



**Course Outcome Survey**

**Instructor:** Dr. Salah M. Rahal  
**Course Code:** CEN 340  
**Section:** 3421  
**Semester and Academic Year:** Summer Semester / 2015/2016.

*Course Learning Outcomes*

*Having studied this course, I believe I can:*

- 1- Use MATLAB in signals and systems field.  
 Strongly Agree    Agree    Neutral    Disagree    Strongly disagree
- 2- Give mathematical description of main signals\*<sup>1</sup>, define basic time-domain operations on signals\*<sup>2</sup>, and describe signals characteristics\*<sup>3</sup>.  
 Strongly Agree    Agree    Neutral    Disagree    Strongly disagree
- 3- Determine types of systems and define basic systems properties such as system with/without memory, invertibility, causality, stability, time invariance, and linearity.  
 Strongly Agree    Agree    Neutral    Disagree    Strongly disagree
- 4- Describe Linear Time-Invariant “LTI” system by its unit impulse response, perform the convolution, compute the output for any arbitrary input signal, and describe the properties of LTI systems.  
 Strongly Agree    Agree    Neutral    Disagree    Strongly disagree
- 5- Use differential/difference equations for analyzing an important class of LTI systems and determine the system output.  
 Strongly Agree    Agree    Neutral    Disagree    Strongly disagree
- 6- Use Fourier Series and its properties for analyzing periodic signals, define the LTI system output for any periodic input signal, and describe the filtering effect.  
 Strongly Agree    Agree    Neutral    Disagree    Strongly disagree
- 7- Use Fourier Transform, its inverse, and its properties for analyzing aperiodic signals, and define the LTI system output for any aperiodic input signal.  
 Strongly Agree    Agree    Neutral    Disagree    Strongly disagree
- 8- Define Laplace Transform, its Inverse and its properties and apply them to LTI systems.  
 Strongly Agree    Agree    Neutral    Disagree    Strongly disagree
- 9- Explain Modulation and Demodulation of AM, PM and FM systems.  
 Strongly Agree    Agree    Neutral    Disagree    Strongly disagree

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\*<sup>1</sup> Such as sinusoidal signals, complex exponential, unit impulse and step functions.

\*<sup>2</sup> Such as time shift, time reversal, time scaling.

\*<sup>3</sup> Such as causality, periodicity, odd/even signals, and power/energy.