Math 114.MP1 Intermediate Algebra Winter 2018

Section MP1 CRN 31495 MTWThF 8:30- am - 10:20 am MLC108

**Instructor:** Greg Stachnick

**Contact Information:** 

Email: StachnickGregory@fhda.edu

**Phone:** 408-857-6421

Office Hours:

Tuesday 10:45 am - 11:45 amWednesday 10:45 am - 11:45 am

Or by appointment

Location: MPS Tutorial Center (S41)

**Course Counselor: Khoa Nguyen** 

MPS math courses have an assigned counselor. We are fortunate to have Khoa Nguyen as our designated counselor. In addition to his counseling background, Khoa also has a degree in mathematics, so his is also an addition resource for help with homework.

**Contact Information:** 

Email: NguyenKhoa2@fhda.edu

Office: S-41A

**Phone:** 408-864-5664 **Mobile:** 909-272-0865

**Office Hours:** M – F 10:30 am – 11:30 am

Or by appointment

**Course Description:** 

Application of exponential and logarithmic functions, rational functions, and sequences and series to problems. Emphasis on the development of models of

real world applications and interpretation of their characteristics.

**Prerequisite:** Completion of Math 212 with a grade of C, or equivalent, or qualifying score

on the Placement Test within the last calendar year. Approval of MPS counselor

also required.

#### Textbook:



- 1. Intermediate Algebra for College Students, 7th Edition
- 2. Author: Blitzer (sold in the De Anza College Bookstore)
- 3. Textbook ISBN-13: 9780134178943
- 4. Student Access Code to MyMathLab (MML) (Required)
- 5. A Scientific Calculator is recommended (i.e. TI-30XIIS)

If you already have a copy of Blitzer and a current MML Access Code you don't need to buy anything else. If you buy a used book or rent a book, make sure the MML Access Code on the inside cover has not been scratched off. If you shop other sources, make sure you get 7<sup>th</sup> Edition Blitzer with MML Access Code included.

The Student Access Code to MyMathLab (MML) includes an eBook. Purchase of the hardcopy textbook is optional. Usually the De Anza Bookstore discounted price for the combined package (hardcopy book and Access Code) is a good deal.

De Anza Bookstore Textbook pricing (verify in case of change):

New combo pack (Text with MML Access Code)	\$128.55
Used combo pack (Verify MML Access Code Valid)	\$96.40
New Rental (Verify MML Access Code Valid):	\$61.70
Used Rental (Verify MML Access Code Valid)	\$34.98

## Grading

- 1. **Homework:** Homework will be done in MyMathLab. The MyMathLab Course ID and specific registration instructions will be provided separately. Proficiency in mathematics comes only with frequent practice. Attending classes and completing homework assignments on time is very important in accomplishing this goal.
- 2. Gone in 60 Seconds Daily Quiz: Starting Wednesday April 12, during the first minute of class students will answer a single question based on previous day's class discussion or homework assignment. Students are required to bring a blank 3" x 5" card to class to record their answers. Each question counts as one point. No exceptions for late arrivals. Exceptions are days for which a midterm or Friday quiz is already scheduled.
- 3. Friday Quizzes: Friday is Quiz Day. There will be a short quiz at the end of class each Friday (see tentative course schedule below) based on the homework assignments and class discussions for the week. Weeks for which a midterm has been scheduled will not have quizzes. If you have done all of the homework, attended class and paid attention, you will be very well prepared. The lowest two quiz grades will be discarded (best five out of seven). No make-ups for quizzes.
- 4. **Exams:** There will be three midterms and a cumulative final (see schedule below for dates). If you miss a midterm, you must schedule a make-up within one week.

5. **Projects:** There will be two required class homework projects.

6. **Extra Credit Points:** There will be in class opportunities for extra credit, stay tuned and be there.

### 7. Point Distribution

i. Midterms: 300 Points (100 points each)ii. Quizzes 100 Points (Best 5 out of 7, 20 points each)

iii. Gone in 60 Secondsiv. Class Workv. Homework50 Points100 Points

vi. Projects 100 Points (Two projects, 50 points each)

vii. Final 200 Points
Total 900 Points

#### 8. Letter Grade Breakdown

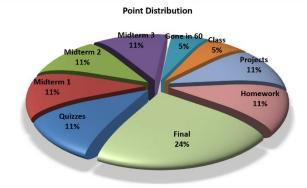
A. 100% - 90%

B. 89% - 80%

C. 79% - 70%

D. 69% - 60%

F. 59% or below



## **Additional Resources**

**Free Tutoring:** The Math Performance Success Tutor Center in Room S41 offers free tutoring on Mondays-Thursdays from 9:00 AM-5:30 PM and Fridays 9:00 Am -12:00 noon. Arrangements for free group tutors are available. Make arrangements for group tutoring sessions with our counselor, Khoa.

**Supplemental Resources:** Search the web for specific class topics. You will find lots of completed problems, additional written and video explanations and some very clever YouTube videos: <a href="http://justmathtutoring.com/page17.html">http://justmathtutoring.com/page17.html</a>

#### **Academic Integrity:**

Cheating will not be tolerated and will result in a grade of 0 for the assignment, quiz or exam and referral to the dean for academic discipline. Cheating includes, but is not limited to: copying from other students, permitting other students to copy from you, plagiarism, submitting work that isn't your own, using notes that don't meet permitted specifications, continuing to write/erase on an exam/quiz after permitted time has ended, changing your

exam/quiz paper after it's been graded and then requesting a grading correction. For more information about De Anza College's policy on academic integrity see: https://www.deanza.edu/studenthandbook/academic-integrity.html

#### **Student Conduct:**

A student who is disruptive will be asked to leave the class. A student who refuses to leave the room will be dropped from the class and will be reported for further action. Cell phones must be silenced and stowed away.

#### Attendance:

Regular class attendance is expected. Registered students missing any day the first week, without first notifying the instructor will be dropped from the course. After the first week, a student may be dropped from the class if she/he is absent three times, without first notifying the instructor. If you miss a quiz because you skipped class you will receive a zero for that assignment. Dropping or withdrawal from the class due to hardship is the students' responsibility. A student who stops coming to class and does not drop will receive an "F" grade. It is the students' responsibility to inform the instructor if she/he is going to be absent and is responsible for any material covered/announcements made on the day of the absence. MPS students are required to sign a contract during the first class meeting. This contract will explain your commitments for class attendance, completing assignments and maintaining passing grades.

#### **Communication:**

Course Studio will be used for communication of announcements. It will be important to login to MyPortal at least once daily to check for new course information regarding homework, extra credit assignments, quizzes and examinations. Class lecture notes will also be published on Course Studio. To access Course Studio, login to MyPortal and select the Students tab. Scroll to the bottom of the page and you will see the Course Studio pane on the lower right. Then select the entry for this course to see announcements, reference links and inspect files. A Course Studio Tutorial will be provided separately.

Any student email correspondence with the instructor should include the course number and section number or time (i.e. Math 114.MP1) in the subject line. Also include our counselor, Khoa, on the cc line. I will respond to emails within one business day.

## **Blitzer Chapter and Section Outline**

## Chapter 1 – Algebra, Mathematical Models, and Problem Solving

- 1.6 Properties of Exponents
- 1.7 Scientific Notation

## **Chapter 4 – Inequalities and Problem Solving**

- 4.1 Linear Inequalities
- 4.2 Compound Inequalities
- 4.3 Equations and Inequalities Involving Absolute Value

## Chapter 5 – Polynomials, Polynomial Functions, and Factoring

- 5.5 Factoring Special Forms
- 5.6 A General Factoring Strategy

## Chapter 6 – Rational Expressions, Functions, and Equations

- 6.1 Rational Expressions and Functions Multiplying & Dividing
- 6.2 Adding & Subtracting Rational Expressions
- 6.3 Complex Rational Expressions
- 6.4 Division of Polynomials by a Monomial
- 6.6 Rational Equations
- 6.7 Formulas and Application of Rational Equations

Time in Motion Problems

Work Problems

6.8 Modeling Using Variations

## Chapter 7 – Radicals, Radical Functions, and Rational Exponents

- 7.1 Radical Expressions and Functions
- 7.2 Rational Exponents
- 7.3 Multiplying and Simplifying Radical Expressions
- 7.4 Adding, Subtracting and Dividing Radical Expressions
- 7.5 Rationalizing the Denominator and Multiplying by More Than One Term
- 7.6 Radical Equations

## **Chapter 9 – Exponential and Logarithmic Functions**

- 9.1 Exponential Functions
- 9.2 Composite and Inverse Functions
- 9.3 Logarithmic Functions
- 9.4 Properties of Logarithms
- 9.5 Exponential and Logarithmic Equations
- 9.6 Exponential Growth and Decay; Modeling Data

# **Chapter 10 – Conic Sections and Systems of Nonlinear Equations**

10.1 Distance and Midpoint Formulas; Circles

## Chapter 11 – Sequences, Series, and the Binomial Theorem

- 11.1 Sequences and Summation Notation
- 11.2 Arithmetic Sequences
- 11.3 Geometric Sequences and Series

# **Tentative Winter 2018 Class Schedule** Math 114.MP1 Intermediate Algebra

	Monday	Tuesday	Wednesday	Thursday	Friday
Week 1 January	8 Introductions 1.6	9 1.6 – 1.7	<b>10</b> 4.1-4.2	4.3	5.5 Quiz 1
Week 2 January	15 MLK Day Holiday	<b>16</b> 5.5 – 5.6	<b>17</b> 5.7	<b>18</b> 6.1	6.1 Quiz 2 (1)
Week 3 January	<b>22</b> 6.2	<b>23</b> 6.2	6.3	25 Review	26 Midterm 1
Week 4 January/Feb	<b>29</b> 6.6	<b>30</b> 6.6	<b>31</b> 6.7	6.8	7.1 Quiz 3 (2)
Week 5 February	<b>5</b> 7.2	<b>6</b> 7.3	<b>7</b> 7.3	7.4	7.4 Quiz 4
Week 6 February	<b>12</b> 7.5	<b>13</b> 7.5	14 Review	15 Midterm 2	16 Presidents Day Holiday
Week 7 February	19 Presidents Day Holiday	<b>20</b> 7.6	<b>21</b> 9.2	9.2 – 9.1	9.1 Quiz 5
Week 8 February/Mar	<b>26</b> 9.3	9.3	<b>28</b> 9.4	9.4	9.5 Quiz 6 (3)
Week 9 March	<b>5</b> 9.5	<b>6</b> 9.5	<b>7</b> 9.6	8 Review	9 Midterm 3
Week 10 March	9.6	<b>13</b> 10.1	14 11.1	<b>15</b> 11.1	16 11.2 Quiz 7
Week 11 March	19 11.2	<b>20</b> 11.3	<b>21</b> 11.3	22 Final Review	23 Final Review
Week 12 March	26	27	28 <u>Final Exam</u> 7:00–9:00 am (4)	29 Final Exa	30 am Week

<sup>(1)</sup> Sunday Jan 21: Last day to drop (2) Friday Feb 2: Last day to request pass/no pass (3) Fri Mar 2: Last day to drop with a W (withdraw) (4) Wed Mar 28 Final Exam 7:00-9:00 am

## **Important Dates**

Monday, Jan. 8 :: First day of Winter Quarter 2018. **Saturday, Jan. 20**:: Last day to add quarter-length classes. *Add date is enforced.* Sunday, Jan. 21: Last day to drop for a full refund or credit (quarter-length classes). Drop date is enforced. **Sunday, Jan. 21**:: Last day to drop a class with no record of grade. *Drop date is* enforced. Friday, Feb. 2:: Last day to request pass/no pass grade. Request date is enforced. Friday, March 2:: Last day to drop with a "W." Withdraw date is enforced. **Monday, Jan. 15**:: Holiday: Observance of Martin Luther King's Birthday Friday-Monday, Feb. 16-19 :: Holiday: Presidents' Day Weekend (no classes) March 26-30:: Final Exams Thursday, March 1:: Last day to file for a winter degree or certificate. Friday, March 30 :: Last day of Winter Quarter Monday, April 9 :: First day of Spring Quarter

# **Student Learning Outcome(s):**

<sup>\*</sup>Evaluate real-world situations and distinguish between and apply exponential, logarithmic, rational, and discrete function models appropriately.

<sup>\*</sup>Analyze, interpret, and communicate results of exponential, logarithmic, rational, and discrete models in a logical manner from four points of view - visual, formula, numerical, and written.