Electrical and Computer Engineering

**ECE 310  Digital Signal Processing  credit: 3 hours.**
Introduction to discrete-time systems and discrete-time signal processing with an emphasis on causal systems; discrete-time linear systems, difference equations, z-transforms, discrete convolution, stability, discrete-time Fourier transforms, analog-to-digital and digital-to-analog conversion, digital filter design, discrete Fourier transforms, fast Fourier transforms, spectral analysis, and applications of digital signal processing. Prerequisite: ECE 210.

<table>
<thead>
<tr>
<th>CRN</th>
<th>Type</th>
<th>Section</th>
<th>Time</th>
<th>Days</th>
<th>Location</th>
<th>Instructor</th>
</tr>
</thead>
<tbody>
<tr>
<td>70543</td>
<td>Lecture</td>
<td>CCS</td>
<td>06:00 PM - 07:15 PM</td>
<td>TR</td>
<td>3081 - Electrical &amp; Computer Eng Bldg</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>70430</td>
<td>Lecture</td>
<td>CSP</td>
<td>06:00 PM - 07:15 PM</td>
<td>TR</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>58210</td>
<td>Lecture</td>
<td>E</td>
<td>03:00 PM - 03:50 PM</td>
<td>MWF</td>
<td>3017 - Electrical &amp; Computer Eng Bldg</td>
<td>Katselis, D</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>58213</td>
<td>Lecture</td>
<td>G</td>
<td>10:00 AM - 10:50 AM</td>
<td>MWF</td>
<td>3017 - Electrical &amp; Computer Eng Bldg</td>
<td>Bresler, Y</td>
</tr>
</tbody>
</table>

Credit Hours: 3 hours
Not intended for Graduate - Urbana-Champaign.