Errors in Chapter 3:

Pg 129
Relations relating shear strains to normal stresses (equations 5, 6, and 7) are incorrect.
Corrected equations:

\[
\begin{align*}
\gamma_{xx} &= \frac{\eta_{xx,yy}}{E_{xx}} \sigma_{xx} \\
\gamma_{yx} &= \frac{\eta_{yy,xx}}{E_{yy}} \sigma_{yy} \\
\gamma_{xy} &= \frac{\eta_{zy,yy}}{E_{zz}} \sigma_{zz} \\
\gamma_{xz} &= \frac{\eta_{zz,xx}}{E_{xx}} \sigma_{xx} \\
\gamma_{yz} &= \frac{\eta_{yy,zz}}{E_{yy}} \sigma_{yy} \\
\gamma_{zx} &= \frac{\eta_{zz,yy}}{E_{zz}} \sigma_{zz}
\end{align*}
\]

(5)

(6)

(7)

Pg 150
A sentence that appears three lines from the top of the page should read:

“Similarly, the strain at failure is denoted \( \varepsilon_{11}^{fT} \) or \( \varepsilon_{11}^{fC} \).”

(As printed, \( \varepsilon_{22}^{fC} \) appears rather than \( \varepsilon_{11}^{fC} \).

Pg. 153
A row of information is missing in Table 3. The last row in the table should be as follows:

<table>
<thead>
<tr>
<th>Thickness</th>
<th>0.125 mm</th>
<th>0.125 mm</th>
<th>0.125 mm</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(0.005 in)</td>
<td>(0.005 in)</td>
<td>(0.005 in)</td>
</tr>
</tbody>
</table>

Pg 161, Homework Problem 1:

The problem statement is in error, and needed information is missing. The problem should read:

1. An anisotropic material is known to have the following elastic properties:

\[
\begin{align*}
E_{xx} &= 100 \text{ GPa} & E_{yy} &= 200 \text{ GPa} & E_{zz} &= 75 \text{ GPa} \\
\nu_{xy} &= 0.20 & \nu_{yx} &= -0.25 & \nu_{xz} &= 0.60 \\
\nu_{yx} &= 0.40 & \nu_{zy} &= -0.1875 & \nu_{yz} &= 0.225 \\
G_{xy} &= 60 \text{ GPa} & G_{yz} &= 75 \text{ GPa} & G_{zy} &= 50 \text{ GPa} \\
\eta_{xx,xy} &= -0.30 & \eta_{xx,yy} &= 0.25 & \eta_{xx,zz} &= 0.30 \\
\eta_{yy,xy} &= 0.60 & \eta_{yy,xx} &= 0.25 & \eta_{yy,zz} &= 0.20 \\
\eta_{zz,xy} &= -0.20 & \eta_{zz,xx} &= -0.05 & \eta_{zz,yy} &= -0.15 \\
\eta_{xy,xx} &= -0.18 & \eta_{xy,yy} &= 0.18 & \eta_{xy,zz} &= -0.16 \\
\eta_{xz,xx} &= 0.19 & \eta_{xz,yy} &= 0.28 & \eta_{xz,zz} &= -0.05 \\
\eta_{yz,xx} &= 0.15 & \eta_{yz,yy} &= 0.05 & \eta_{yz,zz} &= -0.10
\end{align*}
\]
\[ \begin{align*}
\mu_{xy, xz} &= -0.10 & \mu_{xy, yz} &= -0.05 & \mu_{xz, yz} &= 0.10 \\
\mu_{xz, xy} &= -0.12 & \mu_{yz, xy} &= -0.042 & \mu_{yz, xz} &= 0.067
\end{align*} \]

**Pg 162, Homework Problem 2:**

Needed information is missing. The problem statement should read:

\[ E_{11} = 100 \text{ GPa} \quad E_{22} = 200 \text{ GPa} \quad E_{33} = 75 \text{ GPa} \]
\[ \nu_{12} = 0.20 \quad \nu_{13} = -0.25 \quad \nu_{23} = 0.60 \]
\[ \nu_{21} = 0.40 \quad \nu_{31} = -0.19 \quad \nu_{32} = 0.22 \]
\[ G_{12} = 60 \text{ GPa} \quad G_{13} = 75 \text{ GPa} \quad G_{23} = 50 \text{ GPa} \]

**Pg 164, Homework Problem 4, part (c):**

Part (c) cannot be solved as stated. A re-wording of part (c) is:

"(c) In Chapter 4 it will be seen that \( \nu_{21} = \nu_{12} \left( E_{22} / E_{11} \right) \). Determine \( \nu_{21} \) for this composite material system."