COURSE REPORT

5-3-11

Course title: Clinical Neuroscience
Department: Anatomy and Cell Biology
Course director: Ron Baisden, PhD

Departments involved in the course:

<table>
<thead>
<tr>
<th>Departments</th>
<th>Number of Teaching Staff Involved</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anatomy and Cell Biology</td>
<td>8</td>
</tr>
<tr>
<td>Internal Medicine</td>
<td>2</td>
</tr>
<tr>
<td>Pharmacology</td>
<td>1</td>
</tr>
<tr>
<td>Pathology</td>
<td>1</td>
</tr>
<tr>
<td>Family Medicine</td>
<td>1</td>
</tr>
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COURSE OBJECTIVES:

The objective of the Clinical Neuroscience course is to transmit the fundamental facts and concepts underlying current knowledge of the nervous system as it applies to general clinical training in medicine and physical therapy. The course is designed according to the principle that the best understanding of the nervous system is obtained when the morphological, physiological and behavioral aspects of the neurosciences are presented conjointly.

At the conclusion of this course the student will be able to:

1. Describe the role of the nervous system in normal function and disease.
2. Identify anatomical structures on gross specimens, brain cross sections, histologic brain stem slides, and CT/MRI images.
3. Explain the neurologic consequences of damage to the various brain structures.
4. Explain the functions of the sensory, motor, and integrative systems which extend throughout the nervous system.
5. Predict the consequences of disease involving the sensory, motor, and integrative systems of the nervous system.
6. Describe the constellation of clinical signs produced by damage to a particular area of the nervous system.
7. Analyze clinical signs in order to identify the location of damage within the nervous system.

TEACHING METHODS:

The course is presented as a series of topical lectures and presentations designed to provide an introductory background knowledge and framework for the future study of clinical neurology. A laboratory portion of the course is included to allow study of normal anatomical specimens and to provide time for personalized interaction and discussion of course material with members of the teaching staff. Clinical examples and correlations are used to provide a context for perceiving and recognizing normal neural structure/function and to illustrate how knowledge of the basic neurobiological principles underlies an understanding of neural and behavioral dysfunction.

Required and recommended textbooks, lab and web resources.
EVALUATION METHODS:

Midterm and comprehensive final – include laboratory practical, plus NBME Subject Examination; three quizzes at weeks four, seven and fifteen are intended to provide feedback on mastery of the content.

Attendance is required and recorded.

GRADING STRUCTURE:

Letter grade is based on Midterm – 40%, Final – 50% & NBME – 10% (calculated into the final grade only if it will improve it)

SUMMARY OF STUDENT PERFORMANCE:

NBME Subject Exams:

<table>
<thead>
<tr>
<th>Year</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
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<tr>
<td>Score</td>
<td>448</td>
<td>495</td>
<td>511</td>
<td>440.5</td>
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<tr>
<td>S.D.</td>
<td>107</td>
<td>100</td>
<td>105</td>
<td>105.9</td>
</tr>
</tbody>
</table>

SUMMARY OF STUDENT FEEDBACK:

Student evaluation of the course has meaningfully improved over the past two years. For the question “my overall evaluation of this course,” average rating was 3.81 on a 5.0 scale, where 5 = excellent. (response rate = 100%) This was up from 3.46 and 3.02 in the prior two years. With less than desired course evaluations, the Course Director added 3 quizzes to provide students with more formative assessment. Additionally attempts have been made to make the daily learning objectives more apparent to the students. In the 2010 Graduation Questionnaire, only 32% of the students identified neuroscience preparation for the clinical clerkships as good or excellent.

PLANS FOR CHANGE:

Course director’s continued efforts to help students focus on specific learning objectives.