

# Course Syllabus

## Course Description:

3 hours. Introduction to the concepts of transmission of information via communication channels. Amplitude and angle modulation for the transmission of continuous-time signals. Analog-to-digital conversion and pulse code modulation. Transmission of digital data. Introduction to random signals and noise and their effects on communication. Optimum detection systems in the presence of noise.

## Instructor:

Dr. Robert Akl, Discovery Park F229, (940) 565-2804, [Robert.Akl@unt.edu](mailto:Robert.Akl@unt.edu)  
(<mailto:Robert.Akl@unt.edu>)

## Teaching Assistant:

Sukrutha [LakshmiSukruthaTirumalaVangipuram@my.unt.edu](mailto:LakshmiSukruthaTirumalaVangipuram@my.unt.edu)  
(<mailto:LakshmiSukruthaTirumalaVangipuram@my.unt.edu>)

Course help hours: TBD

Zoom link for office hours: TBD

## Lab using MATLAB SIMULINK:

## Class Hours:

Mondays and Wednesdays, 5:30 pm – 6:50 pm, DP D201 and Zoom meetings.

## Office Hours:

By appointment for zoom meeting or email.

## Textbook:

*Signals and Systems: Analysis Using Transform Methods and MATLAB*, 2nd edition, M. J. Roberts, McGraw Hill, 2012.

ISBN 978-0-07-338068-1.

Supplemental text: MATLAB Student Edition

## Grading

<b>Attendance</b>	<b>10%</b>
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<b>Homework</b>	<b>10%</b>
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<b>Matlab Project</b>	<b>10%</b>
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<b>Lab Project</b>	<b>10%</b>
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<b>Midterm</b>	<b>25%</b>
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<b>Final</b>	<b>35%</b>
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### **Homework and Projects:**

Homework and Projects will be turned in through Canvas on the due date.