

Agenda CENG 3315 **January 24, 2022**

Review January 19, 2022

[..\1 CENG3315 Lecture 1 24 2022\1 Review of Jan 19 2022 Lecture.pdf](#)

LectureCh2 2 Sinusoids, Time Shift, Plotting (**NOT SAMPLING IN DSP SENSE!!**)

[..\1 CENG3315 Lecture 1 24 2022\2 TLHmcclellan ch02 2 LecturesTimeShift Plot2 4 1 20 2021.pdf](#)

LectureCh2 3 ComplexNos Euler

https://sce.uhcl.edu/harman/CENG3315_DSP_Spring2020/Lectures2020/2_3TLH_Lecture3DSPFirst-L03-1ComplexExp.pdf

TLH Ch2

https://sce.uhcl.edu/harman/CENG3315_Sp2019/0_TLH_Work&Book/TLH_CHAP2ComplexExp.pdf

ProblemSession1 Page 13-16

https://sce.uhcl.edu/harman/CENG3315_Sp2019/0_ProblemSessions/ProblemSession1_Examples.pdf

LectureCh2 4 SineAdd 22 Slides

https://sce.uhcl.edu/harman/CENG3315_DSP_Spring2020/Lectures2020/2_4TLH_DSPFirst-LectureCh2_4PhasorAddition.pdf

Add Phasors Example

https://sce.uhcl.edu/harman/CENG3315_DSP_Spring2020/WebSp2020/Add%20Phasor_ProblemSession.pdf

ProblemSession2 Page 28

https://sce.uhcl.edu/harman/CENG3315_Sp2019/0_ProblemSessions/ProblemSession2_Ch2.pdf

MATLAB1 Plot a sinusoid

https://sce.uhcl.edu/harman/CENG3315_Sp2019/0_MATLAB/Chapter2_MATLAB/SinePlot_Figb_1.pdf

VPN

MATLAB_VPN_UHCL

https://sce.uhcl.edu/harman/CENG3315_DSP_Spring2020/00_3315_2021/3315_web_2021/CSE%20-%20remote-connect-lab-computers_TLH.pdf

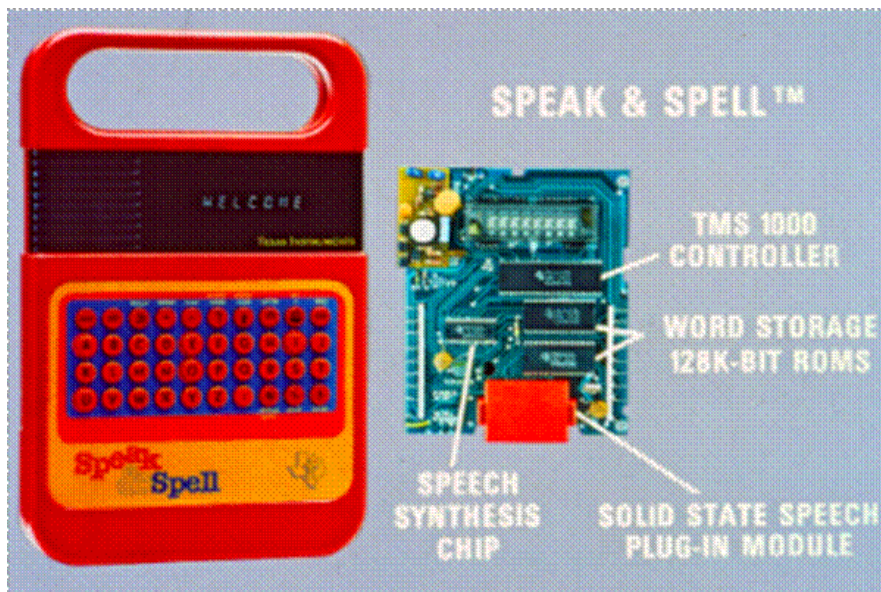
January 19, 2022

Introductions

https://sceweb.sce.uhcl.edu/harman/CENG5434/000_5434_F2021/1_2021HarmanThomas-cv_WithNASA_Robots_patents%20.pdf

FIRST DSP

J. W. Clark, E. C. Greco and T. L. Harman, "Experience with a Fourier Method for Determining the Extracellular Potential Fields of Excitable Cells with Cylindrical Geometry," Critical Reviews in Bioengineering, CRC Press, Inc., 1978.



Syllabus

https://sceweb.sce.uhcl.edu/harman/CENG3315_DSP_Spring2022/3315_Syllabus_Spring_2022_1_14_22.pdf

DSP First

https://sce.uhcl.edu/harman/CENG3315_Sp2019/DSP%20FIRST%20eMcClellan.pdf

<http://dspfirst.gatech.edu/>

Lots of help on Book website

<https://www.ece.gatech.edu/faculty-staff-directory/james-h-mcclellan>

Lecture Ch1 FirstLookAtDSP

https://sce.uhcl.edu/harman/CENG3315_DSP_Spring2020/00_3315_2021/3315_web_2021/3315_Lectu

[res_Sp2021/Ch01TLH_mcclellan_ch01_images_PPT_SP2021.pdf](#)

(Show Van Veen in Lecture 2)

References Chapter 1, 2 General

https://sce.uhcl.edu/harman/CENG3315_DSP_Spring2020/References/1_References%20Chapter%202_VanVeenIntroVideo.pdf

LectureCh2_1 VanVeen Video, Tuning Fork, Rotating Vector Video, Review of Trig, Phase = Time Shift

https://sce.uhcl.edu/harman/CENG3315_DSP_Spring2020/Lectures2020/2_1_TLH_SlidesLecture1_Ch2_1to2_3_D%20S%20P%20First.pdf

1. Barry VanVeen Introduction to DSP

Introductory overview of the field of signal processing: signals, signal processing and applications, philosophy of signal processing, and language of signal processing. 12:58

<https://www.youtube.com/watch?v=YmSvQe2FDKs>

2. Why Study Sinusoids? VanVeen

<https://www.youtube.com/watch?v=yXjXJ50INyQ>