

海外优秀数学类教材系列丛书

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# Advanced Engineering Mathematics

(Fifth Edition)

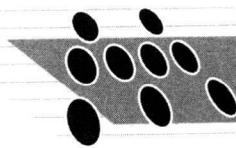
## 高等工程数学 (第5版)

(下册)

□ Peter V. O'Neil



高等教育出版社  
Higher Education Press



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# 高等工程数学 (第5版)(下册)

Peter V. O'Neil

*University of Alabama at Birmingham*



高等 教育 出 版 社  
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Peter V. O' Neil

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# 出版者的话

在我国已经加入 WTO、经济全球化的今天，为适应当前我国高校各类创新人才培养的需要，大力推进教育部倡导的双语教学，配合教育部实施的“高等学校教学质量与教学改革工程”和“精品课程”建设的需要，高等教育出版社有计划、大规模地开展了海外优秀数学类系列教材的引进工作。

高等教育出版社和 Pearson Education, John Wiley & Sons, McGraw-Hill, Thomson Learning 等国外出版公司进行了广泛接触，经国外出版公司的推荐并在国内专家的协助下，~~提~~引进版权总数 100 余种。收到样书后，我们聘请了国内高校一线教师、专家、学者参与~~这些原版教材的译介工作~~，并参考国内相关专业的课程设置和教学实际情况，从中遴选出了这套优秀教材组~~织出版~~。

这批教材普遍具有以下特点：(1)基本上是近 3 年出版的，在国际上~~被广泛使用~~，在同类教材中具有相当的权威性；(2)高版次，历经多年教学实践检验，内容翔实准确、反映时代要求；(3)各种教学资源配套整齐，为师生提供了极大的便利；(4)插图精美、丰富，图文并茂，与正文相辅相成；(5)语言简练、流畅、可读性强，比较适合非英语国家的学生阅读。

本系列丛书中，有 Finney、Weir 等编的《托马斯微积分》(第 10 版，Pearson)，其特色可用“呈传统特色、富革新精神”概括，本书自 20 世纪 50 年代第 1 版以来，~~平均每隔五年就有一个新版面世~~，长在 50 余年始终盛行于西方教坛，作者既有相当高的学术水平，又热爱~~数学~~，~~长年~~工作在教学第一线，其中，年近 90 的 G.B.Thomas 教授长年在 MIT 工作，具有丰富的教学经验，~~Finney~~教授也在 MIT 工作达 10 年；Weir 是美国数学建模竞赛委员会主任。Stewart 编的立体化教材《微积分》(第 5 版，Thomson Learning)配备了丰富的教学资源，是国际上最畅销的微积分原版教材，2003 年全球销量约 40 余万册，在美国，占据了约 50%~60% 的微积分教材市场，其用户包括耶鲁等名牌院校及众多一般院校 600 余所。本系列丛书还包括 Anton 编的经典教材《线性代数及其应用》(第 8 版，Wiley)；Jay L. Devore 编的优秀教材《概率论与数理统计》(第 5 版，Thomson Learning)等。在努力降低引进教材售价方面，高等教育出版社做了大量的细致的工作，这套引进的教材体现了一定的权威性、系统性、先进性和经济性等特点。

通过影印、翻译、编译这批优秀教材，我们一方面要不断地分析、学习、消化吸收国外优秀教材的长处，吸取国外出版公司的制作经验，提升我们自编教材的立体化配套标准，使我国高校教材建设水平上一个新的台阶；与此同时，我们还将尝试组织海外作者和国内作者合编外文版基础课数学教材，并约请国内专家改编部分国外优秀教材，以适应我国实际教学环境。

这套教材出版后，我们将结合各高校的双语教学计划，开展大规模的宣传、培训工作，及时地将本套丛书推荐给高校使用。在使用过程中，我们衷心希望广大高校教师和同学提出宝贵的意见和建议，如有好的教材值得引进，请与高等教育出版社高等理科分社联系。

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# *Contents*

## **PART 1 Ordinary Differential Equations 1**

<b>Chapter 1</b>	<b>First-Order Differential Equations 3</b>
1.1	Preliminary Concepts 3
1.2	Separable Equations 11
1.3	Linear Differential Equations 23
1.4	Exact Differential Equations 28
1.5	Integrating Factors 34
1.6	Homogeneous, Bernoulli, and Riccati Equations 40
1.7	Applications to Mechanics, Electrical Circuits, and Orthogonal Trajectories 48
1.8	Existence and Uniqueness for Solutions of Initial Value Problems 61
<b>Chapter 2</b>	<b>Second-Order Differential Equations 65</b>
2.1	Preliminary Concepts 65
2.2	Theory of Solutions $y'' + p(x)y' + q(x)y = f(x)$ 66
2.3	Reduction of Order 74
2.4	The Constant Coefficient Homogeneous Linear Equation 77
2.5	Euler's Equation 82
2.6	The Nonhomogeneous Equation $y'' + p(x)y' + q(x)y = f(x)$ 86
2.7	Application of Second-Order Differential Equations to a Mechanical System 98
<b>Chapter 3</b>	<b>The Laplace Transform 113</b>
3.1	Definition and Basic Properties 113
3.2	Solution of Initial Value Problems Using the Laplace Transform 122
3.3	Shifting Theorems and the Heaviside Function 127
3.4	Convolution 142
3.5	Unit Impulses and the Dirac Delta Function 147
3.6	Laplace Transform Solution of Systems 152
3.7	Differential Equations with Polynomial Coefficients 157
<b>Chapter 4</b>	<b>Series Solutions 163</b>
4.1	Power Series Solutions of Initial Value Problems 164
4.2	Power Series Solutions Using Recurrence Relations 169

- 4.3 Singular Points and the Method of Frobenius 174
- 4.4 Second Solutions and Logarithm Factors 181
- 4.5 Appendix on Power Series 189

## PART 2 Vectors and Linear Algebra 199

Chapter 5	Vectors and Vector Spaces 201
5.1	The Algebra and Geometry of Vectors 201
5.2	The Dot Product 209
5.3	The Cross Product 216
5.4	The Vector Space $R^n$ 222
5.5	Linear Independence, Spanning Sets, and Dimension in $R^n$ 228
5.6	Abstract Vector Spaces 235
Chapter 6	Matrices and Systems of Linear Equations 241
6.1	Matrices 242
6.2	Elementary Row Operations and Elementary Matrices 256
6.3	The Row Echelon Form of a Matrix 263
6.4	The Row and Column Spaces of a Matrix and Rank of a Matrix 271
6.5	Solution of Homogeneous Systems of Linear Equations 278
6.6	The Solution Space of $AX = \mathbf{0}$ 287
6.7	Nonhomogeneous Systems of Linear Equations 290
6.8	Summary for Linear Systems 301
6.9	Matrix Inverses 304
Chapter 7	Determinants 311
7.1	Permutations 311
7.2	Definition of the Determinant 313
7.3	Properties of Determinants 315
7.4	Evaluation of Determinants by Elementary Row and Column Operations 319
7.5	Cofactor Expansions 324
7.6	Determinants of Triangular Matrices 328
7.7	A Determinant Formula for a Matrix Inverse 329
7.8	Cramer's Rule 332
7.9	The Matrix Tree Theorem 334
Chapter 8	Eigenvalues, Diagonalization, and Special Matrices 337
8.1	Eigenvalues and Eigenvectors 337
8.2	Diagonalization of Matrices 345
8.3	Orthogonal and Symmetric Matrices 354
8.4	Quadratic Forms 363
8.5	Unitary, Hermitian, and Skew-Hermitian Matrices 368

## PART 3 Systems of Differential Equations and Qualitative Methods 375

Chapter 9	Systems of Linear Differential Equations	377
9.1	Theory of Systems of Linear First-Order Differential Equations	377
9.2	Solution of $\mathbf{X}' = \mathbf{A}\mathbf{X}$ When $\mathbf{A}$ Is Constant	389
9.3	Solution of $\mathbf{X}' = \mathbf{A}\mathbf{X} + \mathbf{G}$	410
Chapter 10	Qualitative Methods and Systems of Nonlinear Differential Equations	425
10.1	Nonlinear Systems and Existence of Solutions	425
10.2	The Phase Plane, Phase Portraits, and Direction Fields	428
10.3	Phase Portraits of Linear Systems	435
10.4	Critical Points and Stability	446
10.5	Almost Linear Systems	453
10.6	Predator/Prey Population Models	474
10.7	Competing Species Models	480
10.8	Lyapunov's Stability Criteria	489
10.9	Limit Cycles and Periodic Solutions	498

## PART 4 Vector Analysis 509

Chapter 11	Vector Differential Calculus	511
11.1	Vector Functions of One Variable	511
11.2	Velocity, Acceleration, Curvature, and Torsion	517
11.3	Vector Fields and Streamlines	528
11.4	The Gradient Field and Directional Derivatives	535
11.5	Divergence and Curl	547
Chapter 12	Vector Integral Calculus	553
12.1	Line Integrals	553
12.2	Green's Theorem	565
12.3	Independence of Path and Potential Theory in the Plane	572
12.4	Surfaces in 3-Space and Surface Integrals	583
12.5	Applications of Surface Integrals	596
12.6	Preparation for the Integral Theorems of Gauss and Stokes	602
12.7	The Divergence Theorem of Gauss	604
12.8	The Integral Theorem of Stokes	613

**PART 5 Fourier Analysis, Orthogonal Expansions, and Wavelets 623**

Chapter 13	Fourier Series 625
13.1	Why Fourier Series? 625
13.2	The Fourier Series of a Function 628
13.3	Convergence of Fourier Series 635
13.4	Fourier Cosine and Sine Series 651
13.5	Integration and Differentiation of Fourier Series 657
13.6	The Phase Angle Form of a Fourier Series 667
13.7	Complex Fourier Series and the Frequency Spectrum 673
Chapter 14	The Fourier Integral and Fourier Transforms 681
14.1	The Fourier Integral 681
14.2	Fourier Cosine and Sine Integrals 685
14.3	The Complex Fourier Integral and the Fourier Transform 687
14.4	Additional Properties and Applications of the Fourier Transform 698
14.5	The Fourier Cosine and Sine Transforms 717
14.6	The Finite Fourier Cosine and Sine Transforms 719
14.7	The Discrete Fourier Transform 726
14.8	Sampled Fourier Series 733
14.9	The Fast Fourier Transform 745
Chapter 15	Special Functions, Orthogonal Expansions, and Wavelets 765
15.1	Legendre Polynomials 765
15.2	Bessel Functions 783
15.3	Sturm-Liouville Theory and Eigenfunction Expansions 815
15.4	Orthogonal Polynomials 836
15.5	Wavelets 841

**PART 6 Partial Differential Equations 855**

Chapter 16	The Wave Equation 857
16.1	The Wave Equation and Initial and Boundary Conditions 857
16.2	Fourier Series Solutions of the Wave Equation 862
16.3	Wave Motion Along Infinite and Semi-infinite Strings 881
16.4	Characteristics and d'Alembert's Solution 895
16.5	Normal Modes of Vibration of a Circular Elastic Membrane 904
16.6	Vibrations of a Circular Elastic Membrane, Revisited 907
16.7	Vibrations of a Rectangular Membrane 910

Chapter 17	The Heat Equation	915
17.1	The Heat Equation and Initial and Boundary Conditions	915
17.2	Fourier Series Solutions of the Heat Equation	918
17.3	Heat Conduction in Infinite Media	940
17.4	Heat Conduction in an Infinite Cylinder	949
17.5	Heat Conduction in a Rectangular Plate	953
Chapter 18	The Potential Equation	955
18.1	Harmonic Functions and the Dirichlet Problem	955
18.2	Dirichlet Problem for a Rectangle	957
18.3	Dirichlet Problem for a Disk	959
18.4	Poisson's Integral Formula for the Disk	962
18.5	Dirichlet Problems in Unbounded Regions	964
18.6	A Dirichlet Problem for a Cube	972
18.7	The Steady-State Heat Equation for a Solid Sphere	974
18.8	The Neumann Problem	978
Chapter 19	Canonical Forms, Existence and Uniqueness of Solutions, and Well-Posed Problems	987
19.1	Canonical Forms	987
19.2	Existence and Uniqueness of Solutions	996
19.3	Well-Posed Problems	998

## PART 7 Complex Analysis 1001

Chapter 20	Geometry and Arithmetic of Complex Numbers	1003
20.1	Complex Numbers	1003
20.2	Loci and Sets of Points in the Complex Plane	1012
Chapter 21	Complex Functions	1027
21.1	Limits, Continuity, and Derivatives	1027
21.2	Power Series	1040
21.3	The Exponential and Trigonometric Functions	1047
21.4	The Complex Logarithm	1056
21.5	Powers	1059
Chapter 22	Complex Integration	1065
22.1	Curves in the Plane	1065
22.2	The Integral of a Complex Function	1070
22.3	Cauchy's Theorem	1081
22.4	Consequences of Cauchy's Theorem	1088
Chapter 23	Series Representations of Functions	1101
23.1	Power Series Representations	1101
23.2	The Laurent Expansion	1113

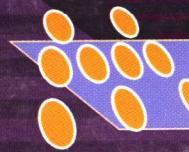
Chapter 24	Singularities and the Residue Theorem	1121
24.1	Singularities	1121
24.2	The Residue Theorem	1128
24.3	Some Applications of the Residue Theorem	1136
Chapter 25	Conformal Mappings	1163
25.1	Functions as Mappings	1163
25.2	Conformal Mappings	1171
25.3	Construction of Conformal Mappings Between Domains	1182
25.4	Harmonic Functions and the Dirichlet Problem	1193
25.5	Complex Function Models of Plane Fluid Flow	1200

## PART 8 Historical Notes 1211

Chapter 26	Development of Areas of Mathematics	1213
26.1	Ordinary Differential Equations	1213
26.2	Matrices and Determinants	1217
26.3	Vector Analysis	1218
26.4	Fourier Analysis	1220
26.5	Partial Differential Equations	1223
26.6	Complex Function Theory	1223
Chapter 27	Biographical Sketches	1225
27.1	Galileo Galilei (1564–1642)	1225
27.2	Isaac Newton (1642–1727)	1227
27.3	Gottfried Wilhelm Leibniz (1646–1716)	1228
27.4	The Bernoulli Family	1229
27.5	Leonhard Euler (1707–1783)	1230
27.6	Carl Friedrich Gauss (1777–1855)	1230
27.7	Joseph-Louis Lagrange (1736–1813)	1231
27.8	Pierre-Simon de Laplace (1749–1827)	1232
27.9	Augustin-Louis Cauchy (1789–1857)	1233
27.10	Joseph Fourier (1768–1830)	1234
27.11	Henri Poincaré (1854–1912)	1235

*Answers and Solutions to Selected Odd-Numbered Problems* A1

*Index* I1



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