Audio Overview

# Designing With Audio/Digital Audio Primer

1. Audio is important because it can be utilized to provide feedback to a user when there isn’t a screen present or when looking at a screen is not possible or desired. In the consideration of accessibility, audio is very important for a screen reader to provide the ability for a person with vision impairments to be able to access a web page.
2. Audio can be used as a form of feedback that reaches multiple people at the same time, such as a PA system or citywide emergency warning system. It is also good for mobile application such as gps turn-by-turn navigation or app notifications. Sound can be used in gaming to further engage the player in the game.
3. Amplitude – reflects the change in pressure from the peak of the waveform to the trough

Wavelengths – the distance, measured in units such as inches or centimeters, between two points with the same degree of phase.

Frequency – the number of cycles per second, where one Hertz equals one cycle per second.

Phase – how far through a cycle a waveform is.

Cycle – the amount of time it takes a waveform to go from one amplitude, all the way through its amplitude changes, until is reaches the same amplitude again.

1. When two of more sound waves meet, their amplitudes add to and subtract from each other. If the peaks and troughs line up, they are in phase. If the peaks of one waveform match up with the troughs of another, they will cancel each other out, resulting in no waveform.
2. Audio sampling – in digital storage, the original waveform is broken into individual samples.

Bit-depth – determines the amplitude resolution, higher bit-depth means greater dynamic range, a lower noise floor, and higher fidelity.

1. Audio compression is a type of lossy or lossless compression in which the amount of data in a recorded waveform is reduced to differing extents for transmission respectively with or without some loss of quality, used in CD and MP3, Internet radio, and the like.

# Podcast Introduction

## The Power of Audio

1. Sound effects – audio storytellers use sound effects to paint broader pictures in the listeners’ minds such as the context and the background.

Spoken word – used to convey detailed information and be specific, the power of vocal expression allows it to add life to details.

Music – adds color and energy, creates mood and affects emotion, music often attaches itself to experiences that we have.

## The Magic of Audio

1. This allows the listeners to imagine their own version of a “charming cottage” whereas a “beachside cottage” may be charming or may be a $20 a night motel on the south end of Ocean Blvd in Myrtle Beach, SC.

## Scripting Your Audio Podcast

1. Simple, direct words are easy for the ear to hear. Monosyllable words are great because they are easier to recognize.

## Editing Spoken Word Audio

1. Editing spoken word audio should be about making the message sound natural. Material should be short enough to get your message across but also easy to understand. General conversation follows a rhythm and a podcast should do the same.

## Top 5 Tips to a Successful Podcast

1. Excellent audio or video quality in every episode that you publish. Audio levels are normalized and at proper loudness.
2. Focused presentation of the topic(s) promised the audience by the show title and description. Explain early in the episode what the value is in the episode at the very beginning of the show.
3. Audience contributed content and involvement. Audience feedback, chatboards, giving out the show’s email address, replying to audience members directly or doing meet-ups.
4. Engaging show promo album art, show title, and text descriptions. These help get the podcast featured in iTunes or Zune and also help to get your show found in search engines.
5. Distribution. Make your podcast available where an audience already exists for audio or video shows. Take advantage of all the ways to let people know of your show and submit your podcast feed to all the available platforms and make your feed URL available on your website.