

San José State University
Department of Communicative Disorders and Sciences
EDAU 115, Introductory Hearing Science, Section 03, Fall Semester, 2019

Course and Contact Information

Instructor:	Shaum P. Bhagat, Ph.D., CCC-A, F-AAA
Office Location:	Sweeney Hall 442
Telephone:	408 924-1798
Email:	shaum.bhagat@sjsu.edu
Office Hours:	Monday 3-4 pm
Class Days/Time:	Monday 4-6:45 pm
Classroom:	Sweeney Hall 444
Prerequisites:	CDS major, upper division standing, instructor consent

Course Format

Class lecture and discussion. Course materials such as syllabus, handouts, notes, assignment instructions, etc. can be found on Canvas. You are responsible for regularly checking with the messaging system through [MySJSU](http://one.sjsu.edu) on [Spartan App Portal](http://one.sjsu.edu) <http://one.sjsu.edu> (or other communication system as indicated by the instructor) to learn of any updates.

Course Description (Required)

Anatomy, physiology and psychoacoustics of the auditory system; theories of hearing and physics of sound.

Course Learning Outcomes (CLO) (Required)

Upon successful completion of this course, students will be able to:

1. Understand basic acoustics and measurement of acoustic signals. CLO 1 maps to *PLO 3 Students will demonstrate knowledge of research methods and evidence-based practice.*
2. Fundamental understanding of the basic anatomy and physiology of the auditory system. CLO 2 maps to *PLO 4 Students will demonstrate knowledge of basic communication and communicative disorders and differences across the lifespan.*
3. Fundamental understanding of the basic principles, methods, and applications of psychoacoustics. CLO 3 maps to *PLO 5 Students will demonstrate knowledge of clinical management of communicative disorders and differences.*
4. Recognition of how certain psychoacoustical methods are applied in the evaluation of hearing and in standards of hearing testing. CLO 4 maps to *PLO 7 Students will demonstrate a knowledge of professionalism and ethical standards.*

Required Texts/Readings

Textbook

Lass, N. and Woodford, C. (2007). Hearing Science Fundamentals. Mosby Publishing. ISBN-10: 0323043429 ISBN-13:9780323043427. Students can purchase the textbook at the SJSU Spartan Bookstore or at the Amazon or Barnes and Noble websites.

Library Liaison

Suzie Bahmanyar, suzie.bahmanyar@sjsu.edu, Communicative Disorders and Sciences Librarian.

Course Requirements and Assignments

Textbook reading assignments corresponding to course topics are listed in the syllabus. It is helpful if you read these assignments are to be prior to class. Students will be expected to actively participate in classroom discussions. Class discussions are largely derived from the reading assignments. Therefore, completion of reading assignments by students prior to class will enhance the overall quality of student academic experiences.

There will be four required homework assignments, four required quizzes, and two required examinations (midterm examination and final examination). A fifth homework assignment and a fifth quiz will be available for students to complete. Each homework assignment will be worth 25 points. The total number of points possible from the homework assignments will be 100 points. The due dates for the homework assignments are listed in the syllabus. Homework assignments are open-book assignments and will be turned in by uploading the assignment to the Canvas course website. Students will have the option of dropping one homework assignment with the lowest point total. Thus, the total number of homework assignment points possible will be derived from the homework assignments with the highest point totals.

Homework assignment # 1: Sine waves

Homework assignment # 2: Decibels and exponents

Homework assignment # 3: Anatomy of the ear

Homework assignment # 4: Auditory neuroscience

Homework assignment # 5: Auditory perception

Each quiz will be worth 25 points. The quizzes are open-book evaluations, and the quizzes will be available for students to complete on the Canvas course website. Students must complete the quizzes by the quiz deadline date. Quiz deadline dates are listed in the syllabus. The total number of points possible from the quizzes will be 100 points. Students will have the option of dropping one quiz with the lowest point total. Thus, the total number of quiz points possible will be derived from the quizzes with the highest point totals.

The midterm examination will be worth 100 points and the comprehensive final exam will be worth 200 points. Each exam will consist of multiple-choice questions, fill-in-the-blank questions, and short answer questions. Dates for the midterm and final examinations are listed in the syllabus. At the discretion of the instructor, make-up exams (midterm or final examination) will be given in cases of documented illness and/or emergencies. For illness, a note from a medical professional will be required. For other emergencies, an appropriate verification will be required. In case you are ill and/or have an emergency, please let me know within 24 hours after the missed exam date by email or in person. Any notification after the 24-hour period will not be accepted, and you will not be able to make up the missed exam.

Please review the following sources and policies:

- [University Syllabus Policy S16-9](http://www.sjsu.edu/senate/docs/S16-9.pdf) at <http://www.sjsu.edu/senate/docs/S16-9.pdf>.

- Office of Graduate and Undergraduate Programs' [Syllabus Information web page](http://www.sjsu.edu/gup/syllabusinfo/) at <http://www.sjsu.edu/gup/syllabusinfo/>

Success in this course is based on the expectation that students will spend, for each unit of credit, a minimum of 45 hours over the length of the course (normally three hours per unit per week) for instruction, preparation/studying, or course related activities, including but not limited to internships, labs, and clinical practica. Other course structures will have equivalent workload expectations as described in the syllabus.

Final Examination or Evaluation

The final examination is a comprehensive exam and will consist of multiple-choice questions, fill-in-the-blank questions, and short answer questions. The date and time of the final examination is listed in the syllabus.

Grading Information

Determination of Grades

Assignment Breakout:

Homework assignments- 20% of total course grade

Quizzes- 20% of total course grade

Midterm examination- 20% of total course grade

Final examination- 40% of total course grade

Grades in this course will be determined on the basis of student performances on the homework assignments, quizzes, and the exams. The total number of points earned by the student will be divided by the total number of points possible, and this percentage will be used to assign grades using the plus/minus letter grade system according to the following scale:

A plus = 480 to 500 points

A = 465 to 479 points

A minus = 450 to 464 points

B plus = 430 to 449 points

B = 415 to 429 points

B minus = 400 to 414 points

C plus = 380 to 399 points

C = 365 to 379 points

C minus = 350 to 364 points

D plus = 330 to 349 points

D = 315 to 329 points

D minus = 300 to 314 points

F = 299 points or lower

Extra Credit

Students will have the opportunity to earn extra credit by completing one extra homework assignment or one extra quiz for up to 25 extra credit points.

Late Policy

Late homework assignments turned in after the due dates will be penalized by deducting 5 points from the point total for each day the assignment is turned in late (i.e. if the assignment is turned in one day late, 5 points will be deducted, if the assignment is turned in two days late, 10 points will be deducted, etc.). Assignments that are not turned in will be assigned a grade of zero.

Students must complete the quizzes by the quiz deadline date. Quiz deadline dates are listed in the syllabus. There will be no opportunities to make up quizzes.

Classroom Protocol

Class attendance is expected. Students will be expected to arrive to class on time. Please refrain from websurfing, texting, and accessing social media during class. This degree of civility and respect is an element of the classroom culture. Failure to comply with these rules will result in your possible dismissal from class for the day. In addition, rude behavior (e.g., interrupting the Instructor, excessive talking in class) will also result in possible punitive measures.

Consent for Recording of Class and Public Sharing of Instructor Material

Common courtesy and professional behavior dictate that you notify someone when you are recording him/her. You must obtain the instructor's permission to make audio or video recordings in this class. Such permission allows the recordings to be used for your private, study purposes only. The recordings are the intellectual property of the instructor; you have not been given any rights to reproduce or distribute the material. Course material developed by the instructor is the intellectual property of the instructor and cannot be shared publicly without his approval. You may not publicly share or upload instructor generated material for this course such as exam questions, lecture notes, or homework solutions without instructor consent.

University Policies

Per [University Policy S16-9](http://www.sjsu.edu/senate/docs/S16-9.pdf) (<http://www.sjsu.edu/senate/docs/S16-9.pdf>), relevant information to all courses, such as academic integrity, accommodations, dropping and adding, consent for recording of class, etc. is available on Office of Graduate and Undergraduate Programs' [Syllabus Information web page](http://www.sjsu.edu/gup/syllabusinfo/) at <http://www.sjsu.edu/gup/syllabusinfo/>. Make sure to visit this page, review and be familiar with these university policies and resources.

Department Policies

The mission of the Department of Communicative Disorders and Sciences is to provide high quality academic and clinical preparation to students seeking careers working with individuals who have speech, language and hearing disorders, and their families. Guided by principles of evidence-based practice and working in collaboration with other professionals, our graduates will adhere to the highest ethical standard in serving the needs of our diverse community.

EDAU 115 /Introductory Hearing Science/Fall Semester 2019/Course Schedule

This course schedule is subject to change with fair notice and notice of changes will be announced in class.

Course Schedule

Week (Optional)	Date	Topics, Readings, Assignments, Deadlines (If appropriate, add any extra column(s) to meet your needs.)
1	8/26	Introduction to Acoustics, Chapter 1
2	9/2	Labor Day- No Class
3	9/9	Simple and Complex Sounds, Chapter 1
4	9/16	Sound Waves and Decibels, Chapter 1, Quiz #1 Due
5	9/23	Speech Acoustics, Homework # 1 Due
6	9/30	Outer Ear, Chapter 2 Quiz #2 Due
7	10/7	Middle Ear, Chapter 2 Homework # 2 Due
8	10/14	Midterm Exam
9	10/21	Inner Ear, Chapter 3
10	10/28	Inner Ear, Chapter 3 Quiz # 3 Due
11	11/4	Central Auditory System, Chapter 4 Homework #3 Due
12	11/11	Auditory Perception, Chapter 5 Quiz # 4 Due
13	11/18	Loudness and Pitch, Chapter 6 Homework # 4 Due
14	11/25	Binaural Hearing
15	12/2	Masking, Chapter 7 Quiz # 5 Due
16	12/9	Differential Sensitivity, Chapter 8 Homework # 5 Due
	12/12	Final Exam Sweeney Hall 444 2:45-5 pm