

Erratum to:

Structural Analysis

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Chapter 1: Basic equations of linear elasticity

- p.12; Last paragraph: The equation for \bar{s} should be $\bar{s} = s_1\bar{v}_1 + s_2\bar{v}_2 + s_3\bar{v}_3$.
p.16; Example 1.1: The equation for \underline{S} is missing 0 in the (3,1) position.
p.20; Problem 1.3: Replace $\tau_{12} = V_3/(bh)$ with $\tau_{12} = V_2/(bh)$.
p.35; Eq. (1.59): In second line replace $\bar{u}(x_1)$ with $\underline{u}(x_1)$.

Chapter 2: Constitutive behavior of materials

- p.73; Problem 2.7: Replace last sentence with “Use a range of Poisson’s ratios $0 \leq \nu \leq 0.5$.”
p.95; Table 2.9: In column #5, replace σ_{1c}^{*f} with σ_{2c}^{*f} .

Chapter 3: Linear elasticity solutions

There are no errata.

Chapter 4: Engineering structural analysis

- p.155; Fifth paragraph, last sentence: Capitalize “Introducing...”
p.160; Third paragraph, sentence 2: Delete second “a” at start.
p.161; First paragraph: Replace equation with: $\frac{dB}{L} = \frac{eB}{L} = \frac{\alpha\Delta T}{1+2k_A \cos^3 \theta}$.

Chapter 5: Euler-Bernoulli beam theory

- p.207; Example 5.12: Last equation replace -1 by +1.
p.212; Problem 5.8: Add the following sentence: “All plots are to be constructed for values of $\bar{k} = 0, 10, 1000$.”
p.213; Problem 5.9: Sentence #4: change “fall” to “falls”. Item (3): delete “that”.
p.213; Problem 5.10: Title: change “Cantilever” to “Cantilevered”. Sentence #2: change “on” to “to”.
p.213; Problem 5.11: Title: change “Cantilever” to “Cantilevered”. Sentence #2: delete “concentrated”.
p.214; Problem 5.12: Item (4), replace $V_3(\eta)/P$ with $V_2(\eta)/P$.

Chapter 6: Three-dimensional beam theory

- p.243; Fig. 6.11: Swap the point labels on the two axes.
p.247; Problem 6.3: Title: replace “bema” with “beam”. Item (6): replace “defined” with “define”.
p.257; Fig. 6.25: The figure should show the $\bar{v}_2 - \bar{v}_3$ axes located at the midpoint of the vertical web with axis \bar{v}_3 pointing upwards.

Chapter 7: Torsion

- p.286; Third paragraph: Delete second sentence which reads: “This forms a set of equations for the unknown coefficients, C_{ij} .”
p.292; Fig. 7.31: The shear flow arrows in the small circled blow-up in the upper right of the figure should be reversed.

Chapter 8: Thin-walled beams

- p.305; Problem 8.7: Delete “at point C.” Add as second sentence: “Define $b = a/2$ and $\alpha = \arcsin(3/5)$.”
p.306; Problem 8.10: Add as second sentence: “Define $a = \alpha R$.” Add to item (4) the following sentence: “ Assume that $\alpha = 1/2$.” Add as NEW item the following: “(5) Find the critical value of $\alpha = \alpha_{cr}$ such that the maximum bending stress σ_1 assumes equal positive and negative values on the section.”
p.306; Problem 8.11: Add as second sentence: “Define $\alpha = b/h$.” Add to item (4) the following sentence: “Assume that $\alpha = 1/2$ and $\beta = 2$.”
p.317; Problem 8.16: Add to the second sentence: “..., and assume that $b = \beta h$.”
p.318; Problem 8.20: Add as second sentence: “Define $a = \alpha R$ and assume $\alpha = 1$.” Add NEW item: “(5) What is the effect of α on the maximum value of the shear flow?”

- p.318; Problem 8.22: Add as a second sentence: “Define $b = \alpha h$ and assume that $\alpha = 1/2$ with $\beta = 3$.”
- p.333; Problem 8.38: Replace the last sentence with: “Use $b = a$ and $c = 2a$ and $t_1 = t_2 = t_w = t$.”
- p.337; Last 2 lines: Replace “is C is” with “is \mathcal{C} ” in two places.
- p.338; Last equation: Replace “360 t ” with “360” immediately following the second equal sign.
- p.341; Problem 8.39: Change the second (3) to (4).
- p.341; Problem 8.41: Add “on page 295” following “Figure 7.34...”
- p.341; Problem 8.43: Add a third sentence: “Assume $t_1 = t_2 = t_w = t$, $b = a$ and $c = 2a$.”
- p.342; Problem 8.44: In item (2) change “ $d/b \in [0, 1.5]$ ” to “ $0 \leq d/b \leq 1.5$.”
- p.344; Third paragraph: Replace “10that” with “10 that”.
- p.350; Fig. 8.56: Replace f_1 and f_2 with $f^{[1]}$ and $f^{[2]}$.
- p.353; Problem 8.54: Switch item (1) with item (2), *i.e.*, reverse their order.
- p.353; Problem 8.55: Switch item (1) with item (2), *i.e.*, reverse their order.
- p.353; Problem 8.56: Switch item (1) with item (2), *i.e.*, reverse their order. Also, add as last sentence: “Assume $b = a$, $c = 2a$ and $t_1 = t_2 = t_w = t$.”
- p.361; Problem 8.60: As specified the beam develops unrealistically large twisting. Change the beam properties to: $h = 0.2$ m, $b = 0.1$ m and $t = 10$ mm.
- p.362; Eqs. (8.80a,b): Change x_2 to $x_2(s)$ and x_3 to $x_3(s)$.
- p.364; Second paragraph: In first line change “8.5.1” to “7.5”.
- p.376; Problem 8.64: Title: change “Cantilever” to “Cantilevered”.
- p.386; Fig. 8.84: Change “countour” to “contour” in the figure.
- p.390; Problem 8.67: Add to end of first sentence: “... and specified in problem 8.66.”
- p.390; Problem 8.68: Add as second sentence: “Assume $b = a$, $c = 2a$ and $t_1 = t_2 = t_w = t$.”

Chapter 9: Virtual work principles

- p.403; Fig. 9.3: Change “ $F_2 = -3$ ” to “ $F_2 = 3$ ” in figure.
- p.403; Fig. 9.4: Change “to” to “by” in caption.
- p.403; Example 9.2: In second paragraph, change first “ s_2 ” to “ s_1 .”
- p.429; Fig. 9.29: Swap Δ_1 and Δ_2 in figure.
- p.440; First paragraph: Change second u_1 to u_2 .
- p.448; Last paragraph: Change “eq. (9.59)” to “eq. (9.61)”.
- p.453; Eq. (9.68): Reverse subscripts “A” and “C” in numerator of final result.
- p.456; Fig. 9.47: Change both vertical dimensions from L to $L/2$. Note: this affects only problem 9.17.
- p.457; Fig. 9.49: Reverse the direction of M_1 acting on rear face.
- p.460; Eq. (9.75): Change V to \mathcal{V} at integral symbol.
- p.461; Third equation: Change V to \mathcal{V} at integral symbol.

- p.464; First paragraph: In next to last sentence change “his” to “this”: “For this expression...”
- p.471; Problem 9.23: Change last item (2) to (3).
- p.472; Problem 9.27: Change second item (1) to (2).
- p.482; Fig. 9.71 caption: Replace caption’s second sentence with: “The isostatic system is obtained by cutting the moment restraint at the left end.”
- p.482; Example 9.29: Equation in second paragraph should read: $M_3(\eta) = -p_0 L^2 (1 - \eta)^2 / 2$.
- p.485; Example 9.31: In first paragraph, second sentence, add after “infinite stiffness” the following: “($E\mathcal{A} \rightarrow \infty$)”
- p.486, Next to last paragraph: Add to end of sentence beginning with “Finally,” the following: “...for $0 \leq \eta \leq 1$ (symmetric).”
- p.487; Third paragraph, second sentence: Replace “possible” with “possibly”.
- p.490; Fig. 9.79: Replace the upward distributed load with a single downward concentrated load P applied at the mid-span point D. (Otherwise, problem 9.32 is identical to example 9.31.)
- p.490; Problem 9.34: Item (1): replace “displacement” with “vertical displacement”.

Energy methods

- p.521; Last paragraph: Swap “ $\sin \theta$ ” and “ $\cos \theta$ ” in equations for “ e_1 ” and “ e_3 ”.
- p.522; First equation: Change “ $u_1 \cos \theta$ ” to “ $u_1 \sin \theta$ ” in 2 places and change “ $u_2 \sin \theta$ ” to “ $u_2 \cos \theta$ ” in 2 places. Also, replace the last (3^{rd}) line in equation with: $= \frac{1}{2} \frac{EA}{L} [2u_1^2 \sin^2 \theta \cos \theta + u_2^2 (1 + 2 \cos^3 \theta)]$.
- p.522; Second equation set: Replace second pair of equations with the following:

$$\frac{\partial \Pi}{\partial u_1} = \frac{EA}{L} 2u_1 \sin^2 \theta \cos \theta - P_1 = 0,$$

$$\frac{\partial \Pi}{\partial u_2} = \frac{EA}{L} u_2 (1 + 2 \cos^3 \theta) = 0.$$

- p.522; Third equation set: Replace matrix equation with the following:

$$\begin{bmatrix} 2 \sin^2 \theta \cos \theta & 0 \\ 0 & 1 + 2 \cos^3 \theta \end{bmatrix} \begin{Bmatrix} u_1 \\ u_2 \end{Bmatrix} = \frac{L}{EA} \begin{Bmatrix} P_1 \\ 0 \end{Bmatrix}.$$

- p.522; Sentence following third equation set: Replace sentence with new sentence: “Solving these equations then yields $u_1 = P_1 L / (2EA \sin^2 \theta \cos \theta)$ and $u_2 = 0$.”

- p.522; Fourth equation set: Replace the fourth equation set with the following:

$$\frac{e_1}{L} = \frac{1}{2 \sin \theta \cos \theta} \frac{P_1}{EA}, \quad e_2 = 0, \quad \frac{e_3}{L} = -\frac{1}{2 \sin \theta \cos \theta} \frac{P_1}{EA}.$$

- p.522; Last equation set: Replace the last equation set with the following:

$$\frac{F_1}{P_1} = \frac{1}{2 \sin \theta}, \quad F_2 = 0, \quad \frac{F_3}{P_1} = -\frac{1}{2 \sin \theta}.$$

- p.526; Problem 10.7: Replace “generalized coordinates” with “nodal displacements”.
- p.526; Problem 10.8: Replace “generalized coordinates” with “nodal displacements”.
- p.526; Problem 10.9: In sentence 2, replace “bar 3” with “bar 2.” Also, replace “generalized coordinates” with “nodal displacements”.
- p.534; Equations #1-3: Replace all 6 instances of \underline{b} with \hat{b} .
- p.567; Example 10.17: Replace title, “Ring under internal forces” with “Ring under inplane and out of plane loads”.
- p.568; Third equation: Change H_{33}^c to H_{22}^c and change M_3 to M_2 in two places, and in following line also change M_3 to M_2 .
- p.568; Fourth equation: Change H_{33}^c to H_{22}^c and H_{33} to H_{22}^c .
- p.576; Fig. 10.50: Change “half-span” to “triangular” in figure caption.
- p.576; Problem 10.21: In title, replace “Simply supported” with “Cantilevered”.
- p.576; Problem 10.22: In last line on page, replace “turn to” with “consider”.
- p.577; Problem 10.23: Replace “move in the only in the vertical” with “move in only the vertical”. Swap items (1) and (2), and replace “reaction Q ” with “reaction B ”.
- p.577; Problem 10.24: In second sentence, replace “while that bars” with “while that of bars”. Also, change the second item (1) to (2).
- p.577; Problem 10.25: In title, change “simple” to “mid-span”.

Chapter 11: Variational and approximate solutions

- p.589; Last equation: Change l^4 to L^4 in numerator.
- p.596; Last paragraph: First sentence, last word: change to “ends.”
- p.608; First equation: Change third integral to read: $\int_0^L w p_1 dx_1$.
- p.608; Eq. (11.16): Change second integral to read: $\int_0^L w p_1 dx_1$.
- p.616; Problem 11.6: In Item (1), replace $\bar{u}(x_1)$ with $\bar{u}_1(x_1)$.
- p.625; Problem 11.10: Add to end of problem statement the following sentence: “Assume $\alpha = 1/2$ for all plots.”
- p.646; Third equation: Replace $-\pi^2$ with $-\frac{\pi^2}{L^2}$.
- p.650; Problem 11.12: Replace last word in first sentence with: “and a uniform load p_0 is acting upwards.”
- p.651; Problem 11.13: In second sentence in item (2), replace “Construct 5” with “Construct 3”.
- p.651; Problem 11.14: In title, replace “two” with “end-point and”.
- p.652; Problem 11.17: In last line on page, replace x_1^{2+i} with x_1^{1+i} .
- p.653; Problem 11.17: In first sentence on page, replace “3 cases” with “4 cases”.
- p.653; Problem 11.18: In second sentence of item (2), replace x_1^{2+i} with x_1^{1+i} .
- p.654; Problem 11.19: In last sentence of item (2), replace $8 \cdot 10^3$ with 8×10^3 .
- p.660; Last equation: Change limits of first integral to $-\ell/2$ and $\ell/2$.
- p.661; Third equation: Change limits of first integral to $-\ell/2$ and $\ell/2$, and change \hat{p}_2 to p_2 .
- p.671; Fig. 11.50: A pinned (simple) support is missing at the right end of the beam.

Chapter 12: Variational and energy principles

- p.681; Last sentence on page: Change punctuation to “matrix, \underline{S} , are” in sentence.
- p.686; Third equation: Remove leading minus sign.
- p.689; Last sentence on page: Insert space after first comma.
- p.699; Fourth equation: Second line should include leading minus sign: $-2tL \int_0^1 \tau_0(g + \frac{2h}{3}) d\eta$,
- p.701; Fig. 12.10: Change label on abscissa from “ η ” to “ ζ ”.
- p.703; Paragraph #3: Change $\tau_{13} = \partial\phi/\partial x_2$ with $\tau_{13} = -\partial\phi/\partial x_2$
- p.713; Problem 12.1: Replace all 6 occurrences of u_2 with \bar{u}_2 .
- p.713; Problem 12.2: In item (1), replace $H_{11}/(4abG)$ with $H_{11}/(16ab^3G)$.
- p.715; Problem 12.11: In third sentence, replace γ_{12}^2 with γ_{ave}^2 , replace ϵ_1 with $\bar{\epsilon}_1$, du_1 with $d\bar{u}_1$, γ_{12} with γ_{ave} , and du_2 with $d\bar{u}_2$. In the next sentence, replace F_1 with N_1 in 2 places and F_2 with V_2 in 3 places. Replace items (1) and (2) with the following: “(1) Develop the principle of virtual work from the equilibrium equations and boundary conditions. (2) Develop the governing differential equations and boundary conditions using the principle of minimum total potential energy.”
- p.716; Problem 12.11: In item (5), replace u_2 with \bar{u}_2 . In item (6), replace F_2 with V_2 in 1 place and F_0 with V_0 in 2 places; also replace u_2 with \bar{u}_2 . In item (7), replace $(H_{33}u_2)$ with $(H_{33}\bar{u}_2)$, replace $s^2 = 2.0 \cdot 10^{-3}$ with $\bar{s}^2 = 2.0 \times 10^{-3}$, and replace $s^2 = H_{33}/K_{22}l^2$ with $\bar{s}^2 = H_{33}/(K_{22}L^2)$. In item (8), replace F_2 with V_2 and γ_{12} with γ_{ave} . In item (11), replace s^2 with \bar{s}^2 in 2 places.
- p.716; Problem 12.12: In 1st sentence, replace “of axial stiffness S .” with “with cross-sectional area \mathcal{A}_s and axial stiffness S .” In 4th sentence, replace “in to” with “into”. Throughout entire problem, replace subscript $(\cdot)_f$ with subscript $(\cdot)_0$ on variables σ and P (a total of 10 places). In the last sentence in item (2), replace $(du_1/dx_1)_{x_2=h}^2$ with $(du_1/dx_1)_{x_2=b}^2$. In item (8), replace $h\tau^{12}/P$ with $\mathcal{A}_s\tau_{12}/P$. In item (9), replace $h\tau_{12}/P(\eta, \zeta = 1)$ with $\mathcal{A}_s\tau_{12}/P(\eta, \zeta = 1)$
- p.717; Problem 12.12: In first line on page, replace “same question” with “repeat this in another plot...” In item (12), replace “same question” with “repeat this in another plot”. In item (13), replace “ $k \in [0, 1]$ ” with “ β for $0 \leq \beta \leq 1$ ”. In the last sentence of the last paragraph, replace “ \mathcal{A} ” with “ \mathcal{A}_s ” in 3 places; replace “ k ” with “ β ”; replace “;” with “, and”.

Chapter 13: Introduction to plasticity and thermal stresses

- p.731; Problem 13.3: In item (2), delete the end of the sentence, “on a non-dimensional scale P^y vs. Δ/Δ^y ”. Add item (3): “(3) Find an expression for P/P^y as a function of Δ/Δ^y in the elasto-plastic region, $P^y < P < P^p$.” Add the following sentence to the end of item (5): “Your plot can either be generic or you can choose specific values for θ and \bar{k} .”
- p.731; Problem 13.4: Change “cylinder” to “tube” in the problem title and in the first sentence. In item (1), change p_i/p_i^E to p_i/p_i^y .

- p.741; First paragraph: change κ_3^y to κ_1^y in three instances.
- p.745; First equation: Change second plus (+) sign to a minus (-) sign so first equation reads: $\frac{d^2 u_r}{dr^2} + \frac{1}{r} \frac{du_r}{dr} - \frac{u_r}{r^2} - \frac{(1+\nu)}{(1-\nu)} \alpha \frac{dT}{dr} = 0$.
- p.746; Fig. 13.16 caption: Add to end of last sentence: “and $\nu = 0.3$.”
- p.746; Problem 13.7: Add to the end of the problem this sentence: “Assume $\bar{R}_i = 0.2$ and $\nu = 0.3$.”
- p.758; Second paragraph: Change $d\bar{u}_1/dx_1 = P_1^e/S = E\alpha T_0/3$ to $d\bar{u}_1/dx_1 = P_1^e/S = \alpha T_0/3$.
- p.758; Second equation: Change L^3 to L^2 .
- p.760; Problem 13.12: In first sentence change “cress-section” to “cross-section”. In last 2 sentences do the following. Change \hat{h}_1 to \bar{h}_1 and change \hat{h}_2 to \bar{h}_2 . Change η_1 to λ_1 in 2 places and change η_2 to λ_2 in 2 places.
- p.761; Problem 13.13: In first sentence change “cress-section” to “cross-section”. In last 2 sentences do the following. Change \hat{h}_1 to \bar{h}_1 and change \hat{h}_2 to \bar{h}_2 . Change η_1 to λ_1 in 2 places and change η_2 to λ_2 in 2 places.
- p.761; Problem 13.14: In item (5), insert “for” after “cross-section”.
- p.762, Problem 13.15: In the second paragraph replace “example 6.6.” with “example 6.6 on page 249.”

Chapter 14: Buckling of beams

- p.767; First sentence: Insert after “beam” the following: “with a symmetrical cross-section”.
- p.767; Fig. 14.5: Remove rollers from left support.
- p.769; Eq. (14.15): Replace H_{33}^{*c} with H_{33}^c .
- p.770; Eqs. (14.17 & 14.19): Replace H_{33}^{*c} with H_{33}^c .
- p.771; Eq. (14.24-25): Replace H_{33}^{*c} with H_{33}^c .
- p.771; Eq. (14.27): Replace H_{22}^{*c} with H_{22}^c .
- p.772; Second paragraph: Replace H_{33}^{*c} with H_{33}^c in 2 places.
- p.772; Eq. (14.30): Replace H_{33}^{*c} with H_{33}^c .
- p.773; Eq. (14.33): Replace H_{33}^{*c} with H_{33}^c .
- p.774; Eq. (14.34-35) and text between: Replace H_{33}^{*c} with H_{33}^c in 4 places.
- p.775; Full page: Page must be reformatted at fig. 14.11.
- p.775; Eq. (14.38) and remaining equations on page: Replace H_{33}^{*c} with H_{33}^c in a total of 6 places.
- p.776; Second paragraph & first equation: Replace H_{33}^{*c} with H_{33}^c in 3 places.
- p.778; Second equation from bottom: Change $[\underline{K} + P\underline{K}_G]$ to $[\underline{K} - P\underline{K}_G]$.
- p.778; Eq. (14.47): Change $[\underline{K} + P\underline{K}_G]$ to $[\underline{K} - P\underline{K}_G]$.
- p.779; Eq. (14.49) & two following lines: Replace H_{33}^{*c} with H_{33}^c in 5 places.
- p.781; Second paragraph: Replace H_{33}^{*c} with H_{33}^c in 2 places.
- p.781; Second equation & following paragraph: Replace H_{33}^{*c} with H_{33}^c in 5 places.
- p.782; Entire page: Replace H_{33}^{*c} with H_{33}^c in 5 places.
- p.784; First paragraph: Replace H^{*c} with H_{33}^c .

- p.784; Equation above Table 14.1: Replace H_{33}^{*c} with H_{33}^c .
- p.784; Problem 14.1: Add to end of second sentence: “by solving the governing differential equation.”
- p.784; Problem 14.2: Replace H_{33}^{*c} with H_{33}^c in 2 places.
- p.785; Figs. 14.16-17: In figs. 14.16-17 add rollers to right supports.
- p.785; Problem 14.3: In second sentence, change a_3 to q_3 . Also, replace H_{33}^{*c} with H_{33}^c in 2 places.
- p.785; Problem 14.5: In second sentence replace “on” with “for”.
- p.786; Problem 14.6: In item (1) change italicized text to: “*subjected solely to the transverse load p_0* .” Also, change σ_{ult} to σ_{allow} in 4 places.
- p.786; Problem 14.7: In the inline equation in item (1) replace a with q_1 .
- p.788; Problem 14.11: In the last sentence, replace “ \bar{v}_3 ,” with “ \bar{v}_3 directions, respectively.”
- p.788; Problem 14.13: In item (4) replace hM_3^{mid}/H_{33}^c with $M_3^{mid}L^2/(hH_{33}^c)$.
- p.790; Sentence before last equation: Replace “appendix” with “appendix”.

Chapter 15: Shear deformation in beams

- p.801; Problem 15.1: Replace “fig. 15.4” with “fig. 15.3.” Also, in item (2) replace “improved deformation mode” with “parabolic stress distribution”.
- p.801; Problem 15.2: In item (5) replace “cantilevered” with “clamped”.
- p.802; Fig. 15.8: Change angle Φ_3 to $-\Phi_3$.
- p.807; Second paragraph, last sentence: Replace “fast” with “faster” and delete the following “to”.
- p.815; Problem 15.9: In the fifth sentence replace a with q_1 and b with q_2 . In the following sentence, add a “)” at the end of the equation for \bar{k} . Finally, in the last sentence, change \bar{k}^* to \bar{k} .
- p.816; Problem 15.10: In the fourth sentence replace Φ_n with Z_n .
- p.816; Problem 15.11: At the end of items (2), (3) and (4), add “for $\alpha = 0.25$.” Also, change item (5) to read the same way. In the remainder of the problem statement, replace $\alpha \in [0, 0.5]$ with $0 \leq \alpha \leq 0.5$ in 4 places.

Chapter 16: Kirchhoff plate theory

- p.822; Second paragraph: Delete “and” in line before eq. (16.3).
- p.823; Eq. (16.9): Replace ϵ_{12}^0 with γ_{12}^0 .
- p.824; Fig. 16.3: Change V_1 to Q_1 and V_2 to Q_2 .
- p.824; Last paragraph: Change “components” to “component” in first sentence.
- p.830; First paragraph: Change M_1 to M_2 in 2nd sentence.
- p.834; Item 4: Change “linear” to “rectilinear” in title.
- p.836; Fig. 16.10: Reverse direction of moment arrows for M_0 in upper-right, lower-left direction (*i.e.*, axis \bar{v}_1).
- p.837; Eq. (16.46b): Change first D to $-D$.

- p.839; Problem 16.4: Change U_3 to \bar{u}_3 and replace $x_1 \in [0, a]$, $x_2 \in [0, b]$ with $0 \leq x_1 \leq a$ and $0 \leq x_2 \leq b$.
- p.840; Fig. 16.18: Reverse direction of M_0 arrow on left edge of figure.
- p.844; Problem 16.6: Third sentence: Replace “The laminate” with “A laminate of width b .”
- p.851; First paragraph: Replace $\underline{SM} = \underline{D} \underline{S} \underline{\kappa}$ with $\underline{SM} = \underline{D} \underline{S} \underline{\kappa}$.
- p.852; Eq. (16.80): Change second term to $4D_{16}\bar{u}_{3,1112}$.
- p.853; Paragraph following eq. (16.82): Replace a with $x_1 = a$ and b with $x_2 = b$.
- p.855; Last paragraph: Replace $D[\alpha_m^4 + \beta_m^4]$ with $D(\alpha^2 + \beta^2)^2$.
- p.858; Problem 16.8: Change N/m^3 to N/m^3 .
- p.858; Problem 16.9: Add to end of 4th sentence: “with material properties for T300/5208 graphite-epoxy from Table 2.7 on page 87.” Insert as last sentence of item (2): “Comment on the effect of fiber direction on these plots.” Insert as last sentence of item (4): “Assume $\sigma_a = 420\text{MPa}$ for aluminum and use the failure stress for T300/5208 graphite-epoxy from Table 2.9 on page 95.” Delete the last paragraph entirely.
- p.859; Problem 16.10; Add to end of 4th sentence: “with material properties for T300/5208 graphite-epoxy from Table 2.7 on page 87.” In item (2) replace $Uu_3\text{sqr}tD_{11}D_{22}/(Pa^2)$ with $\bar{u}_3\sqrt{D_{11}D_{22}}/(Pa^2)$. Insert as last sentence of item (2): “Comment on the effect of fiber direction on these plots.” Insert as last sentence of item (4): “Assume $\sigma_a = 420\text{MPa}$ for aluminum and use the failure stress for T300/5208 graphite-epoxy from Table 2.9 on page 95.” Delete the last paragraph entirely.
- p.860; Third paragraph: Replace x_1 with \hat{x}_1 in all 4 places.
- p.860; Fourth paragraph: Replace “Fourier” with “a Fourier”.
- p.861; Eq. (16.100): Replace p_m with $(\frac{\hat{a}}{m\pi})^4 p_m$.
- p.861; Last line: Replace $p_3(x_1, x_2)$ with $p_3(\hat{x}_1, \hat{x}_2)$.
- p.862; Eq. (16.102): Change g_{mp} to g_m^p in equation and in first line of text immediately following.
- p.863; Eq. (16.109): Change $\frac{\sin m\pi x_1}{a}$ with $\sin \frac{m\pi x_1}{a}$.
- p.864; Second paragraph, sentence 2: Change “For” to “Using”.
- p.864; Eq. (16.110): Change $\frac{\sin m\pi x_1}{a}$ with $\sin \frac{m\pi x_1}{a}$.
- p.864; Problem 16.11: Add to end of 4th sentence: “with material properties for T300/5208 graphite-epoxy from Table 2.7 on page 87.” Insert as last sentence of item (2): “Comment on the effect of fiber direction on these plots.” Insert as last sentence of item (4): “Assume $\sigma_a = 420\text{MPa}$ for aluminum and use the failure stress for T300/5208 graphite-epoxy from Table 2.9 on page 95.” Delete the last paragraph entirely.
- p.864; Problem 16.12: In 2nd sentence, replace “Two” with “The two long”, and replace “other” with “short edges”. Add to end of 4th sentence: “with material properties for T300/5208 graphite-epoxy from Table 2.7 on page 87.” Insert as last sentence of item (2): “Comment on the effect of fiber direction on these plots.” Insert as last sentence of item (4): “Assume $\sigma_a = 420\text{MPa}$ for aluminum and use the failure stress for T300/5208 graphite-epoxy from Table 2.9 on page 95.” Delete the last paragraph entirely.

- p.867; Line above eq. (16.121): Change “eqs. (16.34)” to “eqs. (16.115)”.
- p.868; Sentence following eq. (16.125): Change “equations” to “equation”.
- p.870; Third equation: Replace α with \bar{R} .
- p.870; Last pair of equations: Replace α with \bar{R} in 6 places.
- p.871; Problem 16.14: Add to 2nd sentence: “and $\rho = r/R_0$.” In item (2) change α to \bar{R} , change k_Δ to $k_\Delta R_0^2/D$, replace “use” with “using” and replace the last occurrence of k_Δ with “the stiffness and assuming $\nu = 0.3$.” Add a last sentence: “Assume $\nu = 0.3$.”
- p.871; Problem 16.15: Add to 2nd sentence: “and $\rho = r/R_0$.” Add a last sentence: “Assume $\nu = 0.3$.”
- p.872; Problem 16.16: Add to last sentence: “and assume $\nu = 0.3$.”
- p.873; all equations: Replace partial derivative symbol ∂ with ordinary derivative symbol d (56 instances).
- p.875; Problem 16.17: Change all instances of ϕ to Φ (2 instances). In the second sentence in item (2), change k_Φ to k_Φ/D in 2 places. Add as the last sentence: “For all plots assume $\nu = 0.3$.”
- p.875; Fig. 16.40: Change ϕ to Φ .
- p.885; Eqs. (16.152-16.153): Change last term in eq. (16.153) to $h_N(x_1, x_2)$.
- p.885; Sentence before eq. (16.154): Add to sentence, “needed in eq. (16.144)” and add to continuing sentence before eq. (16.155), “defined as”.
- p.889; First equation: Change B to \underline{B} .
- p.895; Problem 16.18: Change $\alpha_1, \alpha_2, \alpha_3$ to q_1, q_2, q_3 in 2 places.
- p.895; Problem 16.21: Insert (1) at the start of the third sentence to read: “(1) Use...” Also, change “(1)” to “(2)” at beginning of the last sentence.
- p.895; Problem 16.22: In second sentence, insert after “D” and within the parentheses: “and $\nu = 0.3$ ”.
- p.896; Problem 16.22: Insert after the first sentence and before (1): “Because of the wide spacing of the stiffeners, they must be treated individually and cannot be smeared into an anisotropic model.” Also, change (2) to read: “(2) For the two...”
- p.896; Problem 16.23: In the fourth sentence change $h = 1.5 \cdot 10^{-03}$ to $h = 1.5 \times 10^{-3}$. Also add to the end of the last sentence: “(in N.m units)”.
- p.901; Sentence including eq. (16.189): Move this sentence to the end of the example (just before **Example 16.12**).
- p.901; Example 16.12: In the last sentence of the first paragraph, replace “could” with “can” and replace “of” with “or”.
- p.906; Last paragraph: Change “stationary” to “minimum”.
- p.908; Third paragraph from bottom: Replace “complex” with “complicated”. Replace “is a Gauss-Legendre” with “if a Gauss-Legendre”.
- p.909; Fig. 16.55: The solid curve for $m=1$ did not print in this figure.
- p.909; Example 16.16: Change the title to: “**Example 16.16 Buckling of an anisotropic plate under shear loading**”.
- p.910; Third equation: In second integral in second line of the equation, change $\hat{\beta}_m$ to $\hat{\beta}_n$.
- p.910; Last 2 equations: In the last two equations on the page, change the variables a and b to \hat{a} and \hat{b} in a total of 3 places each.

p.912; Last paragraph: In first sentence, change “ration.” to “ratios.” Also, in the fourth sentence, insert “for $m = 1$ ” after “example 16.16”.

p.913; Fig. 16.57: Add “m=1” to the labels “2 terms” and “5 terms” in the figure.

p.913; Problem 16.25: Replace the first sentence with: “Consider the same plate buckling problem treated in example 16.15. In item (2) insert x_1 after π in 3 places. Also in item (2) replace “Using this solution...” with “ Using a 2-term solution...”

p.913; Problem 16.26: Add as the last sentence: “Assume $\nu = 0.3$.”

Appendix: Mathematical tools

p.927; eq. (A.36): Change the second row of the rotation matrix from $\ell_2 \ n_2 \ m_2$ to $\ell_2 \ m_2 \ n_2$.