MPAS 531
Physical Diagnosis I

1. **Course Description:** This is one of a series of three classes designed to teach methods of interviewing and obtaining a complete history and physical exam. In the first section, physical diagnosis and proper examination techniques of problems relating to the systems covered in Clinical Medicine I will be covered. Those systems include: infectious disease, otorhinolaryngology, ophthalmology, pulminology, allergy, immunology, dermatology, genetics, gastroenterology, and tropical medicine. Emphasis is placed on professionalism in the manner and approach to patients; sophistication in taking a history; expertise in the techniques of physical examination; the ability to integrate, correlate, and interpret the data obtained; and the ability to record findings accurately, succinctly, and in an organized, logical sequence. The students will have ample time to practice their skills among themselves with faculty observation and critique. Students will also be expected to self-assess their strengths and deficiencies, and seek out tutorials and advice to remedy perceived problems. Opportunity will be given for students to present and document their findings and receive constructive criticism.

2. **Course Materials:**
   2.1 Bates’ Guide to Physical Examination & History Taking (Book with CD-ROM).
   2.2 Documentation for physician assistants, Lynnette J. Mattingly. ISBN: 0-8036-1141-2
   2.3 Problem-Oriented Medical Diagnosis, Friedman, H. Harold ISBN-13: 9780781729550

3. **Course Objectives:**
   Upon Completion of the course, each student will be able to:
   3.1. Demonstrate proper interviewing techniques to gather information essential to the diagnosis and treatment of the patient including utilization of appropriate lines of questioning and communication skills to facilitate patient-clinician interaction.
   3.2. Develop adaptive interview techniques to be used when interviewing patients of varied ages in varied situations.
   3.3. Understand the importance of eliciting an accurate medical history.
   3.4. Elicit and document an accurate and concise complete medical history on a patient.
   3.5. Demonstrate basic skills in performing physical examination on a patient including appropriate professional manners in interacting with patients who are fearful, confused, hostile, depressed or manipulative.
   3.6. Demonstrate proficiency in using common medical equipment related to the included modules.
   3.7. Demonstrate an understanding of the variety of possible causes underlying common symptoms, and of further questions that may help to narrow the possibilities.
   3.8. Associate clusters of symptoms with specific disease entities.
   3.9. Demonstrate skills in self-directed learning, enhancing the PA student’s ability to take charge of his/her own education.
   3.10. Perform an accurate and complete patient history on a fellow student.
3.11. Define each of the elements of a SOAP (subjective, objective, assessment, plan) note and identify what is contained in each element.

3.12. Demonstrate and perform inspection, palpation, percussion, auscultation, and vital signs in relation to the modules studied.

3.13. Demonstrate and perform proper use of medical instruments and diagnostic tools used in the physical exam, related to the outlined module.

3.14. Demonstrate (on a fellow student or faculty member) the appropriate examination techniques for the following:
   3.14.1. Overall survey, including vital signs
   3.14.2. Lymph node examination
   3.14.3. HEENT examination
   3.14.4. Pulmonary examination
   3.14.5. Abdominal examination
   3.14.6. Dermatological survey

3.15 Using correct technique, perform à physical examination on a fellow student in a defined time limit.

3.16. Cite and employ appropriate safety measures for the protection of both self and patients in performance of the physical examination.

3.17. Identify and/or describe normal physical examination findings.

3.18. Recognize and be able to describe specific abnormal physical findings.

3.19. Relate abnormal findings to disease entities in which they are commonly found.

3.20. Organize and express physical examination findings accurately and clearly in appropriate written form.

3.21. Present a clear oral capsule summary of the patient’s complaints, history of present illness, relevant medical history and physical examination findings.

3.22. Use correct medical terminology, together with correct grammatical construction in presenting medical information in oral or written form.

3.23. Demonstrate appropriate professional concern and sensitivity in patient encounters.

4. **Course Competencies:** (For modules without specific competencies, students will be fine honing their patient interviewing skills as well as reviewing and perfecting examination skills presented in previous modules.)

4.1. **Introduction to health care and Laboratory Medicine Module:**
   4.1.1. Demonstrate proficiency in basic examination skills
      4.1.1.1. Infection control
      4.1.1.2. Inspection
      4.1.1.3. Palpation
      4.1.1.4. Percussion
      4.1.1.5. Auscultation
   4.1.2. Demonstrate proficiency in Measurement of vital signs
      4.1.2.1. Pulses
      4.1.2.2. Respiration
4.1.2.3 Blood Pressure
4.1.2.4 Temperature
4.1.2.5 Height and weight
4.1.3 Demonstrate a knowledge of name, function, and proper use of examination instruments including but not limited to:
   4.1.3.1 Stethoscope
   4.1.3.2 Ophthalmoscope
   4.1.3.3 Snellen acuity chart
   4.1.3.4 Otoscope
   4.1.3.5 Tuning fork
   4.1.3.6 Reflex hammer

4.2 Infectious Disease Module:
   4.2.2 Demonstrate the process of specimen collection included in the diagnosis of infectious disease:
   4.2.3 Obtaining cultures
      4.2.3.1 Swabs
      4.2.3.2 Blood
      4.2.3.3 Urine
      4.2.3.4 Sputum
      4.2.3.5 In-office tests
         - Rapid strep
         - Urine tests
         - Blood tests
   - Hospital lab tests
      - CBC
      - Cultures

4.3 Dermatology Module:
   4.3.2 Understand the anatomy and physiology of the skin and its appendages.
   4.3.3 Assess the color, level of hydration, temperature, and texture of skin.
   4.3.4 Categorize lesions of the skin according to location, distribution, and appearance.
   4.3.5 Define terms and symptoms associated with disorders of the skin.
   4.3.6 Identify skin changes suggestive of systemic disease such as Addison’s disease, cirrhosis, diabetes mellitus, etc.
   4.3.7 Describe the characteristics of various skin lesions.
   4.3.8 Demonstrate ability to define skin abnormalities by describing pictorial material.
   4.3.9 Recognize signs and symptoms of parasitic infections of the skin.
   4.3.10 Recognize signs and symptoms of malignant and premalignant skin lesions.
   4.3.11 Recognize signs and symptoms of infectious skin lesions caused by bacteria and fungus.
   4.3.12 Define terms and symptoms associated with disorders of the hair and nails.
4.3.13 Recognize signs and symptoms that differentiate types of alopecia.
4.3.14 Recognize signs and symptoms of idiopathic, degenerative, inflammatory, and infectious process of the hair.
4.3.15 Recognize various disorders of the nails.
4.3.16 Appreciate and value the trust and confidence patients and their families accord the health care professional.
4.3.17 Appreciate and value the trust and confidence of the physician who extends the privilege of patient care to the mid-level practitioner.

4.4 **ENT and Allergy Modules**

4.4.2 Demonstrate the proper technique for otoscopic examination of the ear.
4.4.3 Identify the following on a drawing or picture of a normal TM:
   4.4.3.1 Malleus
   4.4.3.2 Pars flaccida
   4.4.3.3 Pars teras
   4.4.3.4 Incus
   4.4.3.5 Cone of light
4.4.4 Demonstrate testing gross hearing by use of the whispered voice.
4.4.5 Demonstrate proper technique for the Weber test.
4.4.6 Demonstrate proper technique for the Rinne test.
4.4.7 Demonstrate proper techniques for the nasal examination using an otoscope with nasal speculum.
4.4.8 Identify the following on a drawing or picture of a nasal exam:
   4.4.8.1 Middle turbinate
   4.4.8.2 Inferior turbinate
   4.4.8.3 Middle meatus
   4.4.8.4 Nasal septum
4.4.9 Describe to the preceptor a nasal examination including color, swelling, exudate, or bleeding of the mucosa, septal deviation or perforation.
4.4.10 Demonstrate proper technique for sinus palpation. Identify the sinuses being palpated.
4.4.11 Demonstrate proper techniques of sinus transillumination.
4.4.12 Demonstrate proper techniques for examination of lips, buccal mucosa, gums, teeth, and roof of mouth.
4.4.13 Demonstrate proper techniques for examination of the tongue including examination of CN 12, and including palpation where appropriate.
4.4.14 Demonstrate proper techniques for examination of the pharynx, including proper use of the tongue blade and including testing of CN 10.
4.4.15 Identify on patient the location of the ten sets of lymph nodes as listed in Bates textbook (p. 194) and demonstrate appropriate examination techniques for each.
4.4.16 Identify on patient the thyroid and cricoid cartilages and trachea.
4.4.17 Demonstrate proper technique for palpation of the thyroid gland.

4.5 **Ophthalmology Module**:

4.5.2 Identify the following structures on a patient:
4.5.2.1 Pupil
4.5.2.2 Iris
4.5.2.3 Sclera
4.5.2.4 Conjunctiva
4.5.2.5 medial and lateral canthi
4.5.2.6 lacrimal puncta

4.5.3 Demonstrate an understanding of the measurement of visual acuity, including office methods to measure it. Explain standard method of describing acuity.

4.5.4 Demonstrate appropriate techniques for assessing visual fields by confrontation.

4.5.5 Demonstrate appropriate techniques for examination of the eyelid, including attention to width of palpebral fissures, edema of the lids, color of the lids, presence or absence of lesions, condition and direction of eyelashes, and adequacy with which the eyelids close.

4.5.6 Demonstrate appropriate techniques for examination of the conjunctivae and sclera.

4.5.7 Demonstrate appropriate techniques for eversion of the upper eyelid.

4.5.8 Define and demonstrate appropriate techniques for assessment of anisocoria.

4.5.9 Demonstrate appropriate techniques for assessment of pupillary responses (direct, consensual, accommodative).

4.5.10 Demonstrate appropriate techniques for assessment of extraocular movements.

4.5.11 Demonstrate knowledge of the working parts of the ophthalmoscope, including the rheostat, lens disc, aperture disc.

4.5.12 Demonstrate appropriate handling of ophthalmoscope to view patient’s left and right eye (appropriate hand, eye use, hand position, etc.).

4.5.13 Demonstrate an ability to elicit and view the red reflex in each eye.

4.5.14 Demonstrate an understanding of the functional anatomy of the nearsighted and farsighted eye, and what alterations are required on the lens disc of the ophthalmoscope to view these eyes appropriately.

4.5.15 Demonstrate appropriate techniques for viewing the retina of each eye.

4.5.16 Demonstrate an ability to describe the retina of a patient, including the color of the optic disc, clarity of the outline of the optic disc, the presence or absence of rings or crescents around the outline of the disc, the size and appearance of the central physiological cup, the presence or absence of any abnormal lesions, exudates, hemorrhages, etc. on the retina.

4.5.17 Demonstrate an ability to describe the differentiate arterioles and veins, based on color, size and light reflection (see Bates page 183).

4.6 Pulmonary Module:

4.6.2 Identify on a patient the five lobes of the lung anteriorly, posteriorly, and laterally.

4.6.3 Identify accessory muscles of respiration and locate these on a patient.
4.6.4 Demonstrate appropriate techniques for evaluation of symmetrical chest expansion by palpation (Bates page 233).
4.6.5 Demonstrate appropriate technique for assessment of tactile fremitus. Describe what is “normal”.
4.6.6 Demonstrate appropriate technique for percussion of lung fields. 
4.6.7 Differentiate between dull and resonant percussion sounds. Utilize this differentiation to locate the diaphragm on a patient and measure its movement with respiration.
4.6.8 Demonstrate appropriate techniques for auscultation of the lungs.
4.6.9 Describe the nature of the breath sounds heard.
4.6.10 Demonstrate appropriate techniques for assessing egophony. Describe what is “normal”.
4.6.11 Demonstrate appropriate techniques for assessing whispered voice sounds. Describe what is “normal”.

4.7 GI Module
4.7.2 Demonstrate the ability to properly position the patient for optimal abdominal examination.
4.7.3 Demonstrate appropriate techniques for inspection of the abdomen, including commentary on the presence or absence of scars, striae, and dilated veins, the contour of the abdomen (flat, rounded, protuberant or scaphoid), symmetry, peristalsis and pulsations.
4.7.4 Demonstrate appropriate techniques for auscultation of the abdomen in all 4 quadrants, including description of bowel sounds in terms of frequency and character.
4.7.5 Demonstrate on a patient the appropriate anatomic positions to auscultate for bruits of the aorta and renal, iliac and femoral arteries.
4.7.6 Demonstrate appropriate technique for percussion of the abdomen. Using this technique, measure the liver span in the midclavicular line.
4.7.7 Demonstrate appropriate techniques for both gentle and deep palpation of the abdomen. Comment on any areas of tenderness or increased resistance to palpation.
4.7.8 Demonstrate appropriate techniques to elicit signs of peritoneal irritation by means of the cough reflex and rebound tenderness.
4.7.9 Demonstrate appropriate techniques for palpating hepatosplenomegaly.
4.7.10 Demonstrate appropriate technique for palpation of the abdominal aortic pulsations.
4.7.11 Demonstrate appropriate technique for testing for shifting dullness.
4.7.12 Demonstrate appropriate technique for testing for the presence of a fluid wave.

5. Student Activities and Experiences (Instructional techniques):
5.1 Case studies enable integration of clinical information into a comprehensible format.
5.2 Guided faculty Lecture.
5.3. Group participation.
5.4. Independent reading assignments.
5.5. Faculty demonstration of examinations and diagnostic techniques
5.6. Hands-on experience through the use of simulated patients.

6. **Student Assessment:**
   6.1. Comprehensive practical, oral, and written final examination. (30% of total grade)
   6.2. Practical, oral, and written examinations at the end of each module. (30% of total grade)
   6.3. Clinical correlation case studies with oral presentation. (15% of total grade)
   6.4. Written H&P and Soap note assignments. (15% of total grade)
   6.5. Full attendance and participation. (10% of total grade)

7. **Course grades:** are calculated on a percentage basis. All final course grade percentages are rounded to the nearest integer. *(XX.50% or higher is rounded up to the next higher integer. XX.49% or less is rounded down.)* Final course grades are assigned according to the following academic standards:

<table>
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<th>Didactic &amp; Research Courses</th>
<th>Percent Grade</th>
<th>Letter Grade</th>
<th>Grade Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>90 – 100</td>
<td>A</td>
<td>student has exceeded expectations</td>
</tr>
<tr>
<td></td>
<td>80 – 89</td>
<td>B</td>
<td>student has met expectations</td>
</tr>
<tr>
<td></td>
<td>70-79</td>
<td>C</td>
<td>student is below expectations</td>
</tr>
<tr>
<td></td>
<td>Less than 70</td>
<td>F</td>
<td>student has failed expectations</td>
</tr>
</tbody>
</table>

An “I” may be temporarily awarded to individuals who fail to complete course requirements within the defined time. A final grade of “F” in any PA course is a non-passing grade and results in automatic and immediate dismissal from the PA Program.

8. **Tentative Schedule:**

<table>
<thead>
<tr>
<th>Module</th>
<th>Dates</th>
<th>Lecture and laboratory TOPICS</th>
</tr>
</thead>
</table>
| Intro to health care and laboratory medicine | Jan 15-21     | Intro to soap notes and patient history.  
|                                |               | Intro to pt. examination, vital signs, and equipment.                                         |
| Infectious Disease            | Jan 22-Feb 5  | Patient history and interview  
|                                |               | Physical Exam skills  
<p>|                                |               | The process of specimen collection.                                                          |
| Otorhinolaryngology           | Feb 8-17      | HENT H&amp;P with oral presentation and case studies.                                               |
| Ophthalmology                 | Feb 18-25     | Ophthalmic H&amp;P with oral                                                                       |</p>
<table>
<thead>
<tr>
<th>Pulminology</th>
<th>Feb 26 - March 10</th>
<th>Pulmonary H&amp;P with oral presentation and case studies.</th>
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<tbody>
<tr>
<td>Allergy and Immunology</td>
<td>March 11-26</td>
<td>Pulmonary radiology with oral presentation and case studies.</td>
</tr>
<tr>
<td>Dermatology</td>
<td>March 29 - April 7</td>
<td>Dermatological H&amp;P with oral presentation and case studies.</td>
</tr>
<tr>
<td>Genetics</td>
<td>April 8-9</td>
<td>Genetic History and red flags with oral presentation and case studies.</td>
</tr>
<tr>
<td>Gastroenterology</td>
<td>April 10 - 22</td>
<td>GI H&amp;P, and radiology, with oral presentation and case studies.</td>
</tr>
<tr>
<td>Tropical Medicine</td>
<td>April 23-28</td>
<td>Semester review and final exam study.</td>
</tr>
<tr>
<td></td>
<td>April 30</td>
<td>Cumulative Final</td>
</tr>
</tbody>
</table>

9. **Academic Honesty Policy:** At a Christian liberal arts university, committed to the pursuit of truth and understanding, any act of academic dishonesty is especially distressing and cannot be tolerated. In general, academic dishonesty involves the abuse and misuse of information or people to gain an undeserved academic advantage or evaluation. The common forms of academic dishonesty include:

9.1. Cheating: using deception in the taking of tests or the preparation of written work, using unauthorized materials, copying another person’s work with or without consent, or assisting another in such activities;

9.2. Lying: falsifying, fabricating, or forging information in either written or spoken presentations;

9.3. Plagiarism: using the published writings, data, interpretations of ideas of another without proper documentation.

9.4. Episodes of academic dishonesty are reported to the Vice President for Academic Affairs. The potential penalty for academic dishonesty includes:

9.4.1. A failing grade on a particular assignment

9.4.2. A failing grade for the entire course

9.4.3. Charges against the student with the appropriate discipline body

10. **ADA Statement:** In accordance with Americans with Disabilities Act, any student in this class who has a documented learning disability will be provided with reasonable accommodations designed to meet his/her needs. Before any such assistance can occur, it is the responsibility of the student to see that documentation is on file with Academic Affairs. If you have documented special needs you must make them known to the instructor prior to the third week of class.
11. **Emergency Contact:** All cell phones and pagers need to remain OFF during lectures and labs, Monday through Friday. If someone needs to reach you during that time, the administrative assistant for the program will take any important phone messages.
1. **Course Description**: This is part two in a series of courses where the student will acquire knowledge required to complete a thorough physical examination related to the modules studied. Students will integrate the knowledge obtained in Clinical Medicine II coupled with laboratory sessions emphasizing the proper use of diagnostic equipment and technique for performing a physical examination. The semester will include the modular education in: cardiology, hematology, oncology, neurology, psychology, geriatrics, rehabilitation, and palliative care. Emphasis is placed on professionalism in the manner and approach to patients; sophistication in taking a history; expertise in the techniques of physical examination; the ability to integrate, correlate, and interpret the data obtained; and the ability to record findings accurately, succinctly, and in an organized, logical sequence. The students will have ample time to practice their skills among themselves with faculty observation and critique. Students will also be expected to self-assess their strengths and deficiencies, and seek out tutorials and advice to remedy perceived problems. Opportunity will be given for students to present and document their findings and receive constructive criticism.

2. **Course Materials**:

3. **Course Objectives**: Upon Completion of the course, each student will be able to:
   3.1. Demonstrate proper interviewing techniques to gather information essential to the diagnosis and treatment of the patient including utilization of appropriate lines of questioning and communication skills to facilitate patient-clinician interaction.
   3.2. Develop adaptive interview techniques to be used when interviewing patients of varied ages in varied situations.
   3.3. Understand the importance of eliciting an accurate medical history.
   3.4. Elicit and document an accurate and concise complete medical history on a patient.
   3.5. Demonstrate basic skills in performing physical examination on a patient including appropriate professional manners in interacting with patients who are fearful, confused, hostile, depressed or manipulative.
   3.6. Demonstrate proficiency in using common medical equipment related to the included modules.
   3.7. Demonstrate an understanding of the variety of possible causes underlying common symptoms, and of further questions that may help to narrow the possibilities.
   3.8. Associate clusters of symptoms with specific disease entities.
   3.9. Demonstrate skills in self-directed learning, enhancing the PA student’s ability to take charge of his/her own education.
3.10. Perform an accurate and complete patient history on a fellow student.

3.11. Define each of the elements of a SOAP (subjective, objective, assessment, plan) note and identify what is contained in each element.

3.12. Demonstrate and perform inspection, palpation, percussion, auscultation, and vital signs in relation to the modules studied.

3.13. Demonstrate and perform proper use of medical instruments and diagnostic tools used in the physical exam, related to the outlined module.

3.14. Demonstrate (on a fellow student or faculty member) the appropriate examination techniques for the following:
   3.14.1. Overall survey, including vital signs
   3.14.2. Cranial nerve examination
   3.14.3. Cardiac examination
   3.14.4. Neurological examination
   3.14.5. Psychological exam and interview
   3.14.6. Geriatric exam techniques

3.15. Using correct technique, perform a physical examination on a fellow student completed within a defined minute time limit.

3.16. Cite and employ appropriate safety measures for the protection of both self and patients in performance of the physical examination.

3.17. Identify and/or describe normal physical examination findings.

3.18. Recognize and be able to describe specific abnormal physical findings.

3.19. Relate abnormal findings to disease entities in which they are commonly found.

3.20. Organize and express physical examination findings accurately and clearly in appropriate written form.

3.21. Present a clear oral capsule summary of the patient’s complaints, history of present illness, relevant medical history and physical examination findings.

3.22. Use correct medical terminology, together with correct grammatical construction in presenting medical information in oral or written form.

3.23. Demonstrate appropriate professional concern and sensitivity in patient encounters.

4. **Course Competencies:** (For modules without specific competencies, students will be fine honing their patient interviewing skills as well as reviewing and perfecting examination skills presented in previous modules.)

4.1. **Cardiovascular Module:**
   4.1.1. Demonstrate appropriate techniques for inspection of the general cardiovascular system, noting the following:
      4.1.1.1. General appearance of the patient as it relates to the CV system.
      4.1.1.2. Respiratory pattern as it relates to the CV system.
      4.1.1.3. Observable pulsations.
      4.1.1.4. Jugular venous distention.
      4.1.1.5. Jugular venous pulsations.
      4.1.1.6. Apical pulse or movements of the left ventricle visualized on the anterior chest wall.
4.1.2 Demonstrate appropriate techniques for assessment of systolic and diastolic blood pressure.

4.1.3 Demonstrate appropriate techniques for palpation of the apical pulse. Comment on the amplitude of the pulse as well as its character.

4.1.4 Demonstrate appropriate techniques for cardiac percussion, noting the change from cardiac dullness in the 3rd, 4th, 5th and 6th interspaces to demarcate lower borders of the heart.

4.1.5 Demonstrate appropriate techniques for auscultation of the heart, including identifying on the patient the “aortic”, “pulmonic”, “tricuspid”, and “mitral” areas, and using both the diaphragm and bell of the stethoscope.

4.1.6 Demonstrate appropriate techniques for auscultation of the heart with the patient in the left lateral position, and with the patient leaning forward in complete exhalation (for aortic murmurs).

4.1.7 Demonstrate an ability to identify S1 and S2, including knowledge of splitting of S2 and auscultation for it in the proper anatomic position. Be able to recognize the presence of an abnormal heart sound.

4.1.8 Demonstrate appropriate technique for inspection of the upper and lower extremities, with attention to the following:
   4.1.8.1 Size, symmetry and swelling
   4.1.8.2 Venous enlargement
   4.1.8.3 Unusual pigmentation, rashes, scars or ulcerations
   4.1.8.4 Texture and color or skin
   4.1.8.5 Nail beds
   4.1.8.6 Distribution of hair

4.1.9 Demonstrate appropriate technique for palpation of the following pulses:
   4.1.9.1 Carotid
   4.1.9.2 Brachial
   4.1.9.3 Radial
   4.1.9.4 Ulnar
   4.1.9.5 Femoral
   4.1.9.6 Popliteal
   4.1.9.7 Dorsalis pedis
   4.1.9.8 Posterior tibial

4.1.10 Demonstrate appropriate techniques for detecting edema.

4.1.11 Demonstrate appropriate techniques for detecting varicosities. Describe their appearance.

4.1.12 Demonstrate appropriate technique for performing in Allen test.

4.1.13 Demonstrate appropriate techniques for assessment of systolic and diastolic blood pressure.

4.2 Psychiatry Module:

4.2.2 Demonstrate the ability to quickly but effectively assess the readiness of a patient to make a particular change in a health-related behavior.

4.2.3 Demonstrate the ability to employ particular strategies designed to move the patient along the path of assigning increased importance to making a change in a health-
related behavior and/or increasing the confidence of the patient in his/her ability to make the specific change in question.

4.2.4 Demonstrate proficiency in utilizing and implementing components of a mental status exam, the Mini-Folstein Mental Status Exam, and other psychological evaluation tools studied in the psychiatry module.

4.2.5 Know how to perform a Mini-Mental Status Examination (MMSE).

4.2.6 Practice performing a MMSE

4.2.7 Demonstrate the ability to perform the MMSE

4.3 **Geriatrics Module:**

4.3.2 Describe techniques in examining older patients.

4.3.3 Demonstrate competence in obtaining a history and appropriate physical exam in this population.

4.3.4 Discuss and demonstrate exam elements and patient education topics specific to an older population.

4.4 **Neurology Module:**

4.4.2 Recognize signs and symptoms of different levels of consciousness.

4.4.3 Recognize and define characteristics of speech.

4.4.4 Define terms and symptoms of disorders of speech, affect, and cognition.

4.4.5 Be able to assess higher cognitive functions.

4.4.6 Display ability to discern the significance of positive ROS items and speech and cognitive findings.

4.4.7 Correctly identify specific speech patterns from recorded material.

4.4.8 Be able to assess the function of each cranial nerve.

4.4.9 Define terms and symptoms used to describe disorders of the cranial nerves.

4.4.10 Recognize signs and symptoms of selected specific disorders.

4.4.11 Demonstrate proper assessment of the 12 cranial nerves.

4.4.12 Demonstrate the ability to assess cranial nerve function.

4.4.13 Identify the specific cranial nerve involved in an abnormal physical finding.

4.4.14 Be able to describe various types of involuntary movements.

4.4.15 Define terms and symptoms associated with motor and cerebellar dysfunction.

4.4.16 Be able to test and grade the strength of each major muscle group.

4.4.17 Recognize and differentiate signs and symptoms of central and peripheral motor disease.

4.4.18 Using several techniques assess cerebellar function.

4.4.19 Be able to grade deep tendon reflexes (DTRs). (1/4 – 4/4)

4.4.20 Define terms and symptoms associated with reflexes.

4.4.21 Accurately recognize dermatomes affected by sensory deficit.

4.4.22 Use various techniques to assess sensory function.

4.4.23 Assess the discriminative ability of sensory perception.

4.4.24 Properly perform a complete motor, sensory, cerebellar, and reflex evaluation.

4.4.25 Use techniques to improve the accuracy of DTR assessment.

4.4.26 Recognize abnormal reflexes.

4.4.27 Associate the presence of abnormal reflexes with specific disease processes.
5. **Student Activities and Experiences (Instructional techniques):**
   5.1. Case studies enable integration of clinical information into a comprehensible format.
   5.2. Guided faculty Lecture.
   5.3. Group participation.
   5.4. Independent reading assignments.
   5.5. Faculty demonstration of examinations and diagnostic techniques
   5.6. Hands-on experience through the use of simulated patients.

6. **Student Assessment:**
   6.1. Comprehensive practical, oral, and written final examination. (30% of total grade)
   6.2. Practical, oral, and written examinations at the end of each module. (30% of total grade)
   6.3. Clinical correlation case studies with oral presentation. (15% of total grade)
   6.4. Written H&P and Soap note assignments. (15% of total grade)
   6.5. Full attendance and participation. (10% of total grade)

7. **Course grades:** are calculated on a percentage basis. All final course grade percentages are rounded to the nearest integer. *(XX.50% or higher is rounded up to the next higher integer. XX.49% or less is rounded down.)* Final course grades are assigned according to the following academic standards:

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<td>A</td>
<td>student has exceeded expectations</td>
</tr>
<tr>
<td></td>
<td>80 – 89</td>
<td>B</td>
<td>student has met expectations</td>
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<tr>
<td></td>
<td>70-79</td>
<td>C</td>
<td>student is below expectations</td>
</tr>
<tr>
<td></td>
<td>Less than 70</td>
<td>F</td>
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</tr>
</tbody>
</table>

An “I” may be temporarily awarded to individuals who fail to complete course requirements within the defined time. A final grade of “F” in any PA course is a non-passing grade and results in automatic and immediate dismissal from the PA Program.

8. **Tentative Schedule:**

<table>
<thead>
<tr>
<th>Module</th>
<th>Dates</th>
<th>Lecture and laboratory TOPICS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cardiology</td>
<td>May 10-June 4</td>
<td>The cardiology exam and auscultation.</td>
</tr>
<tr>
<td>Hematology</td>
<td>June 7-15</td>
<td>Developing a differential diagnosis.</td>
</tr>
<tr>
<td>Oncology</td>
<td>June 16-24</td>
<td>Clinical reasoning</td>
</tr>
<tr>
<td>Neurology</td>
<td>June 25-July 9</td>
<td>The neurological exam.</td>
</tr>
<tr>
<td>Psychology</td>
<td>July 12-26</td>
<td>MSE and psychological evaluation.</td>
</tr>
<tr>
<td>----------------------------</td>
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</tr>
<tr>
<td>Geriatrics</td>
<td>July 27-August 6</td>
<td>Geriatric physical exam.</td>
</tr>
<tr>
<td>CAM/Rehabilitation and end of life care</td>
<td>August 9-11</td>
<td>Semester review and questions.</td>
</tr>
<tr>
<td></td>
<td>August 13</td>
<td>Cumulative Final</td>
</tr>
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9. **Academic Honesty Policy**: At a Christian liberal arts university, committed to the pursuit of truth and understanding, any act of academic dishonesty is especially distressing and cannot be tolerated. In general, academic dishonesty involves the abuse and misuse of information or people to gain an undeserved academic advantage or evaluation. The common forms of academic dishonesty include:

9.1. Cheating: using deception in the taking of tests or the preparation of written work, using unauthorized materials, copying another person’s work with or without consent, or assisting another in such activities;

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9.3. Plagiarism: using the published writings, data, interpretations of ideas of another without proper documentation;

9.4. Episodes of academic dishonesty are reported to the Vice President for Academic Affairs. The potential penalty for academic dishonesty includes:

9.4.1. A failing grade on a particular assignment

9.4.2. A failing grade for the entire course

9.4.3. Charges against the student with the appropriate discipline body

10. **ADA Statement**: In accordance with Americans with Disabilities Act, any student in this class who has a documented learning disability will be provided with reasonable accommodations designed to meet his/her needs. Before any such assistance can occur, it is the responsibility of the student to see that documentation is on file with Academic Affairs. If you have documented special needs you must make them known to the instructor prior to the third week of class.

11. **Emergency Contact**: All cell phones and pagers need to remain OFF during lectures and labs, Monday through Friday. If someone needs to reach you during that time, the administrative assistant for the program will take any important phone messages.
MPAS 533
Physical Diagnosis III

1. **Course Description:** This is the third course in a series of three where the student will acquire knowledge required to complete a thorough physical examination. Students will integrate the knowledge obtained in Clinical Medicine III coupled with laboratory sessions emphasizing the proper use of diagnostic equipment and technique for performing a comprehensive physical examination. The semester will include the following modules: cardiovascular, pulmonary, musculoskeletal, nephrology, men’s health, OBGYN, and pediatric. Emphasis is placed on professionalism in the manner and approach to patients; sophistication in taking a history; expertise in the techniques of physical examination; the ability to integrate, correlate, and interpret the data obtained; and the ability to record findings accurately, succinctly, and in an organized, logical sequence. The students will have ample time to practice their skills among themselves with faculty observation and critique. Students will also be expected to self-assess their strengths and deficiencies, and seek out tutorials and advice to remedy perceived problems. Opportunity will be given for students to present and document their findings and receive constructive criticism.

2. **Course Materials:**
   2.3. Problem-Oriented Medical Diagnosis, Friedman, H. Harold ISBN-13: 9780781729550

3. **Course Objectives:** Upon Completion of the course, each student will be able to:
   3.1. Demonstrate proper interviewing techniques to gather information essential to the diagnosis and treatment of the patient including utilization of appropriate lines of questioning and communication skills to facilitate patient-clinician interaction.
   3.2. Develop adaptive interview techniques to be used when interviewing patients of varied ages in varied situations.
   3.3. Understand the importance of eliciting an accurate medical history.
   3.4. Elicit and document an accurate and concise complete medical history on a patient.
   3.5. Demonstrate basic skills in performing physical examination on a patient including appropriate professional manners in interacting with patients who are fearful, confused, hostile, depressed or manipulative.
   3.6. Demonstrate proficiency in using common medical equipment related to the included modules.
   3.7. Demonstrate an understanding of the variety of possible causes underlying common symptoms, and of further questions that may help to narrow the possibilities.
   3.8. Associate clusters of symptoms with specific disease entities.
   3.9. Demonstrate skills in self-directed learning, enhancing the PA student’s ability to take charge of his/her own education.
   3.10. Perform an accurate and complete patient history on a fellow student.
3.11. Define each of the elements of a SOAP (subjective, objective, assessment, plan) note and identify what is contained in each element.

3.12. Demonstrate and perform inspection, palpation, percussion, auscultation, and vital signs in relation to the modules studied.

3.13. Demonstrate and perform proper use of medical instruments and diagnostic tools used in the physical exam, related to the outlined module.

3.14. Demonstrate (on a fellow student or faculty member) the appropriate examination techniques for the following:
   3.14.1. Overall survey, including vital signs.
   3.14.2. male and female exams
   3.14.3. obstetric exam
   3.14.4. Musculoskeletal examination
   3.14.5. Pediatric exam

3.15 Using correct technique, perform a physical examination on a fellow student within a defined minute time limit.

3.16 Cite and employ appropriate safety measures for the protection of both self and patients in performance of the physical examination.

3.17 Identify and/or describe normal physical examination findings.

3.18 Recognize and be able to describe specific abnormal physical findings.

3.19 Relate abnormal findings to disease entities in which they are commonly found.

3.20 Organize and express physical examination findings accurately and clearly in appropriate written form.

3.21 Present a clear oral capsule summary of the patient’s complaints, history of present illness, relevant medical history and physical examination findings.

3.22 Use correct medical terminology, together with correct grammatical construction in presenting medical information in oral or written form.

3.23 Demonstrate appropriate professional concern and sensitivity in patient encounters.

4. Course Competencies:

4.1 Men’s Health Exam: Upon completion of this program the student will be able to perform a thorough genital, hernia, rectal and prostate exam to include:
   4.1.2 Visually inspecting the genitals
   4.1.3 Palpating the inguinal lymph nodes
   4.1.4 Examining the penis and scrotum
   4.1.5 Checking for inguinal hernias
   4.1.6 Examining the rectum, prostate, and lower portion of the colon

4.2 Women’s Health Exam: Upon completion of this module the student will be able to:
   4.2.2 Obtain a comprehensive gynecological history including menstrual history, obstetrical history, family planning, symptoms related to breast and pelvic abnormalities
   4.2.3 Visually examine the breasts
   4.2.4 Palpate axillary and supraclavicular lymph nodes
   4.2.5 Palpate breast tissue
4.2.6 Incorporate teaching of breast self-examination (BSE)
4.2.7 Perform a pelvic exam including examination of external genitalia, speculum examination, bimanual examination of cervix, uterus and adnexa and rectal exam
4.2.8 Discuss the important elements of the OB exam at different stages and what to look for.

4.3 Pediatric Exam:
4.3.2 Demonstrate proper technique in accomplishing a newborn exam, assessing reflexes in infants, and auscultating pediatric cardiac murmurs.
4.3.3 Demonstrate usage of the Denver Developmental Scale and Growth Charts.
4.3.4 Discuss techniques for examining children ensuring a complete examination.
4.3.5 Discuss important elements of anticipatory guidance for different age groups.

4.4 Orthopedic Exam: Demonstrate appropriate technique for each of the following:
4.4.2 Inspection of the feet.
4.4.3 Palpation of the ankle, MTPs, and IP joints
4.4.4 Assessment of range of motion of the ankle, including each of the following:
   4.4.4.1 tibiotalar joint (dorsiflexion and plantarflexion)
   4.4.4.2 subtalar joint (inversion and eversion of foot)
   4.4.4.3 transverse talar joint (inversion and eversion of forefoot)
   4.4.4.4 MTPs
   4.4.4.5 IPs
4.4.5 Inspect and palpate the knee and identify the tibial tuberosity.
4.4.6 Assess the range of motion of the knee (flexion and extension).
4.4.7 Assess the range of motion of the hips (internal and external rotation, abduction and adduction).
4.4.8 Inspect the spine for curvature (anteroposterior and lateral).
4.4.9 Assess the range of motion of the back (flexion, extension, rotation, lateral bending).
4.4.10 Evaluate a patient using: Straight leg raise.
4.4.11 Assess muscle strength throughout the lower extremity.
4.4.12 Examination of the temporomandibular joint.
4.4.13 Inspect and Palpate of the cervical spine.
4.4.14 Assessment of range of motion of the cervical spine (flexion, extension, rotation, lateral bending).
4.4.15 Assessment of range of motion in the hand and wrist (flexion, extension, radial and ulnar deviation).
4.4.16 Palpation of the DIPs, PIPs, MCPs, and wrist joint.
4.4.17 Inspection and palpation of the elbow.
4.4.18 Assessment of range of motion of the elbow (flexion, extension, pronation, supination)
4.4.19 Inspection and palpation of the shoulder. Identify on the patient the following anatomic sites:
   4.4.19.1 sternoclavicular joint
   4.4.19.2 acromioclavicular joint
   4.4.19.3 subacromial area
   4.4.19.4 bicipital groove
4.4.20 Assessment of range of motion of the shoulder (per Bates)
4.4.21 Assessment of muscle strength in the upper extremity.
4.4.22 Phalen and Tinel signs.

5. **Student Activities and Experiences (Instructional techniques):**
   5.1. Case studies enable integration of clinical information into a comprehensible format.
   5.2. Guided faculty Lecture.
   5.3. Group participation.
   5.4. Independent reading assignments.
   5.5. Faculty demonstration of examinations and diagnostic techniques
   5.6. Hands-on experience through the use of simulated patients.

12. **Student Assessment:**
   12.1. Comprehensive practical, oral, and written final examination. (30% of total grade)
   12.2. Practical, oral, and written examinations at the end of each module. (30% of total grade)
   12.3. Clinical correlation case studies with oral presentation. (15% of total grade)
   12.4. Written H&P and Soap note assignments. (15% of total grade)
   12.5. Full attendance and participation. (10% of total grade)

13. **Course grades:** are calculated on a percentage basis. All final course grade percentages are rounded to the nearest integer. *(XX.50% or higher is rounded up to the next higher integer. XX.49% or less is rounded down.)* Final course grades are assigned according to the following academic standards:

<table>
<thead>
<tr>
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<td>Pertinent endocrine exam, Upper extremity exam</td>
</tr>
<tr>
<td>Nephrology</td>
<td>September 13-27</td>
<td>Back and neck exam and radiograph reading</td>
</tr>
<tr>
<td>Urology and men’s health</td>
<td>September 28-October 5</td>
<td>Urological and men’s exams.</td>
</tr>
<tr>
<td>GYN and women’s health</td>
<td>October 5-13</td>
<td>The female exam.</td>
</tr>
<tr>
<td>OB</td>
<td>October 18-26</td>
<td>The OB exam</td>
</tr>
<tr>
<td>Pediatrics</td>
<td>October 27-November 10</td>
<td>The Pediatric and infant exam</td>
</tr>
<tr>
<td>Rheumatology/Orthopedics</td>
<td>November 15-Dec 8</td>
<td>Lower Extremity Exam</td>
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