Course: Intermediate Algebra
(MATH 0312 – Section 54,56,& 58)

Fall 2004

Instructor: Judy Wagner

Office #221 in Library Building

E-mail: The best way to reach me is through e-mail. Please do not hesitate to e-mail me anytime even on weekends if you have a question or a problem. If I am at home, I will e-mail you back ASAP. If you send me an e-mail please put your name and M0312 on the description line so that I will not delete it as junk mail. My e-mail address is "judybwagner@hotmail.com"

Blinn Office Phone: 979-209-7396; Please leave a message on my Blinn Office phone if you have a problem I need to know about. Often times I am in my office Monday – Wednesday and sometimes on Thursday shortly after 8:00 PM until 10:00 or 10:30 PM. Please do not hesitate to call me at that time. If I am in my office and you want to come up, the building is open until 10:00 PM. Please call before coming.

Office Hours: (My office in L221) 2:40 P.M. – 4:50 P.M. Tuesdays and Thursdays – if I am not in my office please look for me in the tutoring room L245 (3:30 – 4:50); Mondays and Wednesdays I am in my office from 4:05 P.M. – 4:50 P.M.. Please e-mail or leave a phone message if you need to make an appointment to see me. I will be available by appointment Monday and Wednesday 10:00 A.M. – 12:00 Noon, and Tuesday and Thursday 10:00 A.M. – 10:35 A.M, 8:00 PM – 10:00 PM Monday through Wednesday and sometimes Thursday. I am usually not on campus on Fridays.

Course Description: Intermediate Algebra is the study of factoring rules, rational expressions, rational
exponents, radicals, complex numbers, inequalities, quadratic equations, linear systems, and equations with radicals, rational expressions and exponents.

Prerequisites: MATH 0310 with a grade of “C” or better or high school Algebra I, high school Geometry, high school Algebra II, and a score of 230 or higher on the mathematics section of TASP, THEA, or an appropriate score on the alternate test instrument.

Length of Term: One semester; Three hours per week

Credit: Three semester hours

For a list of Student Learning Outcomes refer to:


1. Algebra and Problem Solving
   1.1 Some Basics of Algebra
   1.2 Operations and Properties of Real Numbers
   1.3 Solving Equations
   1.4 Introduction to Problem Solving
   1.5 Formulas, Models and Geometry
   1.6 Properties of Exponents
   1.7 Scientific Notation

2. Graphs, Functions, and Linear Equations
   2.1 Graphs
   2.2 Functions
   2.3 Linear Functions: Slope, Graphs and Models
   2.4 Another Look at Linear Graphs
   2.5 Other Equations of Lines

3. Systems of Linear Equations and Problem Solving
   3.1 Systems of Equations in Two Variables
   3.2 Solving by Substitution or Elimination
   3.3 Solving Applications: Systems of Two Equations

4. Inequalities and Problem Solving
   4.1 Inequalities and Applications
   4.2 Intersection, Unions, and Compound
Inequalities
4.3 Absolute-Value Equations and Inequalities

5. Polynomials and Polynomial Functions
5.1 Introduction to Polynomials and Polynomial Functions
5.2 Multiplication of Polynomials
5.3 Common Factors and Factoring by Grouping
5.4 Factoring Trinomials
5.5 Factoring Perfect-Square Trinomial and Differences of Squares
5.6 Factoring Sums or Differences of Cubes
5.7 Factoring: A General Strategy
5.8 Applications of Polynomial Equations

6. Rational Expressions, Equations, and Functions
6.1 Rational Expression and Functions: Multiplying and Dividing
6.2 Rational Expressions and Functions: Adding and Subtracting
6.3 Complex Rational Expressions
6.4 Rational Equations
6.5 Solving Applications Using Rational Equations
6.6 Division of Polynomials
6.7 Synthetic Division
6.8 Formulas, Applications and Variation

7. Radical Expressions and Functions
7.1 Radical Expressions and Functions
7.2 Rational Numbers as Exponents
7.3 Multiplying Radical Expressions
7.4 Dividing Radical Expressions
7.5 Expressions Containing Several Radical Terms
7.6 Solving Radical Equations
7.7 Geometric Applications
7.8 The Complex Numbers

8. Quadratic Functions and Equations
8.1 Quadratic Equations
8.2 The Quadratic Formula
8.3 Applications Involving Quadratic Equations
8.4 Studying Solutions of Quadratic Equations
8.5 Equations Reducible to Quadratic
8.9 Polynomial and Rational Inequalities
10 Conic Sections
10.1 Conic Sections: Parabolas and Circles

For a specific listing of textbook problems refer to the Textbook Assignment Sheet given out with this first day handout.

Course Objectives: The student should perform at a 70% or better average on examinations and quizzes covering the topics listed in the course description and those topics included in the daily schedule.


Instructional Packet: You will need to buy in the copy center (across from the Library) an instructional packet written by Judy Wagner for this course.

Supplies:

1. Instructional Materials Packet purchased from the Copy Center, across from the Library,
2. The textbook,
3. The solution manual or study guide,
4. A large three ring binder to put your Instructional Materials Packet into,
5. Pencils,
6. Paper,
7. Graph paper,
8. Stapler (to staple your worksheets or work
together),
9. Large Paper-Clips,
10. A graphing calculator, (I prefer a TI-83 Plus), if you have another type of graphing calculator (TI-82) that will be okay also.
11. A red pencil or pen,
12. Two different colored highlighters.
13. A Student I.D. Always bring your student I.D. with you to class on test days. You cannot take an exam in the learning center without a student I.D.

Please refer to the Assignment by Date Assignment Sheet handed out with this first day handout to have a complete listing of tentative daily assignments in the packet and in the textbook. You will find your major exams listed on that Assignment sheet.

Tentative Exam Schedule: Date
Exam 1, Basic Alg./Factoring Thursday, Sept. 16
Exam 2, Factoring/Polynomials Tuesday, Oct. 5
Exam 3, Part 1: Inequalities Tuesday, Oct. 19
Exam 3 Part 2: Quadratics/Radicals Tuesday, Nov. 2
Take Home Review Re-exam, due on or before Nov. 4
Exam 4, Radical/Exam 3 Material Tuesday, Nov. 23
Final Exam Sign up for exam time: Dec. 10=15

Other Important Dates: Last day to drop with a "W" is Friday, November 19, 2004; Last day to drop with a "Wf" or "Wp" is Thursday, December 9, 2004.

Grading Policy: Students will accumulate points from: homework, daily pop tests, short quizzes, major exams, the post test and final exam, and extra credit assignments. Total points must be recorded on a graded tally sheet by students themselves. An A will be given based on 90-100% of total points accumulated, B from 80-89%, C from 70-79%, and D from 60-69%. Your final exam counts approximately 40% of your final grade.
Grades: You will be given a grade printout which corresponds to your grade tally sheet after each major exam prior to the final exam. These print outs will indicate to you what you have not turned in and your current percent score.

Attendance Policy: Students are required by Blinn College to attend a developmental class. Being absent from class may adversely affect your grade. An accurate record of each student's attendance will be kept by the instructor. Any student who accumulates the equivalent of two weeks absences (6 MWF or 4 MW/TH) will be withdrawn from the course with a grade of W, prior to November 19, 2004. Three (3) tardies (absent after 10 minutes) will constitute an absence. The only excused absence is a college sponsored activity. Illness and/or emergency (even with a doctor's note) does not constitute an excused absence: the instructor retains the right to determine whether an absence is authorized as far as make-up work is concerned, and will note in writing if the absence is authorized. See Make-Up Policy. The instructor will not drop students from the course. If a student chooses to drop the course with a grade of W, he/she must do so by Friday, November 19, 2004. Any student dropping after this date will receive a grade of WF unless you have discussed the possibility of receiving a WP with me. The last day to drop with a WF or WP is Thursday, December 9, 2004.

Make-up Policy: Students may take one make-up because of illness or family emergencies. All make-ups must be taken in the Learning Center at the Bryan Campus. If you miss an exam you must take the make-up before the next class period if possible. Please notify me, on or before the exam day, by phone: 209-7396 (office) or E-mail as to why you have missed an exam. To receive full credit on an exam it must be taken before the corrected exam is returned to the other students in the class. To take your exam go to the Learning Center with your Student I.D. and ask for it at the front desk. The
exam will be in a file folder with my and your name on it. No student will be allowed to take 2 make-up exams. If you miss class to take your make-up exam, I will not grade it! The time and date that you take your exam will be recorded in the learning center and you will receive a zero on the exam for an un-excused absence.

If you miss a regular class, call someone in the class to determine what you have missed. If you miss a daily work grade, borrow someone's paper that attended class and correct your daily work or correct your paper over the telephone. Staple all the papers related to a line grade together with the line number written on the top of the paper and the number you did correctly on it. Paper - clip your work to your grade tally sheet and turn it in to me. I will not give you credit for late work unless I have seen the completed corrected work.

Accommodations for Students with Disabilities: Math Instructors would like to help students with disabilities achieve their highest potential in college. In order to receive accommodations on exams or assignments, students must provide an accommodation request from the Disabilities Coordinator, make an appointment with me during my office hours, and discuss what accommodations are appropriate for the course. Proper documentation should be provided to the Disabilities Coordinator in the Center for Student Development (209-7250) so that this can be done in a timely manner. Students must alert me to the situation as soon as possible. Accommodations are not retroactive and no accommodation will be granted until all paperwork is complete.

Classroom Policy: No food, drinks, or tobacco products are allowed in the classroom. Cell phones and pagers must be turned off before entering class.
Final Exam: The final exam, which contains the post test, counts a large percentage of the student's grade (approximately 40%).

Calculator Policy: A graphing calculator is required in this course and I will be using a TI 83 in class. For you a TI-83 Plus is preferred. Students are expected to provide their own calculator. Calculators will not be provided. Other graphing calculators may be used; however, the student is responsible for learning how to operate them. Symbolic calculators such as the TI-89, TI-92 and some models of HP-48 calculators will not be allowed in class.

There are some TI-82 Calculators in the learning center you can use while you are in the learning center, but you cannot take them home with you.

Scholastic Dishonesty: Students caught cheating on any assignment, quiz or exam in this course will be assessed a penalty that will range in severity from an F (or zero) on the particular activity involved to an F for the course. Any student assigned an F for cheating has one week from the time that the assignment, quiz or exam is returned to the class to dispute the grade. After one week, it will be assumed that the student has accepted the grade, and no changes will be made in the grade. Grades received as a penalty for cheating will not be dropped or replaced.

For the purpose of this course, cheating will be defined as (but not limited to) access or use of unauthorized material during exams and quizzes, collaboration between students during exams, quizzes, and assignments for which group work is not allowed, frequent perusal of another student's work during exams and quizzes, unauthorized copying of other student's work or allowing other students to copy your work on any assignment, quiz or exam, and having unauthorized programs or other information stored on calculators.
when these calculators are accessible during an exam or quiz.

Students who cheat and students who facilitate cheating when they allow other students to have access to their own work when that is not allowed will be subject to the same penalties.

Civility Statement: Members of the Blinn College community, which includes faculty, staff and students, are expected to act honestly and responsibly in all aspects of campus life. Blinn College holds all members accountable for their actions and words. Therefore, all members should commit themselves to behave in a manner that recognizes personal respect and demonstrates concern for the personal dignity, rights, and freedoms of every member of the College community, including respect for College property and the physical and intellectual property of others.

If a student is asked to leave the classroom because of uncivil behavior, the student may not return to that class until he or she arranges a conference with the instructor: it is the student's responsibility to arrange for this conference.
OTHER GENERAL COURSE INFORMATION

1. Welcome to Mathematics with Judy Wagner, I hope this will be a pleasant experience for both of us. If you find yourself having difficulty or if you have a personal problem, you can see me during my office hours in my office #221 in the Library Building (209-7396) Please call or e-mail me to let me know if you need to meet me at some other time. E-mail: "judybwagner@hotmail.com"

2. There is free tutoring available at Blinn College in the math tutoring room, room 245 and 247 in the library building during the fall and spring semester. I will let you know when the free tutoring will be available when the math department releases the schedule. Mr. Kristof is available at certain times in room 247 for tutoring in the math lab. Please check the schedule on the door so see when he is available for tutoring. You can also find someone to help you in the Learning Center at the Bryan Campus. Please make use of the tutoring available to you for help.

3. There are tapes in the learning center, which you can watch, that may help you understand something with which you are having difficulty.

4. If you have problems or other questions, please see me in my office hours, or e-mail me at: "judybwagner@hotmail.com". A good time to reach me is in my office shortly after 8:00 PM until 10:00 or 10:30 PM Monday through Wednesday and sometimes on Thursday. If I am not there, leave me a message. I will be glad to help you over the telephone or e-mail me. I do have a recorder on my phone if you need to leave me a message.

5. You can e-mail me at "judybwagner@hotmail.com".

6. There are copies of old exams on file in the library for you to study. Please make sure you go into the library and look at them. Look for the typed computer exams in the folder in the Library. You will find some old exams with answers on them. You should make copies of these and practice working them before you take your exam.

7. You must purchase the instructional material packet from the Copy
Center in the G Building at Blinn College to take this class. It has all of your daily worksheets, pop test, quizzes, informational sheets and review exams in it.

8. You will need to attend every class. You should copy down the problems I work for you in class. Keep these with your class notes. Re-work them and study them. Your exams will have problems on them similar to the problems I go over in class.

9. You will have a lot of homework daily. You must do your homework to pass this class. There will be many problems to do each night. Expect to spend a lot of time doing work for this class. You must keep a daily tally sheet with your daily grades on it. You should have something on each line on the tally sheet. It is your responsibility to make sure you do all your work, grade it, and get it turned in.

10. Your homework counts as part of your grade. You cannot expect to pass this class without doing the necessary practice.

11. Keep your homework on loose-leaf paper, not a spiral. All graphing assignments should be done on graph paper. Do not turn in problems with the answers only. You must show all work on your paper to get credit for it.

12. Staple any worksheets to its corresponding homework papers. Be sure to label assignments correctly for your notebook.

13. You turn in your textbook homework in the order in which it was assigned on the assignment sheet. Be sure to label assignments in the top right hand corner by writing the assignment number from the textbook assignment sheet on your homework. If you are missing some assignments, you will not get credit for them. Use your textbook assignment sheet as a cover sheet in front of your homework. You must highlight the assignments that you have completed. Put your grade tally sheet on the top of your homework and textbook assignment sheet. Record the completion score on the grade sheet that you should receive for your textbook work. You will turn in your textbook homework on exam days, I will grade your homework while you are taking your exam and return it to you the same day. Each regular assignment is worth 10 points each. You will have 5 homework grades.
14. Each extra credit assignment is worth 20 points. If you complete Chapter Review Sets or Chapter Tests that are assigned, you can earn extra credit points. Extra credit assignments are labeled with ***. Label these in RED to ensure that I will see them in your homework folder and give you the necessary extra credit points.

15. There will be 4 major exams and a final exam, which includes your post test. Most exams will be given on the day on which they are assigned on your daily assignment sheet. Each exam will have a different number of points.

16. Please do not miss exams. I will allow you to take "ONE" make-up if you have a reasonable excuse. Make-ups are usually more difficult than the regular exams and I do not give partial credit on them. If you miss an exam, please explain to me why you missed it - it is best to phone or e-mail me with your excuse. I must be notified by the next class period after the exam. All make-up exams must be taken at the Testing Center on the Bryan Campus before the corrected exam is returned to the class. I will leave all make-ups in a folder in the Learning Center with the students name on it. If you miss an exam, go to the Learning Center and take your exam before the next class period if at all possible. Be sure to take your student I. D. with you when you go to the Learning Center.

17. Students should expect daily pop quizzes. These quizzes will count as part of your grade. The points you earn on these quizzes will count as part of your total grade points. It is your responsibility to grade what you have missed and turn your work into me. Zeros on daily grades can drop your total point average a letter grade or two. You must do your homework and pay attention in class to do well on these quizzes. You should use these quizzes to help you study for your major exams. The purpose of the daily quizzes is to force you to attend class regularly, complete your assignments on time, and to help you to focus on the things you need to learn in this class. All grades will be recorded on your tally sheet.

18. Remember you must record your own scores on your grade tally sheet and write the line number that it goes on the top of each assignment when you turn in the assignment. Use the sample grade sheet that I gave you as your guide as to what you need to turn in. The grade sheet follows the assignments assigned on the assignment by date assignment sheet. Each problem is worth one point on the daily pop tests. If I have indicated that a problem is worth
more that I point, you should expect to see one like it one your next exam and on the final. I will not record anything in my computer unless it is recorded on your grade sheet. I don't know what you are giving me unless you record it on the grade sheet and write the line number on which it goes on the top of each assignment. If you turn in work without recording a score, I will give it back unrecorded in my computer. Please turn in your work when it is due. If you have recorded something incorrectly, I will record over your score. A "none" on your grade sheet indicates a grade of a zero. Please turn in all grades with "none" in as soon as possible after they are assigned. Do not record things on the grade sheet that you are not turning in.

19. The more points that you accumulate in this class, the higher your grade will be. There are many ways to earn points.

20. **Helpful hints:**

1) Form a study group with people in the class and go over your old pop tests, notes, etc. Study with a friend. It will help you.

2) Please feel free to ask questions if you do not understand.

3) Do not expect to do well in here if you miss any classes.

4) You must do your homework each night before coming to class the next day.

5) Go to the math tutoring room 245 or 247 or the Learning Center to use the free tutoring offered by Blinn.

6) Look at the tapes in the Learning Center.

7) Call me in my office 209-7396.

8) E-mail me if you need help: "judybwagner@hotmail.com".

9) See me in my office 221 if you need help.

10) Make copies of the old exams in the Library and study them.
11) Do the extra credit homework assignments on the assignment to help raise your grade.

12) Always do your exam corrections after you get your exams back because the extra credit points you will earn will raise your grade significantly!

13) Exam corrections are not optional they are required, although you do earn extra credit points for doing them.

14) Bring your graphing calculator to class every day; put it on your desk and be prepared to use it.

Class motto: Mathematics is a participation sport.