Instructor: Huong Le
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Office: SSB Cubicle #17
Office Hour: Tuesday, 2 – 3:00 PM or by appointment
Website: https://www.pcc.edu/staff/huong-le7 This is where I will post all course materials, handouts, etc.

Course: Math 70 – Review of Intro Algebra
TTh, 11:30 – 1:50 P.M, Room TEB 219

Course Description: Reviews algebraic concepts and processes with a focus on linear equations and inequalities in one and two variables, linear systems, properties of exponents, polynomials, quadratic equations, and functions. Emphasizes applications, graphs, formulas, and proper mathematical notation.

Prerequisites:

- Passing grade from MTH 63 , MTH 65 *OR* placement into MTH 70 or higher
- Successful completion of RD 80 or ESOL 250

Course Content and Outcomes:
See link: https://www.pcc.edu/ccog/?fa=ccog&subject=MTH&course=70

Required Materials:

- **Textbook** – *Intermediate Algebra for College Students* by Blitzer, 7th ed. Pearson/ Prentice Hall ISBN #9781323176276
- **Calculator** - TI30xs Multiview or any scientific calculator
- **Notebook**: All class work need to be neatly written on this notebook. Every page needs to have proper heading: date, page and problem number from the book, etc. This notebook will be collected and graded at the end of the quarter.
- **Supplemental Packet for MTH 70** can be found on the MTH webpage: http://spot.pcc.edu/math/download/70/m70_supplement.pdf
- **Supplemental Notation Packet for MTH 70** can be found on the MTH webpage: http://spot.pcc.edu/math/download/70/m70_notation.pdf

Grading: A: 90 – 100%; B: 80 – 89%; C: 69 – 79%; D: 60 – 68%; F: below 60%

- **Attendance, class work, and Participation (10%):** You are required to attend class daily and on-time, actively participate in class activities and discussion, and write your work on the board when asked.

  Note on Attendance: If you are absent the first week of class and you do not contact me to explain your absence, I may drop you from the course. I may also drop you from the course if you miss more than 4 consecutive class days. However, if you have decided to stop attending class, do not assume that I will drop you (the instructor is not responsible to give you a withdrawal). It is your responsibility to file the necessary paperwork with Admission and Records to drop the class. A student who discontinues coming to class and does not drop will get an **F** grade. For more information, visit: http://www.pcc.edu/registration/dropping.html . If you miss class, you are responsible to know what was covered in class, assignments that were given, etc.

- **Homework Quizzes (15%):** Homework problems will be assigned from the book but not collected. However, weekly quizzes will have problems from the assigned homework assignments. Quizzes are closed notes and closed book and will be done in class. All quizzes are cumulative. **No make-up quizzes will be given.** The quiz with the lowest score will be dropped.

- **Midterm Exams (45%):** There will be 2 midterm exams. All exams are cumulative and closed notes and closed books. **No make-up exam will be given**. In extreme circumstances, you are allowed to make up 1 midterm exam, and you must take the exam the following class day. Your final exam score will replace one of your lowest midterm score if that improves your grade.

- **Final Exam (30%):** Final exam is comprehensive and must be taken on the scheduled date and time. If you miss the final exam, you will receive an "F" as your final course grade.

Pass/ No Pass grading option: Students are permitted to choose their own grading option from letter grade or Pass/No pass using MyPCC. For more information please visit the PCC grading policy website: http://www.pcc.edu/resources/academic/standards-practices/AcademicStandardsandPractices-GradingGuidelines.html

Academic Honesty & Student Conduct:

- Looking at someone else's exam/quiz, helping another student during an exam/quiz, talking to anyone except me during an exam/quiz, or using cell phone or an external source of information for which you are not explicitly given permission, is considered cheating and will result in an F grade for the assignment. Penalty will apply to both the copier and the one allowing copying.

- Turn cell phones off when you enter the classroom. Do not use your cell phone during class time. They are a distraction to you and those around you. Penalties apply for blatant disregard of this request. If the use of cell phone becomes a distraction, instructors have the right to tell student to leave classroom.

- Be on time (Lateness disrupt the class).

- Actively participate in class activities and work cooperatively with your team.

Getting Help: Come to office hours, ask questions during class or after class, meet with classmates outside of class, or see a tutor. You can go to the Learning Center. The Cascade Student Learning Center is located in Terrell Hall, Room 123. I highly recommend that you go to the Learning Center to work on your homework, so that if any questions come up, you have a tutor right there to help you understand your problem.

Accommodation for Disabilities: Students who have a documented disability and require a classroom adjustment or accommodation should contact Disability Services www.pcc.edu/resources/disability and provide the Approved Academic Accommodations letter to the Instructor.

Non-Discrimination Statement: Portland Community College is committed to creating and fostering a learning and working environment based on open communication and mutual respect. If you believe you have encountered sexual harassment, sexual misconduct, sexual assault, or discrimination based on race, color, religion, age, national origin, veteran status, sex, sexual orientation, gender identity, or disability please contact the Office of Equity and Inclusion at (971) 722-5840 or equity.inclusion@pcc.edu.

Safety and Security Considerations: It is the mission of the Department of Public Safety to promote a safe and secure campus community through the delivery of quality public safety, fire, medical and public assistance services. In an emergency, call 971-722-4444. From a campus phone, you need only dial the extension, 4444. For non-emergencies, call 971-722-4902.

Final Note: The instructor has the right to adjust any of this syllabus throughout the term. If necessary, I may need to adjust due dates, grade breakdown percentages, etc.

Tentative Calendar

Week	Tuesday	Thursday
Week 1	1/8 1.1 Expressions and Real Num 1.2 Simplifying	1/10 1.3 Graphing Equations 1.4 Solving Linear Equations
Week 2	1/5 1.5 Problem Solving/ Formulas 1.6 Exponents	1/17 2.1 Functions **Quiz #1**
Week 3	1/22 2.2/2.3 Graphs of Functions 2.4 Linear Functions/ Slope	1/24 2.5 Point Slope From **Quiz #2**
Week 4	1/29 3.1 2x2 Graphically and Algebraically	1/31 **Midterm 1**
Week 5	2/5 3.2 Applications of Linear Systems	2/7 4.1 Linear inequalities **Quiz #3**
Week 6	2/12 4.2 Compound Inequalities 5.1 Intro to Polynomials 5.2 Addition of Polynomials	2/14 5.3 GCF and Grouping **Quiz #4**
Week 7	2/19 5.4 Factoring Trinomials 5.5 Factoring by Form	2/21 5.6 More Factoring 5.7 Applications **Quiz #5**
Week 8	2/26 6.4 Division of Polynomial 7.1 Rational Expressions	2/28 **Midterm #2**
Week 9	3/5 8.1 Square root property	3/7 8.2 Quadratic Formula

Week 10	3/12 8.3 Quadratic Graphs Vertex Form	3/14 Wrap up 8.3/10.5 Final Exam Review
Week 11	3/19 **Final Exam (11- 12:50)**	

Important Dates:

- **Jan 12:** Last day to drop
- **Jan 15:** Last day to add
- **March 2:** Last day to change grade option (Pass/ No Pass)
- **March 2:** Last day to withdraw
- **March 18 – 24:** Finals Week

Homework Problems

"eoo" means every other odd: for example, 1, 5, 9, 13, 17, 21, 25, 29, 33, 37, 41, 45…
"x5" means "multiples of 5": 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60, 65, 70, 75…

Lesson	Topic	Homework ("Exercise Set")
1.1	Algebraic Expressions	Page 12: 1-77 eoo, 89, 93, 95, 97
1.2	Simplifying Expressions	Page 27: 5-130 x5, 141, 147, 149
1.3	Graphing Equations	Page 37: 15, 19, 23, 39, 41, 47, 49, 51, 53, 57-60 all
1.4	Solving Linear Equations	Page 50: 1-33 eoo, 39-47 odd, 67, 69
1.5	Problem Solving & Formulas	Page 65: 1, 5 , 9, 29, 31, 33a , 35 , 37 , 41-59 odd
1.6	Integral Exponents	Page 79: 5-110 x5, 125, 150-155 all **(you could check 150-155 with a calc)**
2.1	Intro to Functions	Page 111: 1-11 odd, 21, 23, 33, 37
2.2	Graphs of Functions	Page 121: 7-23 odd, 29-41 odd, 43 , 45 , 47 , 49, 51
2.4	Linear Functions & Slope	Page 140: 3, 13, 17-39 odd, 45, 47, 51, 59, 77-83 odd, 109-112 all
2.5	Point-Slope Form	Page 152: 1, 9, 11, 19, 21, 23, 29, 35, 41-51 odd, 67 , 69 , 71
3.1	Systems of Equations	Page 178: 1, 3, 9, 13, 23, 27, 45, 59, 61, 67, 69, 73, 89, 95 , 97
3.2	Problem Solving with Systems	Page 192: **CALC: 11, 13, 17, 21, 23, 37-49 odd**
4.1	Solving Linear Inequalities	Page 212: 1-7 odd, 15-21 odd, 25, 47-53 odd, **CALC: 55-65 odd**
4.4	Inequalities in Two Variables	Page 233: 1-45 eoo, 59, 63
5.1	Intro to Polynomials	Page 251: 1, 5, 11-19 odd, 21-28 all, 29, 31, 41, 43, 69, 70, 71
5.2	Multiplying Polynomials	Page 265: 1, 5, 9, 13, 17, 23, 25, 29, 35, 37, 41, 45, 49, 55, 57, 59, 61, 69, 71, 73, 75, 105, 109, 113, 115
5.3	GCF & Factoring by Grouping	Page 275: 1, 5, 9, 13, 25, 29, 37, 49, 51, 75, 77, 79 , 81
5.4	Factoring Trinomials	Page 289: 1-57 eoo, 105
5.5	Factoring Special Forms	Page 299: 1, 5, 9, 13, 25, 29, 37, 49, 51, 75, 77, 79, 81
5.6	A General Factoring Strategy	Page 306: 1, 3, 5, 9, 27, 31, 37, 39, 51
5.7	Solving Polynomial Equations	Page 318: 1-45 eoo, 47-50 all, 75 , 77 , 79 , 81 , 82
7.1	Radical Expressions	Page 343: 1-19 odd, 33, 35, 101 , 103
7.3	Multiply Radical Expressions	Page 353: 21-24 all, 61, 62, 69, 70, 91
7.4	Add & Subtract Rad Expressns	Page 360: 1, 2, 11-14 all, 85, 98 ("makes sense" or "does not make sense"?)
7.5	Rationalizing Denominators	Page 371: 1-29 eoo, 39-55 eoo
7.7	Complex Numbers	Page 383: 1-9 odd, 129
8.1	The Square Root Property	Page 404: 1-21 odd, 59, 61, 65, **CALC: 79-87 odd**
8.2	The Quadratic Formula	Page 419: 1-43 odd, 77 , 81 , 83
8.3	Quadr Funcs in Vertex Form	Page 437: 1-4 all, 9-25 odd
8.3	Quadr Funcs in Standard Form	Page 437: 5-8 all, 27-37 odd, 57 , 69

Answers to the even-numbered questions are provided below.

Lesson 1.2

10. $\sqrt{3}$ **20.** –1/10 **30.** –13 **40.** –20 **50.** 77 **60.** 64 **70.** 1/64 **80.** 5/6 **90.** 17/36

100. 2 **110.** $(-1/4 \bullet -4)y = y$ **120.** $8x^2$ **130.** $7x^2 + 15$

Lesson 1.3

58. d **60.** c

Lesson 1.6

10. $32y^{12}$ **20.** x^7y^6 **30.** –1 **40.** $-\frac{1}{49}$ **50.** $\frac{y^7}{x^3}$ **60.** $32x^5$ **70.** $\frac{y^{10}}{49x^4}$ **80.** $\frac{x^{30}}{y^{18}}$

90. $\frac{5}{x^9}$ **100.** $4x^{15}$ **110.** $-\frac{27b^{30}}{a^9}$ **150.** false **152.** false **154.** false

Lesson 2.4

110. does not make sense **112.** makes sense

Lesson 5.1

22. not a polynomial **24.** polynomial **26.** (↙,↗); graph c **28.** (↖,↘); graph d

70. No; the graph falls to the right, so eventually there would be a negative number of thefts, which is not possible.

Lesson 5.7

48. –2 and 4; b **50.** –4 and 2; a

Lesson 7.3

22. $3\sqrt{3}$ **24.** $2\sqrt{7}$ **62.** $3\sqrt{2}$ **70.** $45\sqrt{10}$

Lesson 7.4

2. $9\sqrt{3}$ **12.** $3\sqrt{5}$ **14.** $15\sqrt{3}$

Lesson 8.3

2. $g(x) = (x + 1)^2 + 1$ **4.** $f(x) = (x + 1)^2 - 1$

Lesson 8.3

6. $f(x) = x^2 + 2x + 1$ **8.** $j(x) = -x^2 - 1$