Department of Mathematics Fall 2023 Book List						
Course #	**Course**	**Faculty**	**Text Title**	**Author**	**Publisher**	**ISBN**
MATH:0100 0221, 0331	Basic Algebra I	Farthing	Beginning Algebra, 13th Edition (with MML)	Lial, Hornsby, McGinnis	Pearson	**ISBN: 9780135962190** Required course materials will be delivered to you in your ICON course through the University of Iowa's Inclusive Access program by the first day of classes. Your IOWA student account (UBILL) will then be charged by the HawkShop for the use of the content for the course, unless you opt out.
MATH:1005 0073, 0083, 0084, 0091, 0101, 0102, 0111, 0112, 0121, 0122, 0123, 0124, 0231, 0232, 0233, 0331, 0332, 0431, 0433, 0632	College Algebra	Farthing	**A) Access Code**: ALEKS 18-Week Access **B)** College Algebra Workbook (course pack)		**A)** McGraw-Hill	**A) ISBN: 9781264245109** Required course materials will be delivered to you in your ICON course through the University of Iowa's Inclusive Access program by the first day of classes. Your IOWA student account (UBILL) will then be charged by the HawkShop for the use of the content for the course, unless you opt out. **B)** Available from instructor
MATH:1010 0231, 0331	Trigonometry	Bezuglyi	Trigonometry, 4th Edition	Young	Wiley	**ISBN: 978EEGRP38295** Required course materials will be delivered to you in your ICON course through the University of Iowa's Inclusive Access program by the first day of classes. Your IOWA student account (UBILL) will then be charged by the HawkShop for the use of the content for the course, unless you opt out.
MATH:1020 0081, 0101, 0331, 0631	Elementary Functions	Sokratova	**A)** Elementary Functions Workbook **B)** Access Code: ALEKS 18-Week Access		**A)** UI Printing **B)** McGraw-Hill	**A)** from UI Printing, available at UI Bookstore **B) ISBN: 9781264245109** Required course materials will be delivered to you in your ICON course through the University of Iowa's Inclusive Access program by the first day of classes. Your IOWA student account (UBILL) will then be charged by the HawkShop for the use of the content for the course, unless you opt out.
MATH:1210 0EXW	Diverse Perspectives in Mathematical Sci	Murray	**Required:** **A)** Hidden Figures: The American Dream and the Untold Story of the Black Women Mathematicians Who Helped Win the Space Race **B)** Mind and Matter: A Life in Math and Football	**A)** Margaret L. Shetterly **B)** Urschel & Thomas	**A)** William Morrow **B)** Penguin Press	**A) ISBN: 9780062363602 B) ISBN: 9780735224865**
MATH:1350 0AAA, 0BBB	Quantitative Reasoning for Business	Bezuglyi	**Required:** **A)** Top Hat Account License (for student clicker) **B)** MyLab Math with Pearson eText 18 Week for Mathematics with Applications in the Management, Natural & Social Sciences, 13th Edition	**B)** Lial, Hungerford, Holcomb, & Mullins	**B)** Pearson	**A)** Clicker App **B) ISBN: 9780137891597** Required course materials will be delivered to you in your ICON course through the University of Iowa's Inclusive Access program by the first day of classes. Your IOWA student account (UBILL) will then be charged by the HawkShop for the use of the content for the course, unless you opt out.
MATH:1440 0AAA	Mathematics for the Biological Sciences	Mitchell	**Required:** **A)** Top Hat Account License (for student Clicker) **B)** MyLab Math with PreCalculus, 7th Edition	**B)** Lial, Hornsby, Schneider, Daniels	**B)** Pearson	**A)** Clicker App **B)** **ISBN: 9780135925782** Required course materials will be delivered to you in your ICON course through the University of Iowa's Inclusive Access program by the first day of classes. Your IOWA student account (UBILL) will then be charged by the HawkShop for the use of the content for the course, unless you opt out.
MATH:1460 000A, 000B	Calculus for the Biological Sciences	Han	MyLab Math Canvas with Pearson eText Calculus for the Life Sciences, 2nd edition	Greenwell, Ritchey, Lial	Pearson	**ISBN: 9780321963857** Required course materials will be delivered to you in your ICON course through the University of Iowa's Inclusive Access program by the first day of classes. Your IOWA student account (UBILL) will then be charged by the HawkShop for the use of the content for the course, unless you opt out.

MATH:1550 000A, 000B	Engineer Math I: Single Variable Calculus	Sokratova	**Required:** **A)** Top Hat Account License (for student Clicker) **B)** Thomas' Calculus Early Transcendentals, 15th Edition (with MML)	**B)** Hass, Heil, Weir	**B)** Pearson	**A)** Clicker App Code **B) ISBN: 9780137559794** Required course materials will be delivered to you in your ICON course through the University of Iowa's Inclusive Access program by the first day of classes. Your IOWA student account (UBILL) will then be charged by the HawkShop for the use of the content for the course, unless you opt out.
MATH:1560 0AAA	Engineer Math II: Multivariable Calculus	Farthing	Advanced Calculus using Mathematica: .nb Edition by Keith Stroyan, Wolfram Research. Available from the Wolfram Store for $49.99 ****NOTE: The week before classes, registered students will receive an email explaining how to obtain Student Mathematica FREE through the University site license.** **After they have Student Mathematica, they will receive instructions in class on how to buy and install the eBook at https://store.wolfram.com/view/book/advancedcalc.str** **The eBook is also available free in the computer labs, but the free version cannot be copied on student-owned machines.** **More information can be found at http://homepage.math.uiowa.edu/~stroyan/AdvCalcWebsite/AdvCalcHomeWeb.html**	Stroyan	Wolfram Research Inc	**ISBN: 097877638** **NOTE:** The week before classes, registered students will receive an email explaining how to obtain Student Mathematica FREE through the University site license. • After they have Student Mathematica, they will receive instructions in class on how to buy and install the eBook at https://store.wolfram.com/view/book/advancedcalc.str • More information can be found at http://homepage.math.uiowa.edu/~stroyan/AdvCalcWebsite/AdvCalcHomeWeb.html
MATH:1850 0CCC,0DDD, 0FFF, 0MMM	Calculus I	Iovanov, Fang	Single Variable Calculus, Early Transcendentals, 9th Edition	Stewart	Cengage	**ISBN: 9780357022269** **NOTE: The Inclusive Access program** will be used to provide required course materials via your ICON course site. Specific opt out information will be provided in the course syllabus and in the opt out tool.
MATH:1860 0AAA, 0BBB, 0FFF	Calculus II	Ayati, Kawamuro	Single Variable Calculus, Early Transcendentals, 9th Edition	Stewart	Cengage	**ISBN: 9780357022269** **NOTE: The Inclusive Access program** will be used to provide required course materials via your ICON course site. Specific opt out information will be provided in the course syllabus and in the opt out tool.
MATH:2550 0101, 0102, 0121	Engineer Math III: Matrix Algebra	Durumeric, Curto	Linear Algebra & Its Applications, 6th Edition with MyLab Math Access Card	Lay, Lay, & McDonald	Pearson	**ISBN: 9780135851203** Required course materials will be delivered to you in your ICON course through the University of Iowa's Inclusive Access program by the first day of classes. Your IOWA student account (UBILL) will then be charged by the HawkShop for the use of the content for the course, unless you opt out.
MATH:2560 0081, 0091, 0093, 0102, 0103, 0121, 0131, 0132, 0331	Engineer Math IV: Differential Equations	Zhang, Darcy, Baker, Camillo	Elementary Differential Equations & Boundary Value Problems, 12th Edition	Boyce & DiPrima	Wiley	**ISBN: 978EEGRP44029** Required course materials will be delivered to you in your ICON course through the University of Iowa's Inclusive Access program by the first day of classes. Your IOWA student account (UBILL) will then be charged by the HawkShop for the use of the content for the course, unless you opt out.
MATH:2700 0101, 0111, 0112	Introduction to Linear Algebra	Farajzadeh,	Linear Algebra & Its Applications, 6th Edition with MyLab Math Access Card	Lay, Lay, McDonald	Pearson	**ISBN: 9780135851203** Required course materials will be delivered to you in your ICON course through the University of Iowa's Inclusive Access program by the first day of classes. Your IOWA student account (UBILL) will then be charged by the HawkShop for the use of the content for the course, unless you opt out.
MATH:2850 0091, 0101	Calculus III	Ye	**Required:** eText: Vector Calculus, 5th Edition	Colley	Pearson	**ISBN: 9780136799887**
MATH:3550	Engineer Math V:		**Required:** **A)** Multivariable Calculus Applications **B)** Calculus 3	**A)** Lax & Terrell	**A)** Springer	**A) ISBN: 9783319740737** (eBook) FREE DOWNLOAD from University of Iowa Libraries with UI credentials: link https://login.proxy.lib.uiowa.edu

0102, 0121, 0231	Vector Calculus	Stewart, Breen		**B)** Herman & Strang	**B)** Openstax.org	/login?&url=https://doi.org/10.1007/978-3-319-74073-7 Go to full text available (Need UI Credentials) **B)** https://openstax.org/details/books/calculus-volume-3
MATH:3600 0001	Intro to Ordinary Differential Equations	Camillo	Elementary Differential Equations & Boundary Value Problems, 12th Edition	Boyce & DiPrima	Wiley	**ISBN: 978EEGRP44029** Required course materials will be delivered to you in your ICON course through the University of Iowa's Inclusive Access program by the first day of classes. Your IOWA student account (UBILL) will then be charged by the HawkShop for the use of the content for the course, unless you opt out.
MATH:3720 0BBB	Introduction to Abstract Algebra I	Cooper	**Required:** Abstract Algebra: Examples and Applications	Hill, Thron		Available for free at http://abstractalgebra.altervista.org/index.html
MATH:3750 0001, 0002	Classical Analysis	Ye	See MATH:2850:0091			
MATH:3770 0CCC	Fundamental Properties Spaces/Funct I	Farthing	**Required: Buy EITHER A or B [only ONE]** **A)** eText: Analysis with Intro to Proof, 5th Edition **B)** Loose leaf: Analysis with Intro to Proof, 5th Edition	Lay	Pearson	**A) ISBN: 9780321998149** **B) ISBN: 9780321892539**
MATH:3800 0003, 0004	Introduction to Numerical Methods	Jay, Ayati	**for :0003 Recommended:** MATLAB Guide, 3rd Edition **for :0004 Required:** Fundamentals of Numerical Computation, Julia Edition	D. Higham, N. Higham Driscoll, Braun	SIAM SIAM	**ISBN: 9781611974652** **ISBN: 9781611977004**
MATH:3996 0IND	Individual Study & Honors in Mathematics	Staff	No Textbook Required			
MATH:3997 0IND	Readings in Mathematics	Staff	No Textbook Required			
MATH:4050 0001	Introduction to Disrete Mathematics	Sokratova	**Optional:** Introductory Combinatorics (edition: 5th)	Brualdi	Pearson	**ISBN: 9780134689616**
MATH:4250 0001	Introduction to Financial Mathematics	Jorgensen	**Required:** Course in Derivative Securities	Back	Springer	**ISBN: 9783540253730**
MATH:4840 0001	Mathematics of Machine Learning	Stewart	Foundations of Data Science	Blum, Kannan	Cambridge Univ Press	**ISBN: 9781108755528** Available electronically through the University of Iowa library at this link: https://doi-org.proxy.lib.uiowa.edu/10.1017/9781108755528
MATH:5000 0001	Abstract Algebra I	Chifan	Abstract Algebra, 3rd Edition	Dummit, Foote	Wiley	**ISBN: 9780471433347**
MATH:5200 0001	Introduction to Analysis I	Curto	Real Analysis, 5th Edition	Royden	Pearson	**ISBN: 9780137906529**
MATH:5400 0001	Fundamental Groups and Covering Spaces	Cooper	No Textbook Required			
MATH:5600 0001	Nonlinear Dynamics with Numerical Methds	Curtu	**Optional:** **A)** Ordinary Differential Equations and Dynamical Systems **B)** Differential Equations, Dynamical Systems & An Introduction to Chaos, 2nd Edition	**A)** Teschl **B)** Hirsch, Smale, Devaney	**A)** AMS **B)** Elsevier	**A)** Available for free at https://www.mat.univie.ac.at/~gerald/ftp/book-ode/ode.pdf **B)** Available for free at https://thalis.math.upatras.gr/~bountis/files/def-eq.pdf
MATH:5750 0001	Mathematical Biology I	Aminzare	**Optional:** **A)** Mathematical Physiology I: Cellular Physiology **B)** Mathematical Foundations of Neuroscience **C)** Dynamical Systems in Neuroscience: The Geometry of Excitability and Bursting	**A)** Keener & Sneyd **B)** Ermentrout & Terman **C)** Izhikevich	**A/B)** Springer **C)** MIT Press	**A)** Available for free through SpringerLink **B)** Available for free through SpringerLink **C)** Available for free through ProQuest Ebook Central
MATH:5800 0001	Numerical Methods I	Jay	**Recommended:** **A)** Classical Numerical Analysis: A Comprehensive Course **Required:** **B)** Introduction to Numerical Methods. Class Notes, Fall 2023	**A)** Salgado, Wise **B)** Jay	**A)** Cambridge University Press **B)** Course Pack	**A) 9781108837705** **B)** Available at UI Bookstore through UI Printing Services
MATH:5900 0001	First-Year Graduate Seminar	Kinser	No Textbook Required			
MATH:6000 0001	Categories and Modules	Bleher	No Textbook Required			
MATH:6200 0001	Analysis I	Jorgensen	**Required:** Real & Complex Analysis (edition: 3rd)	Rudin	McGraw-Hill	**ISBN: 9780070542341**

MATH:6400 0001	Algebraic Topology	Farajzadeh	No Textbook Required			
MATH:6600 0001	Ordinary Differential Equations I	Curtu	**Optional:** A) Elements of Applied Bifurcation Theory B) Applications of Centre Manifold Theory	A) Kuznetsov B) Carr	A) Springer B) Springer	A) Free access for UI students: https://link.springer.com/book/10.1007/978-1-4757-3978-7 B) Free access for UI students: https://link.springer.com/book/10.1007/978-1-4612-5929-9
MATH:7030 0001	Topics in Algebra	Bleher	No Textbook Required			
MATH:7070 0001	Seminar: Algebra	Bleher, Camillo, Kinser	No Textbook Required			
MATH:7090 0001	Seminar: Representation Theory	Ye	No Textbook Required			
MATH:7200 0001	Functional Analysis I	Chifan	No Textbook Required			
MATH:7290 0001	Seminar: Operator Theory	Baker, Bezuglyi, Chifan, Curto, Jorgensen	No Textbook Required			
MATH:7400 0001	Current Geometry and Topology I	Deyeso	No Textbook Required			
MATH:7470 0001	Seminar: Topology	Cooper, Darcy, Farajzadeh, Kawamuro	No Textbook Required			
MATH:7570 0001	Seminar: Differential Geometry	Durumeric, Fang, Farajzadeh	No Textbook Required			
MATH:7580 0001	Seminar: Mathematical Physics	Jorgensen	No Textbook Required			
MATH:7670 0001	Seminar: Mathematical Biology	Aminzare, Ayati, Curtu, Darcy, Li, Mitchell, L. Wang	No Textbook Required			
MATH:7770 0001	Seminar: Partial Differential Equations	Li, Mitchell, L. Wang, Zhang	No Textbook Required			
MATH:7870 0001	Seminar: Numerical Analysis	Ayati, Han, Jay, Stewart, Zhu	No Textbook Required			
MATH:7990 0IND	Reading Research	Staff	No Textbook Required			

New course for Fall 2023

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Rev. May 16, 2023