



Faculty of Pharmacy, Nursing and Health professions
Department of Audiology and Speech Therapy
SPAU3321 Hearing Aids 2

Course Syllabus

Course Description:

This course is designed to provide Audiology and Speech Therapy students with theoretical knowledge on the topics of paediatric hearing aid candidacy, selection and fitting, patient-centred counselling approaches, assistive hearing technologies, bone conduction hearing devices, middle ear implantable devices and cochlear implants. The course covers the candidacy criteria, fitting methods, counselling and follow up protocols as well as the troubleshooting methods offered to the recipients of these technologies.

Pre-requisite Courses:

For enrolment, students must have successfully passed:

SPAU332 Hearing Aids 1

SPAU334 Diagnostic Audiology

OFFERED: Spring 2024/25

Lecture times: T, R: 9:30 – 10:50 am.

CREDITS:

Theory: Three credit hours.

FACULTY:

Dr. Adnan Shehabi (MSc, PhD)

Office: PNH306

Email: ashehabi@birzeit.edu

Office Hours: M 11:30-12:00; T, R 9:30-12:00; W 11:30 – 1:30

COURSE OUTCOMES:

1. Identify and discuss different counselling approaches related to patients receiving hearing technologies including information counselling and personal adjustment counselling.
2. Discuss paediatric hearing aid candidacy and selection.
3. Identify the need for and the types of assistive hearing technologies.

4. Describe the candidacy and fitting criteria of bone anchored hearing devices and middle ear implantable devices.
5. Describe the candidacy criteria of cochlear implants.
6. Discuss basic programming and tuning approaches in cochlear implants.
7. Identify factors influencing the benefit from implantable hearing technologies.

COURSE REFERENCES AND READINGS:

- Jace Wolfe and Erin Schafer, (2024). **Programming Cochlear Implants**. Plural Publishing.
- Ruckenstein Michael (2020). **Cochlear Implants and Other Implantable Hearing Devices**. Plural Publishing
- Dillon, Harvey (2012). **Hearing Aids**. 2nd Edition. Boomerang press
- Other readings from current relevant journals, computer assignments, audio-visual programs, and web-based activities may be assigned during the semester.

COURSE REQUIREMENTS AND GRADING

Course Requirements

1. To **turn off** all cell phones before lectures begin.
2. Attend classes and participate in class discussions.
3. Take notes on all classroom lectures and discussions.
4. All assignments must be submitted in class on assigned due date. Late assignments will **not be accepted** without prior approval from the instructor and will result in a **receiving 0 marks on it.**
5. Complete all exams including quizzes, the midterm exam and the final exam designed to evaluate the understanding of background material and theory covered throughout the course.
6. Complete the midterm and final exams as well as quizzes and the assignment.
7. In case of an absence with an excuse, faculty member must be notified by email and a report documenting the cause of the absence must be supplied. In case a student is absent on an exam/quiz without an acceptable excuse, the student will **receive 0 marks** on it.

Grading

Grades will be determined by quizzes, exams (midterm and final exam) and assignment. The contribution of each assessment component towards the final mark is as follows:

- | | |
|---------------------------------------|-----|
| • Midterm Exam | 30% |
| • Final Exam | 40% |
| • Quizzes | 20% |
| • Asynchronous/synchronous activities | 10% |

The final grade will be based on the total number of points accumulated by the student and expressed as a percentage (%) of the total points possible during the semester. Grades will be assigned using the following percentage scale:

Grade	Classification
85-100%	Excellent
78-84%	Very Good
70-77%	Good
60-69%	Satisfactory
Below 60%	Failure

COURSE POLICIES

Preparation/Attendance:

Students are expected to come to class prepared having completed all assigned readings. Students are expected to come to theory ready to participate. If an absence cannot be avoided, contact the course faculty. Absence for more than double the weekly contact hours (i.e., more than 4 lectures) without excuse will result in receiving withdraw with failure (WF) grade.

Make-up Work and Retakes:

If a student is unable to attend a test, the faculty member must be notified beforehand either by email or phone call. Failure to do this may result in **a “0” for that test**.

Make-up tests may be in a variety of formats or combination of formats including oral, or written as multiple choice, essay or short answer. The decision to allow students to revise assignments and/or re-take examinations will be made at the discretion of the faculty.

Synchronous and Asynchronous Teaching

This course involves a blended approach of synchronous and asynchronous teaching in some topics. For asynchronous topics, students are expected to fully complete the asynchronous learning materials at home before the class. The synchronous lectures will involve discussions, in-class individual and group activities. Failure to complete the asynchronous material will impact student ability to catch up with the synchronous activities.

Citation Style (Refer to this especially in assignments):

Student papers should use the American Psychological Association (APA) version 7 citation format.

This link provides condensed information from the APA Manual:

http://owl.english.purdue.edu/handouts/research/r_apa.html gives condensed information from the APA.

COURSE SCHEDULE AND REQUIRED READINGS

***Pre-assigned quiz**

Week	Topics
Week 1	Course introduction <i>Patient-centered counselling and education in hearing aids (Asynchronous)</i>
Week 2	Measuring electroacoustic features of hearing aids (test box measurements)
Week 3	Paediatric hearing aid candidacy, selection, and fitting
Week 4*	Paediatric hearing aid candidacy, selection, and fitting
Week 5	<i>Assistive Listening Devices and Technologies (asynchronous)</i>
Week 6	Bone-anchored hearing devices design and hardware
Week 7*	Bone-anchored hearing devices candidacy
Week 8	Middle Ear Implantable Devices hardware and candidacy
Week 9	Cochlear implant design, hardware and signal processing
Week 10	<i>Cochlear implant candidacy (Asynchronous)</i>
Week 10	Midterm Exam
Week 11	<i>Surgical and medical aspects of cochlear implants (Asynchronous)</i>
Week 12*	Factors influencing benefit from cochlear implants for adults and children
Week 13	Basic Terminology of cochlear implant programming
Week 14	Basic Terminology of cochlear implant programming
Week 15*	Basic principles of cochlear implant programming
Week 16	Basic principles of cochlear implant programming
	Final Exam (date to be announced)