**DIVINE WORD COLLEGE OF LAOAG**

**Laoag City**

**LEARNING RESOURCE CENTER**

**BACHELOR OF SECONDARY EDUCATION**

**Major in Mathematics**

**CHED Memo # 75, series of 2017**

**Effective 2018-2019**

**Abstract Algebra (Math 18)**

Rosenberg, Steven J. (2022). *An invitation to abstract algebra*. Boca Raton: CRC Press. (512.02 R813 2022) 25269

Osoinach, John K.. (2021). *Discovering abstract algebra. providence, Rhode Island* : MAA Press, an imprint of American Mathematical Society. (512.02 O83 2021) 25260

Fraleigh, John B., Neal Brand. (2021). *A first course in abstract algebra*. 8th ed. New Jersey: Pearson Education, Inc. (512.02 F8123 2021) 25245

Sibley, Thomas Q.. (2020). *Thinking algebraically: An introduction to abstract algebra*. Providence : American Mathematical Society. (512.02 S564 2021) 25276

Beachy, John A., William D. Blair. (2019). *Abstract algebra*. 4th ed. Illinois: Waveland Press, Inc. (512.02 B365 2019) 25295

**Advanced Statistics (Math 14)**

Demidenko, Eugene. (2020). *Advanced statistics with applications in R.* New Jersey: John Wiley & Sons Inc. (519.5 D379 2020) 25319

Brown, Jonathon D.. (2018). *Advanced Statistics for the behavioral sciences: A Computational approach with R*. Switzerland: Springer. (519.5 B877 2018) 25281

Hirotsu, Chihiro. (2017).*Advanced analysis of variance*. New Jersey: John Wiley & Sons, Inc. (519.9 H671 2017) 25285

Bolboaca, Sorana D., ed. (2020). *Applied and computational statistics*. Switzerland: MDPI. (519.5 A648 2020) 25264

Speegle, Darrin, Bryan Clair. (2022) *Probability, statistics, and data: A fresh approach using R.* Boca Raton: CRC Press. (519.5 S742 2022) 25271

**Assessment and Evaluation in Mathematics (Math 20)**

Abramovich, Sergei, Michael L. Connell. (2021). *Developing deep knowledge in middle school mathematics: A textbook for teaching in the age of technology*. Switzerland: Springer. (510.71 A159 2021) 25279

Kelton, Suzanne. (2021). *A beginner’s guide to teaching mathematics in the undergraduate classroom*. New York: Routledge. (510.7 K29 2021) 25232

Niss, Mogens and Werner Blum. (2020). *The learning and teaching of mathematical modelling*. London: Routledge. (511.8 N726 2020) 25243

Andreescu, Titu, Kathy Cordeiro, Alina Andreescu. (2020). *Awesome math teaching mathematics with problem-based learning*. New Jersey: John Wiley & Sons, Inc. (510.71 A558 2020)

Thompson, Denisse R., Megan Burton, Annalisa Cusi, David Wright, eds. (2018). *Classroom assessment in mathematics perspectives from around the globe*. Switzerland: Springer. (510.7 C591 2018) 25233

**Calculus with Analytic Geometry (Math 6)**

Bucur, Alina, David Zureick-Brown, eds. (2019). *Contemporary mathematics: Analytic methods in arithmetic geometry.* U.S.A.: the American Mathematical Society. (512.7 C761 2019) 25238

Ashlock, Daniel. (2019). *Fast start advanced calculus*. U.S.A.: Morgan & Claypool Publishers. (517 A826 2019) 25263

Nitecki, Zbigniew. (2018). *Calculus in 3D geometry, vectors, and multivariate calculus*. Providence, Rhode Island: MAA Press. (515 N728 2018) 25275

Lipsman, Ronald L., Jonathan M. Rosenberg. (2017). *Multivariable calculus with MATLAB® with applications to geometry and physics*. Switzerland: Springer. (519.4 L767 2017) 25240

**Calculus II (Math 9)**

Polanco, Carlos. (2021). *Exterior calculus: Theory and cases*. Singapore: Bentham Science Publishers Pte. Ltd. (517 P762 2021) 25261

Pawlowski, Christina. (2021). *Barron’s painless calculus*. New York: Kaplan, Inc. (517 P337 2021) 25234

Hass, Joel. (2020). *Thomas’ calculus*. 14th ed. United Kingdom: Pearson Education. (512.7 H353 2020) 25313 / 25314 (pt1/pt2)

Mingarelli, Angelo B. (2019). *The ABC’s of Calculus* [s.n.: [s.l.] (517 M663 2019) 25318

Lawrence S. Leff, Cristina M. Pawlowski. (2021). *Baron’s math 360: A complete study guide to pre-calculus, your go-to guide for everything pre-calculus.* New York: Kaplan, Inc. (512.9 L488 2021) 25299

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Stewart, James, Daniel Clegg, Saleem Watson. (2021*). Multivariable calculus. 9th ed. metric version*. Australia: Cengage. (512.7 S849 2021) 25286

Hass, Joel. (2020). *Thomas’ calculus.*. 14th ed. United Kingdom: Pearson Education, Inc. (512.7 H353 2020) 25313 25314 (pt 1-2)

Hass Joel, et al. (2020). *University calculus: Early transcendentals*. 4th ed. United Kingdom: Pearson. (512.7 U58 2020) 25311 24312 (pt 1-2)

Franklin, Jerrold. (2020). *Understanding vector calculus: Practical development and solved problems*. New York: Dover Publications. (515.63 F831 2020) 25267

Hass, Joel, Christopher Heil and Maurice D. Weir. (2019). *Thomas’ calculus: Early transcendentals*. 14th ed. United Kingdom: Pearson Education Limited. (512.7 H353t 2019) 25309 25310 (pt 1-2)

Mendelson, Elliott. (2022). *Schaum’s outline: Calculus*. 7th ed. New York: McGraw Hill. (515 M488 2022) 25231

**College and Advanced Algebra (Math 2)**

Cisinski, Denis-Charles. (2019). *Higher categories and homotopical algebra.* New York: Cambridge University Press. (512 C579 2019) 25304

Lorandini, Caryl. (2019). *Barron’s math 360: A complete study guide to pre-algebra*. New York: Kaplan, Inc. (512 L865 2019) 25300

Wizo, Math. (2019). Algebra: *100 fully solved equations to explain everything you need to know to master algebra!* U.S.A.: Math Wizo. (512 W835 2019) 25266

Bosch, Siegfried. (2018). *Algebra: From the viewpoint of Galois theory*. Switzerland: Springer. (512 B742 2018) 25282

Makshud, Rejaul. (2017). *Algebra booster with problems & solutions for JEE: Main and Advanced*. New York: McGraw Hill. (512 M235 2017) 25305

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Goad, Carla L. (2021). *SAS programming for elementary statistics getting started.* Boca Raton: CRC Press. (519.5 G573 2021) 25270

Hay-Jahans, Christopher. (2019). *R companion to elementary applied statistics*. Boca Raton: CRC Press. (519.5 J25 2019) 25241

Navidi, William; Barry Monk. (2019). *Elementary statistics*. 3rd ed. New York: McGraw Hill. (519.5 N325 2019) 25323

Triola, Mario F. (2018). *Elementary statistics using excel*. U.S.A.: Pearson Education. (519.5 T834 2018)

Bluman, Alan A. (2018). *Elementary statistics: A step by step approach*. 10th ed. New York: McGraw Hill. (519.5 B658 2018) 25320

**History of Mathematics (Math 1)**

Stillwell, John. (2020). *Mathematics and its history*. Switzerland: Springer. (510.9 S857 2020) 25280

Zack, Maria, Dirk Schlimm, eds. (2020). *Research in history and philosophy of mathematics*. Switzerland: Springer Nature Switzerland. (510.9 R432 2020) 25250

Berlinghoff, William P., Fernando Q. Gouvêa. (2019). *Math through the ages: A gentle history for teachers and others*. Mineola, New York: Dover Publications, Inc. (510.9 B515 2019) 25239

Barrow-Green, June, Jeremy Gray, Robin Wilson. (2018). *The history of mathematics : A source-based approach*. Providence, Rhode Island : MAA Press, an imprint of the American Mathematical Society. (510.9 B278 2018) 25302

Faulkner, Nicholas and Erik Gregersen, eds. (2018). *The history of mathematics*. New York: Britannica Educational Publishing. (510.9 H673 2018) 25235

**Linear Algebra (Math 11)**

Fioresi, Rita, Marta Morigi. (2022). *Introduction to linear algebra*. Boca Raton: CRC Press. (512.5 F518 2022) 25237

Farin, Gerald, Dianne Hansford. (2022). *Practical linear algebra: A geometry toolbox*. 4th ed. Boca Raton: CRC Press. (512.5 F225 2022) 25287

Messer, Robert A.. (2021*). Linear algebra : Gateway to mathematics*. 2nd ed. Providence : American Mathematical Society. (512 M584 2021) 25277

Leon, Steven J., Lisette G. de Pillis. (2021). *Linear algebra with applications*. 10th ed. Harlow, England: Pearson. (512.5 L579 2021) 25290

Weintraub, Steven H. (2019). *Linear algebra for the young mathematician*. U.S.A.:P The American Mathematical Society. (512.5 W423 2019) 25294

**Logic and Set Theory (Math 5)**

Jebril, Iqbal H. Hemen Dutta, and Ilwoo Cho. (2022). *Concise introduction to logic and set theory*. Boca Raton: CRC Press. (511.3 J44 2022) 25255

Larson, Paul B., Jindrich Zapletal. *Geometric set theory*. Providence, Rhode Island: American Mathematical Society. (511.3 L333 2020) 25292

Zakharov, Valeriy K., Timofey V. Rodionov. (2018). *Sets, functions, measures*. Boston: Walter de Gruyter. (511.3 Z21 2018) 25296

Warner, Steve. (2018). *Pure mathematics for beginners: A rigorous introduction to logic, set theory, abstract algebra, number theory, real analysis, topology, complex analysis, and linear algebra*. (2018). [s.n.]; [s.l.] (510.W279 2018) 25259

**Mathematics of Investment (Math 8)**

Nokeri, Tshepo Chris. (2021). *Implementing machine learning for finance: A systematic approach to predictive risk and performance analysis for investment portfolios*. California: Apress. (006.3 N785 2021) 25251

Becket, Michael. (2021). *How the stock market works: A beginner’s guide to investment*. 7th ed. Great Britain: Kogan Page. (332.64 B395 2021) 25261

Arnold, Glen. (2020). *The financial times guide to investing: The definitive companion to investment and the financial markets*. 4th ed. Harlow, England: Pearson. (332.6 A754 2020) 25298

Thomsett, Michael C. (2019). *Understanding momentum in investment technical analysis making better predictions based on price, trend strength, and speed of change*. Business York: Expert Press. (332.63 T481 2019) 25265

**Modern Geometry (Math 7)**

King, James R. (2021). *Geometry transformed : Euclidean plane geometry based on rigid motions*. Providence, Rhode Island : American Mathematical Society. (516 K53 2021)

Haesen, Stefan, Leopold Verstraelen, eds. (2017). *Topics in modern differential geometry*. U.S.A.: Atlantis Press. (516.36 T673 2017) 25244

Blumenthal, Leonard M. (2017). *A modern view of geometry*. Mineola, New York: Dover Publications, Inc. (516.36 B658 2017) 25249

Casnati, Gianfranco, et al. (2016). *From classical to modern algebraic geometry: Corrado Segre’s mastership and legacy*. Switzerland: Springer. (516.36 F931 2016) 25283

**Number Theory (Math 10)**

Kundu, Satyabrota, Supriyo Mazumder. (2022). *Number theory and its applications*. Roca Baton: CRC Press. (512.7 K97 2022) 25272

Effinger, Gove; Gary L. Mullen. (2022). *Elementary number theory*. Boca Raton: CRC Press. (512.7 E27 2022) 25254

Angell, David. (2022). *Irrationality and transcendence in number theory*. Boca Raton: CRC Press. (512.7 A583 2022) 25256

Belabas, Karim, Henri Cohen. (2021). *Numerical algorithms for number theory using Pari/GP*. Providence, Rhode Island : American Mathematical Society. (518.47 B425 2021) 25293

Chahal, J. S. (2021). *Algebraic number theory: A brief introduction*. Boca Raton: CRC Press. (512.7 C436 2021) 25252

**Plane and Solid Geometry (Math 4)**

Sunday, Daniel. (2021). *Practical geometry algorithms with C++ Code*. U.S.A.: Amazon KDP. (516.11 S957 2021)

McMullen, Chris. (2021). *Plane geometry practice workbook with answers: triangles, quadrilaterals, and other polygons*. Vol. 1. Zishka Publishing. (516 M168 2021) 25307

Keller, Matthias, Daniel Lenz, Radoslaw K. Wojciechowski. (2020). *Analysis and geometry on graphs and manifolds*. New York: Cambridge University Press. (515.15 A533 2020) 25303

Alexander, Daniel C., Geralyn M. Koeberlein. (2020). *Elementary geometry for college students*. 7th ed. Australia: Cengage Learning. (516 A375 2020) 25274

Lychev, Sergey and Konstantin Koifman (2019). *Geometry of incompatible deformations: Differential geometry in continuum mechanics*. Boston: Walter de Gruyter. (516 L981 2019) 25301

**Principles and Strategies of Teaching Mathematics (Math 16)**

Pound, Linda and Trisha Lee. (2022). *Teaching mathematics creatively*. London: Routledge. (510.7 P874 2022) 25198

Capaldi, Mindy, ed. (2021). *Teaching mathematics through games*. Providence, Rhode Island : MAA Press, an imprint of the American Mathematical Society. (510.7 T253 2021) 25192

Howard, James P. and John F. Beyers. (2020). *Teaching and learning mathematics online*. Boca Raton: CRC Press. (510.7 T253 2020) 25171

Van de Walle, John A., Karen S. Karp, Jennifer M. Bay-Williams. (2020). *Elementary and middle school mathematics teaching developmentally*. Harlow, England: Pearson. (510.7 V217 2020) 25190

Camarista, Genesis G; Oranio, Ian B. (2020). *Teaching mathematics in the intermediate grades*. Quezon City : Lorimar Publishing, Inc. ( FIL 510.7 C172 2020) 23572 / 23573 / 23574

**Problem Solving Mathematical Investigations and Modeling (Math 15)**

Fox, William P., William C. Bauldry. (2021).*Advanced problem solving using MapleTM applied mathematics, operations research, business analytics, and decision analysis*. Boca Raton: CRC Press. (510 F791 2021) 25273

Radozycki, Tomasz. (2020). *Solving problems in mathematical analysis, part II definite, improper and multidimensional integrals, functions of several variables and differential equations*. Switzerland: Springer. (510 R131 2020 ) 25308

The Consortium for Foundation Mathematics. (2020) *Mathematics in action: An introduction to algebraic, graphical, and numerical problem solving*. 6th ed. New Jersey: Pearson Education, Inc. (510 M426 2020) 25289

Felmer, Patricio, Peter Liljedahl, Boris Koichu, eds. (2019). *Problem solving in mathematics instruction and teacher professional development*. Switzerland: Springer. (510 P962 2019) 25278

Maresch, Guenter. (2019). *Solving problems in our spatial world* . New Jersey : World Scientific . (510 M325 2019) 25322

**Research in Mathematics (Math 21)**

Durand-Guerrier, Viviane, et al. (2021). *Research and development in university mathematics education*. London: Routledge. (370.15 R432 2021) 25248

Savard, Annie, Alexandre Cavalcante, eds. (2021). *Financial numeracy in mathematics education research and practice*. Switzerland: Springer. (332.02 F491 2021) 25257

Ram, Mangey, Om Prakash Nautiyal, Durgesh Pant. (2021). *Scientific methods used in research and writing.* Boca Raton: CRC Press. (001.422 S291 2021) 25253

Petit , Marjorie M., et al. (2020). *A focus on ratios and proportions bringing mathematics education research to the classroom*. New York: Routledge. (372.7 F652 2020) 25246

Brown, Tony. (2020). *A contemporary theory of mathematics education research*. Switzerland: Springer. (510.7 B881 2020) 25247

**Technology for Learning and Teaching 2 (Instrumentation and Technology in Mathematics (Math 19)**

Koepf, Wolfram. (2021). *Computer algebra: An algorithm-oriented introduction.* Switzerland: Springer. (512 K78 2021) 25306

Attard, Catherine and Kathryn Holmes. (2020). *Technology-enabled mathematics education: Optimising student engagement*. London: Routledge. (512 A883 2020) 25242

Peterson, John C. , Robert D. Smith. (2020). *Mathematics for machine technology*. 8th ed. Australia: Cengage. (512 P485 2020) 25268

Wigderson, Avi. (2019). *Mathematics and computation: A theory revolutionizing technology and science*. Oxford: Princeton University Press. (512 W654 2019) 25297

Hegedus, Stephen, et al. (2017). *Uses of technology in upper secondary mathematics education*. Switzerland: Springer. (512 U84 2017 ) 25258

**Trigonometry (Math 3)**

Lial, Margaret L., et al. (2021). *Trigonometry*. New Jersey: Pearson Education. (516.24 L693 2021) 25288

Dugopolski, Mark. (2020). *Trigonometry*. 5th ed. Boston. Pearson. (516.24 D867 2020) 25291

Sullivan, Michael, Michael Sullivan, III. (2019). *Precalculus concepts through functions: A right triangle approach to trigonometry*. U.S.A.: Pearson Education, Inc. ()

Blitzer, Robert. (2018). *Algebra and trigonometry*. 6th ed. New Jersey: Pearson Prentice Hall. (512.13 B648 2018) 25315 25316 pt 1-2

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