



## SYLLABUS



**ANATOMY AND PHYSIOLOGY II, SPHR106**  
**Spring, 2007**  
**Tuesday and Thursday, 3:45-5:00, Fungler 222**

**Lab during Ear section: Tuesday Fungler 220**

**Lab during Brain section: Tuesday 12:45-1:30, Anatomy Lab, Ross Hall**

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### **CONTACT INFORMATION:**

#### **Section 1: Ear**

**Instructor:** Diane Brewer, MA, CCC-A

**E-mail:** [dmb@gwu.edu](mailto:dmb@gwu.edu)

**Phone:** (202) 994-7167

**Office Hours:** T:5:00-6:00; Th:12:30-1:30; and by appt.  
Room 406B Old Main (corner of 19<sup>th</sup> and F)

#### **Section 2: Brain**

**Instructor:** Adrienne Hancock, Ph.D.

**E-mail:** [hancock@gwu.edu](mailto:hancock@gwu.edu)

**Phone:** (202) 994-2704

**Office Hours:** TBD and by appointment,  
Room 406D Old Main (corner of 19<sup>th</sup> and F)

### **MATERIALS:**

Mullin, W., Gerace W., Mestre, J. & Velleman, S. (2003). *Fundamentals of Sound with Applications to Speech and Hearing*. Boston, MA: Allyn & Bacon.

Patestas, M.A. & Gartner, L.P. (2006). A textbook of neuroanatomy. MA: Blackwell. ISBN#: 140510340X

Pinel, J. (1998). A colorful introduction to the anatomy of the human brain. Boston, MA: Allyn & Bacon. ISBN#: 0205162991

Seikel, J.A., King, D.W., Drumwright, D.G. (2005). *Anatomy & Physiology for Speech, Language, and Hearing, Third Edition*. Thomas Delmar Learning, Clifton Park, NY.

**Blackboard website:** Lecture notes, assignment descriptions, journal articles, handouts, and helpful resources will be posted on the course blackboard website.

### **DESCRIPTION:**

The emphasis of this course will be on those aspects of the ear and brain anatomy particularly pertinent to communication processes. Clinical cases will be presented that exemplify the topic and relevant anatomy and physiology will be discussed. Textbook readings will serve as background to the lectures.

## **OBJECTIVES:**

The student should be able to:

1. Demonstrate understanding of anatomy and physiology of the ear.
2. Identify and label major cortical, subcortical, and brainstem neuroanatomical sites important in speech, language, and cognitive functions.
3. Describe various neuropathologies of communication disorders
4. Distinguish differences in symptoms following brain damage to cortical, subcortical, and brainstem areas.
5. Summarize principles of a clinical neurological examination

## **REQUIREMENTS**

### **Section 1: Ear**

Four labs for projects and quizzes.

Three homeworks to be assigned, due in labs.

One exam (cumulative)

### **Section 2: Brain**

Five labs with brain specimens (to be drawn and labeled)

Completed coloring pages

Ten weekly on-line quizzes

Reaction paper to a movie or book about a person with neurological disorder

Two exams (non-cumulative)

## **GRADING CRITERIA:**

Your final grade will be determined as follows:

### **Section 1: Ear**

<b>45</b>	<b>Quizzes (3)</b>
<b>35</b>	<b>Labs/Homework/Participation</b>
<b>75</b>	<b>Exam 1</b>

### **Section 2: Brain**

<b>40</b>	<b>Lab Drawings: (* indicates drawings)</b>
	General overview (5 points)
	Cortex* (10 points)
	Damaged brain (5 points)
	Subcortical* (10 points)
	Brainstem* (10 points)
<b>30</b>	<b>Coloring Pages</b>
<b>75</b>	<b>Exam 2</b>
<b>75</b>	<b>Exam 3</b>
<b>100</b>	<b>Weekly on-line quizzes (10 points each)</b>
<b>30</b>	<b>Reaction paper</b>
<b>500</b>	<b>TOTAL POSSIBLE POINTS</b>

Grade Cutoffs

	89-87	B+	79-77	C+	69-67	D+	59-0	F
100-94%	A	86-84	B	76-74	C	66-64	D	
93-90%	A-	83-80	B-	73-70	C-	63-60	D-	

## **POLICIES**

Due to the amount and complexity of the material, **attendance is mandatory**. In particular, the brain labs cannot be made-up. **After ONE grace absence day, you will forfeit 5 points** (1% of final grade) for **each** day absent unless:

1. Your excuse is documented (hospital bill, police report, funeral bulletin, etc), AND
2. You inform the professor immediately, AND
3. The professor gives you permission to make up the missed class for full or partial credit.

It is strongly suggested that you learn the missed material from a classmate or other resource, as **you are responsible for learning** all material covered in class.

**IF you disrespect materials or speak or dress inappropriately:** Points will be deducted from your attendance and you may be asked to leave class.

**IF your cell phone rings in class:** You will be embarrassed. You will detract from the learning environment. You will interrupt, distract, and disturb the instructor and your classmates. Please remember to turn it OFF.

### **Academic Honor Code:**

As students at George Washington University, you are expected to uphold the Code of Academic Integrity (<http://www.gwu.edu/~ntegrity/code.html#definition>). Academic dishonesty is defined as **cheating of any kind, including misrepresenting one's own work, taking credit for the work of others without crediting them and without appropriate authorization, and the fabrication of information**. Reported infractions will be discussed privately with the student(s). If it is determined that someone has violated the Academic Honor Code, that person(s) will earn 0 points for that assignment, or possibly receive a failing grade for the course. Violations will be reported to the University Judicial Officer in the Office of Academic Integrity.

### **Americans with Disabilities Act:**

Students with disabilities needing academic accommodation should: (1) register with and provide documentation to the Student Disability Resource Center; (2) bring a letter to the instructor indicating the need for accommodation and what type. This should be done during the first week of class.

For more information about services available to GWU students with disabilities, contact Disability Support Services  
Marvin Center Suite 242  
V/TDD: (202) 994-8250

<http://gwired.gwu.edu/dss/>

(This syllabus and other class materials are available in alternative format upon request.)

### **SYLLABUS CHANGE POLICY:**

This syllabus is a guide for the course and is subject to change with advanced notice. Changes will be posted on Blackboard.

<i>Week</i>		<b><i>Lab: Tues &amp; Thurs 12:45- 1:35</i></b>	<b><i>Class: Tues &amp; Thurs 3:45- 5:00</i></b>
<b>1. Jan</b>	<b>16</b>	Overview & Film	Outer Ear (S: 435-441; 465-467)
	<b>18</b>		Middle Ear (S: 441-449; 467-469)
<b>2. Jan</b>	<b>23</b>	<b>Quiz: Outer Ear &amp; Model identification</b>	Middle Ear (M: Ch 12)
	<b>25</b>		Inner Ear (S: 449-460; 469-490)
<b>3. Jan</b>	<b>30</b>	<b>Quiz: Middle Ear &amp; Model identification</b>	Inner Ear - Auditory
<b>Feb</b>	<b>1</b>		Inner Ear - Vestibular
<b>4. Feb</b>	<b>6</b>	<b>Quiz: Inner Ear &amp; Model identification</b>	Inner Ear Physiology
	<b>8</b>		<b>EXAM 1</b>
<b>5. Feb</b>	<b>13</b>	Syllabus & Historical Perspective	Introduction: Ch 1
	<b>15</b>	<b>*online quiz History &amp; Ch 1, 2</b> <i>Thursday 8pm- Friday 8pm</i>	Development: Ch 2: Pinel Ch 4
<b>6. Feb</b>	<b>20</b>	ALL: Explore brains in lab Pinel Ch 1-2	Gross Anatomy: Ch 6
	<b>22</b>	<b>*online quiz Ch 6</b>	More gross anatomy
<b>7. Feb</b>	<b>27</b>	GROUP A: lab (draw whole, hemi, and slices) GROUP B: Pinel Ch 3, 5 (not pg 80-81)	Neurons: Ch 3
<b>Mar</b>	<b>1</b>	<b>*online quiz Ch 3, 4</b>	Neurotransmitters: Ch 4
<b>8. Mar</b>	<b>6</b>	<i>REVERSE 2/27</i>	Blood Supply: Ch 8
	<b>8</b>		<b>EXAM 2 (turn in coloring books)</b>
		March 12-16 SPRING BREAK	March 12-16 SPRING BREAK
<b>9. Mar</b>	<b>20</b>	GROUP A: lab (damaged) GROUP B: Pinel pg 105-117, 122-126, Ch 10, 12	Cerebral Cortex: Ch 23
	<b>22</b>	<b>*online quiz, Ch 23</b>	
<b>10. Mar</b>	<b>27</b>	<i>REVERSE 3/20</i>	Damage to Cerebral Cortex
	<b>29</b>	<b>*online quiz, 3/27 &amp; 3/29 notes</b>	Subcortical: Overview
<b>11. April</b>	<b>3</b>	GROUP A: lab (subcortical) GROUP B: Pinel Ch 11, pgs 118-121, 158-161	Basal ganglia: Ch 12
	<b>5</b>	<b>*online quiz, Ch 12</b>	
<b>12. April</b>	<b>10</b>	<i>REVERSE 4/3</i>	Limbic System: Ch 20
	<b>12</b>	<b>*online quiz Ch 20, 21</b>	Thalamus, et al.: Ch 21, 22
<b>13. April</b>	<b>17</b>	GROUP A: lab (brainstems) GROUP B: Pinel Ch 6, pgs 80-81	Cerebellum: Ch 13
	<b>19</b>	<b>*online quiz Ch 22, 13</b>	Brainstem/ CN: Ch 15
<b>14. April</b>	<b>24</b>	<i>REVERSE 4/17</i>	
	<b>26</b>	<b>*online quiz Ch 15</b>	Motor Pathways: Ch 10 Pinel Ch 9
<b>15. May</b>	<b>1</b>	<b>*online quiz Ch 10, 11</b> <b>**TUESDAY 8pm - Wed 8pm</b>	Sensory Pathways: Ch 11; Pinel Ch 8

**FINAL EXAM (May 7-15) EXAM 3 (turn in coloring books)**

**\*\* Note for Brain section: We will not meet on Thursdays during LAB time unless we fall behind schedule. However, you will usually have an on-line quiz on most weeks. These quizzes will be through blackboard and MUST be taken between Thursday 8pm and Friday 8pm, with the exception of the final quiz, Tuesday May 1.**