Textbook reading assignments are carefully chosen and are not optional. Grades will be based on your ability to integrate

pathophysiology, case-based presentations, radiographic interpretation, and both memorization and application of didactic information. You will be provided with an objective list of essential images which you must be able to identify. The lecture and lab sessions will center on these but are not limited to these core images. In order to excel in the course you will need to pay close attention and take notes in lecture, attend and be involved in lab sessions, complete all reading assignments, internet practice sessions, and continue to be curious.

# Exam / Assessment

There will be one final exam which includes two parts: 1) Multiple Choice objective exam (50 questions-includes PFT) and 2) Practical Exam with case scenarios and x-rays to interpret (20 images). The objective exam will contain primarily information from the lectures and from readings in both cased-based scenarios and straight-forward informational questions. Radiology is a highly technical and ever evolving specialty of medicine. The goal is not to make a radiologist out of you. The goal is that you develop essential clinical interpretive skills, understand how x-rays work, gain understanding in radiographic utility, and very importantly learn to describe in appropriate terminology what you see (or don't see) in a given film. Focus will be on plain radiography with introductory CT- again based on the skills of a generalist.
Exam date: March 14th 2014 (Thursday) 2:00 to 4:30pm (Written and Practical)

# Schedule

Feb 11: Lecture 9:00-10:50- Modalities of Medical Imaging & Chest Practical Radiology (Chapters 1,6); (pp. 1-19, 125-145) Quellette (Chapters 1,2)
Feb 18: Lecture 9:00-10:50- Abdomen / GU & GI / Female Pelvic Imaging
Readings: Practical Radiology (Chapters 8,9,10); (pp. 163-176, 181-195, 199-208) Quellette (Chapters 34)

Feb 25: Lecture 9:00-10:50- C-Spine & Skeletal
Readings: Practical Radiology (Chap 2,3,); (pp. 21-57, 65-78) Quellette (Chapters 5,6,7,8)
March 4: Lecture 9:00-10:50- EENT Imaging, Head CT, Imaging of bone disease and Endocrine Disorders, Clinical Practice Issues in imaging
Readings: Practical Radiology (Chap 4,5,11,12) (pp. 85-100, 105-119,215-221, 223-229) Quellette (Chapter 9)

# Core Radiology Goals, Objectives, Standards & Competencies

**By the end of the module the student will be able to:**

1. Have a basic understanding of Radiology imaging
2. Give interpretation of findings from different imaging modalities
3. Know the difference between a normal and abnormal image
4. Understand the difference between each of the imaging modalities: X-ray, CT, MRI, Ultrasound and Special procedures
5. Know the Cardinal Rule of Radiation and the risks of imaging procedures
6. Have a working knowledge of pharmacologic agents commonly used in radiology

**Objectives:**

1.0 The master's physician assistant student shall demonstrate knowledge and skill to properly diagnose medical diseases and conditions with imaging studies (General Diagnostic, CT, US, MRI, Angiography, and Nuclear Medicine). In the following: **ARC-PAC Standards (B2.05, B2.07)**

a. Obtaining a pertinent age specific history

b. Selecting the appropriate examination

c. Selecting the appropriate preparation for examination

d. Analyzing clinical and imaging data

e. Establishing a logical diagnosis and differential diagnosis

f. Describing indications for referral, consultation, and ancillary services

2.0 The master's physician assistant student shall demonstrate knowledge and skill in basic evaluation, and interpretation of imaging studies (General Diagnostic, CT, US, MRI, Angiography, and Nuclear Medicine) for abnormalities and common variants for the following systems: **ARC-PA Standards (B2.05, B2.07)**

Cardiac
Endocrine
Gastrointestinal
Neurologic
Peripheral Vascular

Pulmonary
Skeletal/Muscular
Soft Tissue
Urinary Tract

3.0 The master's physician assistant student shall demonstrate knowledge of the exposure risk of doing radiology procedures and know how to protect their self and the patient. **ARC-PA Standards (B2.13)**

4.0 The master's physician assistant student shall demonstrate knowledge of the actions, indications, and contra-indications of pharmacologic agents commonly used in radiology. **ARC-PA Standards (B2.02.d)**

**Competencies**

1. The PA student will identify normal anatomical structures on the different modalities in radiology by demonstrating their knowledge in lab through practical exams. This will be a written lab assignment. **(1.a,b,d) (2.a.e) (4.g)**

2. The PA student will identify abnormal findings on X-ray by oral presentation or written assignment in the lab. **(1.a,b,d) (2.a) (4.g)**

3. The PA student will write up a written report on a given x-ray to be turned in as a lab assignment. **(1.a,b,c) (2.a,b,e)**

4. The PA student will be given a case scenario and will order the correct radiology imaging for that patient in a written assignment in class.**(2.b) (4.d)**

**Medical conditions that will be covered are:**

Pneumothorax
Subcutaneous Emphysema
Emphysema
Pleural Effusion
Pulmonary Edema (cardiogenic & non-cardiogenic)
Pneumonia (interstitial vs. air-space)
Pneumonitis
Pulmonary Fibrosis (Interstitial Lung Dz)

Pulmonary TB
Lung Abscess
Atelectasis Aspiration
Foreign Body
Pulmonary mass (lung cancer vs. benign nodule) Aortic
Dissection
Diaphragmatic Rupture
Cardiomegly
Small Bowel Obstruction
Ileus
Large Bowel Obstruction Cecal &
Sigmoid Volvulus Ascites
Hydronephrosis
Ureteronephrosis Kidney
Stone Normal IVP
Misplaced lines and tubes Normal
ET-tube placement Child Abuse
Intracranial bleed / hematoma
CNS space occupying lesion
C-spine fractures (Flexion Teardrop, Hangman's , Burst, Jefferson's, Odontoid, Clay-Shoveler's, Wedge or Compression)
Cervical vertebrae subluxation
Thoraco-lumbar vertebral fractures / subluxations
Major pelvic fractures Shoulder
dislocation / fracture AC-separation
Clavicular fracture Humeral
shaft fracture Elbow fracture
Fat pad sign
Radial & Ulna fracture
````Colles fracture Scaphoid /
Wrist fractures Hand fractures
````Boxer fracture
````Finger fractures
````Phalanx dislocations
Hip fractures
Femur fractures

Tibial Plateau fractures
Patella fracture
Tibial & Fibular shaft fractures
Ankle Fractures
````Lateral malleolus
````Medial malleolus
````Bi-malleolar fracture
````Tri-malleolar fracture
Fifth Metatarsal fracture
Marching fracture
Phalanx (digit) fracture or dislocation

**CT**

Recognition of major normal anatomical landmarks on Chest CT & Abdominal CT (as explained in lecture and power points)

Lung abscess
Pneumothorax
Pneumomediastinum Pleural
Effusion Pneumonia
Pulmonary Fibrosis

Aortic aneurysm (Thoracic and Abdominal)
Pericardial tamponade
Lung Cancer/Mass
Hepatic mass (hepatoma) AAA
Pancreatitis Ascites
Pneumoperitoneum Small Bowel
obstruction Large Bowel
Obstruction Hydronephrosis
Ureteral obstruction
Urolithiasis
Ovarian mass
Subdural hematoma Epidural
hematoma Intracerebral
hemorrhage Hydrocephalus
Brain mass with midline shift

# Pulmonary Function Test: Module PAS 656

**Pulmonary Function Test: PFT performance and evaluation in Medicine for the PA student**

This module is designed to give you didactic and essential basic clinical skills in Pulmonary Function Test (PFT) performance and interpretation. The goal is to teach basic performance and interpretation skills commensurate with generalist- emergency medicine, urgent care, family practice, internal medicine (ambulatory and hospital). There are core skills in PFT which all practitioners must have to be competent. You will be given this information in lecture format, and lab practice session, to recognized the different pulmonary diseases in medicine. Emphasis will be in how to preform, when to order and how to interpret a PFT.

Instructor:
David Fahringer, MSPH, PA-C
Assistant Professor, University of Kentucky
Clinical Sciences Department
College of Health Sciences: PA Studies
Office: CTW 201C Lexington Campus
859-218-0586

Textbooks : None handouts

Methodology
There will be two hours of lecture one week in formal didactic format. Lab session for the week will review concepts covered in lecture. Grades will be based on your ability to integrate pathophysiology, case-based presentations, PFTs interpretation, and both memorization and application of didactic information. The lecture and lab session will center on these but are not limited to these core images. You will have hands on practice in the lab to demonstrate how to set up a for a PFT, preform, coach and interpretation

# Exam / Assessment

There will be one final exam which includes two parts: Multiple Choice PFT strips, and cases on the objective exam (5-10 questions). This will be added in with the radiology

module. The exam questions will contain primarily information from the lecture and from cased-based scenarios (Class and lab) and straight-forward informational questions. The goal is to develop essential clinical interpretive skills, understand how to set up and preform a PFT, and gain understanding of when to order a PFT.

# Schedule

March 11: Lecture 9:00-10:50: Introduction to PFT and overview of use of PFTs in medicine.

# Core Radiology Goals, Objectives, Standards & Competencies

**By the end of the module the student will be able to:**

1. Have a basic understanding of Pulmonary Function Test (PFT)
2. Give interpretation of findings from different PFTs
3. Know the difference between a normal and abnormal PFT
4. Understand the different medical pulmonary disease that will require a PFT

**Objectives:**

1.0 The master's physician assistant student shall demonstrate knowledge and skill to properly diagnose medical diseases and conditions with the use of a PFT exam in the following: **ARC-PAC Standards (B2.05, B2.07)**

   a. Obtaining a pertinent specific history for the PFT

   b. Selecting the appropriate preparation for PFT examination

   c. Analyzing clinical and PFT findings

   d. Establishing a logical diagnosis and differential diagnosis

   e. Describing indications for referral, consultation, and ancillary services

2.0 The master's physician assistant student shall demonstrate knowledge and skill in basic PFT evaluation, and interpretation of PFTs for abnormalities and common variants for the following systems: **ARC-PA Standards (B2.05, B2.07)**

   a. Emphysema
   b. Asthma
   c. Mixed obstruction/restrictive airway disease

3.0 The master's physician assistant student shall demonstrate knowledge to calibrate, preform, and coach for a PFT exam. **ARC-PA Standards (B2.07, B2.09)**

4.0 The master's physician assistant student shall demonstrate knowledge of how to clinically tie in the results of the PFT to the patient's condition. **ARC-PA Standards (B2.05, B2.07)**

**Competencies**

1. The PA student will identify normal and abnormal PFTs by demonstrating their knowledge in lab through practical exams. **(1.a,b,d) (2.a.d,e) (4.g)**
2. The PA student will demonstrate by demonstration of preforming a PFT in the lab setting. **(1.a,b,d) (2.a) (4.g)**
3. The PA student will be given a case scenario and will determine what the medical condition of the patient from reading the PFT. **(1.a,b,d) (2.a,b,e) (4.d,e,f)**

# 2014 Spring Procedure Module

Description

The third module of PAS 656 takes place during weeks 9-16 and will cover common procedures you are expected to know for current clinical practice. You should become familiar with the indications, contraindications, required equipment, procedure steps, and complications for each of these procedures over the course of the module.

The module will consist of lectures, hands-on labs, videos, reading, and simulation exercises. You will be graded on participation, quizzes, a module examination, simulation exercise, and successful demonstration of several skills and procedures. You will be responsible for reading the textbook and/or watching videos online prior to lecture and lab. You are responsible for supplemental material and material covered in class. You may be tested on material not explicitly stated in class. Look to the objectives for guidance as you study.

This module is 20% of your total PAS 656 grade. There will be quizzes over weekly topics and one cumulative procedures exam during lab time the final week of the module. A skills assessment form must be completed; the form contains skills that the student must satisfactorily perform in front of one of the course instructors. All skills must have a course instructor signature and date by the final week of the course. There will be a simulation lab toward the end of the module in which you will be expected to fully participate and complete a brief reflective piece. Those who do not satisfactorily pass the procedures module exam or do not have the skills assessment form complete will be required to come to lab on the Thursday afternoon of final exam week for remediation. More details about module components and grading will be provided in class and on Blackboard.

Instructors


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| Shea Lambirth, M.D. | Sam Powdrill, M.Div, PA-C | Bradford W. Schwarz, M.S., PA-C |
| Office CTW 207A | Office CTW 201A | Office 205B |
| pspoynter@uky.edu | spowd2@uky.edu | bradford.schwarz@uky.edu |


Text and Videos

*The Essential Guide to Primary Care Procedures* by E.G. Mayeaux ISBN 0781773903

Procedures Consult http://app.proceduresconsult.com.ezproxy.uky.edu/Learner/Default.aspx

Procedures Module Grading

5% Quizzes
5% Skills assessment form
5% Simulation
5% Module exam

Objectives These may be updated before or during the module with notification.

Week 9 – Sterile Technique and PFTs

- Perform and interpret a pulmonary function test using correct technique
- Compare and contrast aseptic technique and sterile technique
- Demonstrate the correct surgical technique for gowning and gloving without assistance
- Recognize common surgical instruments including adson forcep, hemostat, suture scissors, and needle driver.
- Demonstrate how to correctly pass and hold surgical instruments

Week 11 – Lines, Tubes, & Drains; Injections & Anesthesia

- Demonstrate how to administer medication via the following routes: intramuscular, intravenous, intraosseus, subcutaneous, and intradermal
- Demonstrate how to safely draw up medications into a syringe from an ampule and/or vial
- Demonstrate ability to calculate dosages, IV drip rate and infusion time
- Discuss common antiseptics and describe how to correctly cleanse the skin in anticipation of a procedure
- Describe common local anesthetics including lidocaine and bupivicaine
- Discuss common local anesthetic agents and understand procedure for administering a local anesthesia or common regional anesthetic block such as a digital block
- Recognize which areas are inappropriate for a digital block
- Discuss the indications and contraindications in using epinephrine in local anesthetics.
- Understand the principles and essential techniques, equipment required, when each procedure should (or should not) be used, and common complications: arterial line, central line, nasogastric tube, urinary catheter, lumbar puncture, thoracentesis, and paracentesis
- Know the three locations for a central line and the anatomical landmarks for each
- Demonstrate how to correctly remove a JP drain
- Discuss how to record inputs and outputs
- Outline the indications and steps for joint aspiration and joint injection

Week 12 – OR Scrub, Instruments, & Suture Material; Knot Tying

- Recognize and correctly demonstrate use of surgical instruments, sutures and suture needles depending on the type of tissue or closure being used
- Recognize and discuss the characteristics of common types of suture material including chromic, vicryl, silk, prolene, and nylon (e.g., absorbable, braided, tensile strength duration) and know when it is appropriate to use a particular suture
- Understand suture size and choose the size of suture to use on various places on the body particularly face, trunk and extremities
- Observe, practice and demonstrate two hand tying and instrument tying technique
- Recognize and describe how to make an incision with regard to skin lines of tension in order to promote wound closure and reduce scar visibility
- Demonstrate the following suture methods: simple interrupted and continuous

Week 13 – Wounds and Suturing

- Describe a wound by surgical wound classification (I-IV)
- Describe when to use and how to perform punch, shave, and excisional biopsy
- Compare and contrast healing via primary, secondary, and tertiary intention and recognize reasons one might be selected over another
- Explain techniques for wound management and healing promotion

- Discuss how to clean a wound including abrasion, burn, laceration, puncture (e.g., bite), pressure wound, or incision
- Know the stages of wound healing
- Recognize and be able to discuss types of wound dressings
- Explain the fundamental principles of wound care and tissue management
- Demonstrate the correct technique for donning gloves and opening a sterile field
- Demonstrate the correct technique for scrubbing in preparation for surgery
- Discuss prepping skin for surgery
- Recognize and understand principles of patient positioning and safety in the operating room
- Explain the treatment principles and rationale for draining an abscess
- Demonstrate correct technique for incising, breaking up loculations, and drainage of an abscess
- Outline the steps to draining a epidermal cyst
- Discuss methods of wound closure include suture, staples, steri-strips, and dermabond
- Discuss indications and contraindications of using a wound vac
- Demonstrate the following suture methods: horizontal mattress, vertical mattress,, subcuticular, buried knot

Week 14 – Airway Management; Postoperative Care

- Demonstrate chin lift and jaw thrust and understand reason for their use
- Discuss the different types of airway management and understand the procedure for placement: nasopharyngeal, oropharyngeal, LMA, endotracheal tube
- Outline the steps and pharmacologic means of rapid sequence intubation
- Demonstrate bag-mask ventilation
- Recognize utility of needle decompression and describe correct procedure
- Discuss the indications for chest tube placement, procedure for removal, and significance of water seal
- Understand the basics of ventilator settings: pressure control, volume control, peak airway pressure, PEEP, IPAP, EPAP, CPAP, and bivalve
- Discuss the following types of oxygen delivery: room air, nasal cannula, and masks
- Understand the following more invasive forms of airway mangament: needle cricothyroidotomy (angiocath), surgical cricothyroidotomy, and tracheostomy
- Know the considerations for appropriate postoperative care
- Discuss the evaluation of postoperative fever
- Understand the indications and demonstrate how to correctly perform incentive spirometry

Week 15 – Splinting, Casting, and Taping

- Recognize splinting and casting material and be able to use
- Identify when to use a cast and when to use a splint
- Describe potential complications of casting and splinting and describe how to avoid these complications
- Outline the six Ps for assessing extremity integrity and safety
- Describe how to correctly apply the following splints: volar arm splint, sugar tong splint, finger splint, thumb spica, knee splint, and ankle stirrup

Week 16 – Simulation Feedback and Case Scenarios

- Interpret and use an ECG in a clinical situation
- Interpret and use imaging in a clinical situation
- Identify and perform the correct procedure in a clinical situation