Errata for Actuarial Mathematics

(SECOND EDITION) as of May 30, 1998

Page 68:
In the line below (3.5.1), change "is equivalent to" to "implies".

Page 69:
In the lines below (3.5.6) and (3.5.8), change "is equivalent to" to
"implies".

Page 79:
At the end of the first paragraph of Section 3.8, add "When the
select status can be inferred from the force of mortality, the bracket notation
will be suppressed to reduce the clutter of the symbols."

Page 89:
In Exercise 3.38, in the displayed equation the subscript on the
lefthand side should be "[x]".

Page 115:
In equation (4.3.13), delete the "bar" on A.

Page 129:
In Exercise 4.21 c., the final A symbol should be for a pure
endowment.

Page 129:
In first expression of Exercise 4.22 a., delete the first left
parenthesis in the integrand and enclose it in brackets.

Page 142:
In the fourth "Additional relation" at the bottom of Table 5.2.1,
the exponent in the integrand should be "n-t".

Page 155: In the first two lines of display (5.5.3), the annuities-due should
be paid mthly.

Page 159: In Exercise 5.9, Exercise 5.8 is a better reference than
Exercise 5.7.

Page 162:
In Exercise 5.29, the second superscript should be "(m)".

Page 166:
In Exercise 5.54 delete "-due" and following "annum" insert "payable continuously and".

Page 166:
In Exercise 5.59 the determination should be for a temporary complete annuity-immediate and the answer should be 10.41532.

Page 171:
In the line following the solution to Example 6.2.1, "(6.2.6)" should be "(6.2.7)."

Page 173:
In the fifth line of the Solution, "(5.2.15)" is better reference.

Page 177:
In the display of the d.f. in the Solution for part a.: In the first line, the "less than or equal" should be "less than" and in the second line the "less than" should be "less than or equal". Apply the same changes to the d.f's in parts b. and c. on page 179.

Page 198:
In Exercise 6.14, in the first line insert "either" following "under" and in the second line insert "or (5.4.10)" after "age".

Page 216:
In the first line of Example 7.4.1, "6.4.1" should be "6.3.1".

Page 234:
In the line following (8.3.1), ">" should be "> or =".

Page 235:
In the fourth line below formula (8.3.9), the reference should be to "Exercise 8.7".

Page 243:
To (8.5.9) add the restriction, "K(x) greater or equal to h." Delete the lines following (8.5.9).

Page 244:
Delete parts b) & c) of Theorem 8.5.1 and delete Theorem 8.5.2. Change the line immediately before the corollary to read: "Theorem 8.5.1 a leads to the following corollary:"

Page 245:
Change the proofs of the b) & c) parts of the Corollary to: "b) and c) follow from an application of a)".

Page 253:
In Exercise 8.18, Theorem 8.2 should be Theorem 8.5.2.

Page 261:
In Figure 9.2.2, the vertical dotted line is located at "s" on the $T(x)$ axis.

Page 268:
In the first line of the third paragraph of Section 9.4, there shold be a bar over xy in $T(xy)$.

Page 269:
The subscript on the second "F(t)" on the right-hand side of the first equation below (9.4.7) should be "$T(y)$".

Page 269:
The first "of" in the first line of Example 9.4.1, should be "and".

Page 271:
In the two line equation below (9.4.16), the subscripts on the 4th "q" in the first line and the last "q" in the second line should be "$y+k$".

Page 276:
On the right-hand side of (9.6.4b) the subscript should be "$T^*(y)$".

Page 277:
In the solution for Example 9.6.2 b), $T(y)$'s survival function is valued at (t).

Page 278:
In (9.6.10), the upper 2 is missing from the symbol for the second mixed partial derivative and in the numerator of the right-hand side the subscript on the second "f" should be "$T(y)$".

Page 292:
In display (9.9.4), the "1" over the "x" in the subscript should be over the "y".

Page 298:
In Exercise 9.1.c, the second $T(x)$ should be $T(y)$ and "coefficients" should be singular.

Page 299:
In Exercise 9.8, "distributions" should be "distribution".

Page 299:
In Exercise 9.11.b, add "for n>3".

Page 300:
In Exercise 9.13, parts c. and d. should ask for "complete" expectations.

Page 301:
Exercise 9.30.a. depends on material in Section 9.9.

Page 314:
In line 7 from the bottom of the page, the "exp" is missing its closing bracket following the limits of the integration.

Page 349:
In Example 11.4.1, assume that there are no withdrawals after the commencement of the annuity payments.

Page 358:
In formula (11.6.1), the annuity subscript should start "[x+t]+m/12" instead of "[x+t]".

Page 376:
In the final line of Table 12.3.1, the minus sign before the alpha parameter should be deleted.

Page 394:
In the third line of Exercise 12.11, "lambda*beta" should be "lambda/beta".

Page 432:
In the last line of Exercise 13.11, the "lambda/c" immediately before the integral should be deleted.

Page 434:
In Exercise 13.24 item 5., "deficit" should be "negative surplus".
The following should be added at the end of the exercise: [Hint: U(T-) and |U(T)| are identically distributed in this exercise. To verify this fact, see Gerber and Shiu, North American Actuarial Journal, Vol. 2 (1998), No. 1., formula (3.7).]

Page 463:
Each sentence in Exercises 4.16 and 4.17 request an answer.

Page 464:
In Exercise 14.22 b., "12.16" should be "12.20".

Page 487:
The "w" in the first sentence below (15.6.5) and the two "w's" in
(15.6.6) should be "omegas".

Page 491:
In the solution of Example 15.7.1, the derivative is with respect
to "delta". Remember that the premium was set at time 0 and is not a function
of the valuation interest rate.

Page 508:
n (16.4.1), the first right (closing) parenthesis that follows
"e-sub-(h-1)" should follow "c-sub-(h-1)".

Page 722:
The answers for Exercise 3.36 should be: a) 0.000877 and
b) 0.999189.

Page 722:
The answers for Exercise 3.37 should be 0.4076 and 0.1786.

Page 723:
The answers indicated for Exercises 4.11, 4.13, 4.14 and 4.15
should be relabeled for Exercises 4.14, 4.16, 4.17 and 4.19 respectively.
The following answers should be inserted:
4.11 a) $0.2*z^{(-0.8)}$, $0<z<1$ c) 1/6, 25/396

4.12 0.0 $z<v^n$
$1.0-FsubT(logz/logv)$ $v^n\{<or=\}z<1$
1.0 $1\{<or=\}z$

4.13 a) 0.0 $z<e^{(-1)}$
$z^{0.2}$ $e^{(-1)}\{<or=\}z<1$
1.0 $1\{<or=\}z$

Page 726:
The answers for Exercise 6.1 should be: -0.43202 and 0.39760.

Page 728:
The "infinity" in the second line should be "as".

Page 732:
For both parts a. and c. of Exercise 9.11, the two "n-3" exponents
should be "n-1".

Page 736:
In the answers for parts a. and b. of Exercise 11.8,
"480" should be "640",
"240" should be "360", and
"16,800" should be "22,400".

Page 740:
The answer to Exercise 13.24 should be "10/3".

Page 741:
For Exercises 4.16 and 4.17 place "alpha =" before the first
expressions. Also in each exercise, the final inequality is the answer to the
"Develop..." request.