

COURSE: SHS 701 [Seminar in Psychoacoustics] Su 07
INSTRUCTOR: Dr. Terrio [Office- Rm 228 SRS Phone 266-5216] [Office hours are posted to my door]

FORMAT: 3 hours credit, lecture, class discussion, presentations
PLACE: Seminar room, SRS Bldg, MWF, 2:40-4:10 [Rev MTW 1:00-2:30]

TEXT: Gelfand, S. Hearing- an introduction to psychological and physiological acoustics. New York: Marcel Dekker, Inc.
SUPPLEMENT: Bring a calculator with a log function to all class meetings.

CATALOG DESCRIPTION: Presents methods for studying perception of acoustic signals, detection of stimuli, perception of loudness, and pitch.

ASHA KASA [3/2003] content: Audiology Standard IV-B Foundations of Practice

B9. The student must have knowledge of principles, methods, and applications of psychoacoustics;
B15. The student must have knowledge of principles and practices of research ... and application to clinical applications.

Objective: The student will develop basic terminology as it relates to principles of research and their application in clinical environments.

Indicator: The student will participate orally in classroom discussion and question-answer sessions and will produce written responses to pertinent items on formative assessments.

Target: 80% or higher level of accuracy

Indicator: The student will respond in writing to formative assessment items that require recognition of research principles as they apply to audiological assessment and / or treatment of hearing-impaired individuals in clinical settings.

Target: 80% or higher level of accuracy

Objective: The student will identify basic psychoacoustic terms, principles, concepts, and procedures.

Indicator: The student will participate orally in classroom discussion and question-answer sessions and will produce written responses to pertinent items on formative assessments.

Target: 80% or higher level of accuracy

Indicator: The student will respond in writing to formative assessment items that require recognition of psychoacoustic principles, concepts, and procedures as they apply to audiological assessment and / or treatment of hearing-impaired individuals in clinical settings.

Target: 80% or higher level of accuracy

FORMATIVE OUTCOMES ASSESSMENT: Learning outcomes will be assessed with an exam following completion of each major course topic. Formative assessments follow an "objective" [fill-in-the blank, multiple-choice, short answer, listing] format. Half-credit for correct items that are incorrectly spelled.

GRADING: The final grade for this course is derived by adding points from all tests and computing an average score- A: 94-100%
B: 85-93% C: 74-84% D: 61-73%

[over]

MAKE-UP EXAMS: Students are expected to complete make-up exams within one week after returning from a medical absence.

A physician's excuse is required.

OFFICIAL USM STATEMENT: If a student has a disability that qualifies under the American with Disabilities Act (ADA) and requires accommodations, he/she should contact the Office for Disability Accommodations (ODA) for information on appropriate policies and procedures. Disabilities covered by ADA may include learning, psychiatric, physical disabilities, or chronic health disorders. Students can contact ODA if they are not certain whether a medical condition/disability qualifies. Address: The University of Southern Mississippi, Office for Disability Accommodations, 118 College Drive # 8586, Hattiesburg, MS 39406-0001 Voice Telephone: (601) 266-5024 or (228) 214-3232 Fax: (601) 266-6035 Individuals with hearing impairments can contact ODA using the *Mississippi Relay Service* at 1-800-582-2233 (TTY) or email Suzy Hebert at Suzanne.Hebert@usm.edu

From the USM Undergraduate Bulletin: "When cheating is discovered, the faculty member may give the student an F on the work involved or in the course. If further disciplinary action is deemed appropriate, the student should be reported to the Dean of Students. In addition to being a violation of academic honesty, cheating violates the Code of Student Conduct and may be grounds for probation, suspension, and/or expulsion. Students on disciplinary suspension may not enroll in any courses offered by The University of Southern Mississippi."

GENERAL:

If you choose to withdraw from this course, please initiate proper "drop" procedures in the Registrar's Office. Your instructor is required to enter a letter grade of "F" if a student simply stops attending class.

Check the official University calendar for the last day to drop this course without academic penalty.

Please do not ask your instructor for your final grade. Final grades are available through SOAR.

Please do not ask to take any exam early. The University requires that students complete final exams only at scheduled times.

Instructors are not allowed to discuss grades over the phone for any reason.

Please adopt a "buddy" [a fellow class member] to "cover" for you when you're absent. Your buddy should pickup any handouts and take notes for you. Each student is ultimately responsible for any material covered during an absence.

Please switch-off cell phones prior to the beginning of class. Cell phones should be out of sight during class meetings and exams.

Cell phones cannot be used as a calculator on tests.

Any student with special medical needs is asked to contact his/her buddy or the instructor so we'll know what to do in a medical emergency.

TENTATIVE TOPIC SEQUENCE:

- Sound waves and their sources; Fundamentals Review [Borden and Harris on reserve]
- Frequency encoding in the cochlea, tone-on-tone masking [**CHAP: Cochlear Mechanism, Auditory Pathways**]
- Frequency and intensity coding in the cochlea and cochlear implants
- Phon/Sone **Scales** [**CHAP: Loudness**]
- Principles of speech perception [**CHAP: Speech Perception**]
- Psychoacoustic methods [**CHAP: Psychoacoustic Methods**]
- Auditory discrimination [**CHAP: Auditory Sensitivity**]
- Principles of problem solving
- Principles of masking [**CHAP: Masking**]
- Principles of localization [**CHAP: Binaural hearing**]

In compliance with USM LEC guidelines 2/13/06 [www.usm.edu/lec/teaching_resources_syllabus.html]