# MATH 111I: INTENSIVE BASIC COLLEGE MATH
**Section 006**
**18 AUG 2016 - 7 DEC 2016**
MW 4:40pm-5:30pm in LeConte 112
TΘ 4:25pm-5:40pm in LeConte 112

## COMMUNICATION

Instructor: Julie Lang
Email: jelang@email.sc.edu
Office: LeConte 300K
Office Hours: M 10:00-11:00am; TΘ 8:00-9:00am; F 11:00am-12:00pm, by appointment otherwise
Webpage: http://people.math.sc.edu/jelang/
Notes: First thing's first: call me "Julie"; I generally do not like titles being put in front of my name. I compulsively check my email several times each day, so that is usually the best way to get in contact with me outside of class. My office hours are the designated times when you can come by my office and ask me any questions concerning the class and I will drop what I am doing to work with students. Occasionally my door is closed during office hours, but do not think this means I am unavailable. A closed door may just mean that I am listening to music and I do not want to disturb others. Just knock! I am also frequently (but not always) in my office outside of office hours. It is completely acceptable to come ask me questions outside of office hours, with the proviso that if I am particularly busy at that moment, I may ask you to come by another time or to send me an email. (I have my own classes to take, too!)

## COURSE DESCRIPTION AND OBJECTIVES

Learning Outcomes: Upon successful completion of the course, students should be able to:

1. Demonstrate understanding of the following concepts: mathematical expressions and equations, functions, graphs, lines, quadratics, exponents, logarithms, inverse functions, power functions, & various basic topics associated with these

2. Be comfortable working with all of these entities using valid algebraic manipulations

3. Apply these concepts to modeling problems at the usual level of a basic college math course (that is, solve word problems).

## 'REQUIRED' MATERIALS

**Textbook:** Stewart, Redlin, Watson, Panman, *College Algebra: Concepts & Contexts*
ISBN: 978-0-495-38789-3
Feel free to share a textbook with a friend if you don't want to buy your own. We will follow the material fairly closely, but we may only use the actual text once a week, if that.
**Blackboard:** We will have homework assignments that will be taken through the university's blackboard site. https://blackboard.sc.edu
**Calculator:** (see below)

# COURSE POLICIES AND EXPECTATIONS

**Design:** There will (approximately) daily be homework on the course Blackboard that will be due at the beginning of the following lecture. It is very important that you study outside of class in order to learn. I cannot emphasize this enough. I suggest that you devote as much time as is necessary for you to understand the material thoroughly enough to be able to adequately explain it to another student. Think of the written homework like a take-home quiz and that will help you prioritize it.

**Participation:** All participants are expected to show respect to other students, me, and any guests who may be visiting the class during the semester. Disrespect will not be tolerated. Also, I highly encourage questions and (relevant) comments in class! Feel free to (curiously) interrupt my lecture with a question! Each student is individually responsible for all of the material presented in class as well as any assigned material to be studied outside of lecture. That said, group work is highly recommended! Out-of-class participation is also expected, so read the text and other materials that help you learn. I encourage you to get to know the other students in class, as they are an excellent resource that is available to you and working together in groups is an easy way to improve your skills in communicating mathematics. It is also exceedingly important for students to note that while collaboration is allowed on homework assignments, ALL OF YOUR WORK SHOULD BE YOUR OWN. Copying the answers from other students goes against academic integrity and will not help you learn the material.

**Cell Phones/Tablets/Laptops:** University is an adult environment and it is my opinion that it is not my place to tell students how to manage their social lives. If you chose to text in class or browse the internet, that is your decision. Know that YOU ARE STILL RESPONSIBLE FOR ALL OF THE MATERIAL FROM CLASS. Incessant texting in class generally results in less complete understanding of the course material and thus a lower grade in this course. If there is some sort of emergency situation, you may take calls outside of the classroom while out of earshot. HOWEVER, you are only entitled to make that decision for yourself. If you chose to text, your device should be inaudible to others around you so that you do not disrupt the students who chose to focus on their work. If your device makes any sort of noise in class, **I** get to answer it. This includes responding to texts.

**Calculator:** No calculators should be necessary for this course, but the math department has it listed as a requirement for their sample syllabus. Therefore graphing calculators are permitted on homework assignments, recalling that the work you turn in must be your own and can not be copied from other sources. Recommended calculators are the TI-83 or the TI-84. Do NOT use a TI-89 or a calculator with a built in CAS or Computer Algebra System. Unless explicitly stated otherwise, all calculators are strictly prohibited on tests. Having a calculator on your desk during a test (unless specified by me) will result in a score of "0" on that exam. This includes cell phones and other electronics with calculator capabilities.

**Attendance:** High student attendance makes me feel loved. Attendance is taken whenever we meet for class; any more than six absences will be considered excessive. Students

who miss an excessive number of classes before the drop deadline may be dropped from the course. Your attendance will be considered in borderline grade cases. Note that attendance itself does NOT count as a grade.

**Redemption Points:** I will keep a course roster in my office. For every day you visit my office (other than the day before or the day of a test) and discuss the course material thoroughly with me, you may write the date next to your name on the roster. Each date that you write next to your name corresponds to one "Redemption point". I will write the date on the sheet for you if you cannot make it to my office and we do substantial work via email. You can earn no more than one Redemption Point per day. Redemption points will be totaled at the end of the semester and may be used to redeem points that you missed either on the Blackboard assignments or Written Homework assignments. These points work just like extra credit, with the exception that they can not be used to make the final Blackboard homework or written homework scores exceed 100%. Upon handing in the Final Exam, you will be asked how you would like your Redemption points distributed across the two types of assignments. Redemption Points may be revoked due to disrespectful behavior or due to asking one of the questions at the end of this document which are all answered in the syllabus.

**Late Work/Make-Up Policy:** No late Blackboard assignments will be accepted. Any Written Homework assignments that make it to my hands before I have finished grading the stack will be graded. Grades will be posted to Blackboard for written assignments after I have finished grading to let you know when it is too late to submit an assignment. Note that since there is leniency built into the written homework deadline and since online homework is accessible from any device with internet capabilities, absences (for any reason) will not change the due date and the deadlines will not be extended. All tests must be taken during the allotted time period. Tests can be made up only in the case of a verifiable emergency. It is your responsibility to contact me within a reasonable time to request a make-up exam.

**Academic Integrity:** There is nothing that frustrates me more than cheating and academic dishonesty. This is true for exams as well as for homework. All of your work must be your own. I expect you to familiarize yourself with the Honor Code found in the current student handbook. Keep in mind that "Any student who violates this Honor Code or who knowingly assists another to violate this Honor Code shall be subject to discipline." and I will report anyone who knowingly violates the Honor Code. The Honor Code webpage is available online at www.housing.sc.edu/academicintegrity/honorcode.html and it explains that being found responsible for a breech of the Honor Code may come with consequences including mandatory attendance at a four-week Academic Integrity Workshop, suspension, or expulsion.

**Students with Disabilities:** Students who would like to request accommodations for disabilities must talk to me as soon as possible. Students must register with the Office of Student Disability Services (which is conveniently located on the first floor of LeConte) before I can make any accommodations. Any disability accommodation will be followed with appropriate discretion.

## ASSIGNMENTS

**Blackboard Homework:** There will be a homework assignment posted on Blackboard after (approximately) every lecture which is to be completed before lecture begins the next day, with the exception that there will be no homework assignment after "review" lectures or after exams. These are to be completed and submitted on Blackboard and no late Blackboard assignments will be accepted. You will be provided with multiple attempts on the problems. This will help you not fall behind; the course will move quickly! You are permitted to work with other students on these questions, but it is essential that everyone involved works on each problem. It is your responsibility to work through the homework problems in their entirety in order to gain mastery of the material. If you experience technical difficulties accessing Blackboard, please contact Blackboard help. All other questions should be directed towards me, a tutor, or a fellow student in an appropriate time frame.

**Written Homework:** Periodically, there will be a Written Homework assignment due on Thursday. These are to be handed in to me in Thursday's lecture. You are permitted to work with other students on Written Homework assignments, but it is essential that everyone involved works on each problem. It is your responsibility to work through the homework problems in their entirety in order to gain mastery of the material. Your solutions should also be your own; I do not want identical solutions from two students who worked together. I suggest that you discuss the problems in a group, but write your solutions separately. If I detect that any Written Homework has been mindlessly copied, this will be considered cheating. I will grade at least one solution in each Written Homework assignment. Please indicated clearly which solutions go to which problems. If I cannot locate your solution to the problem that I am grading, you will receive a 0 for that problem. If I do not grade every problem of an assignment, there will be some portion of the credit given for having attempted the ungraded problems.

If your assignment spans multiple pages, these pages must be affixed to each other with a staple, paper clip, binder clip, or other semi-permanent device. Folding the pages together is unacceptable. Edges of the paper are to be straight and free of any ruffle from being torn out of a spiral bound notebook. Failure to affix multiple pages together or submitting an assignment on non-rectangular paper will result in a grade deduction of 20% on that assignment (40% if ruffley-edged pages are not appropriately joined). Written Homework assignments must also have the student's name written clearly at the top of the first page. Homeworks without a legible name written at the top will not be graded.

**Tests:** Anything taught in class is fair game for the tests. All tests are independent work and no group work is permitted in any form. Tests will be taken in class during the allotted time period. Tests can be made up only in the case of a verifiable emergency. It is your responsibility to contact me within a reasonable time to request a make-up exam.

**Final Exam:** The final exam is cumulative and will take place on **7 DEC 2016, in LeConte 112 from 4:00pm to 6:30pm.** Do not plan on leaving town before this day; this exam will NOT be administered before the scheduled time. Anything that was taught during the semester is a valid topic for an exam question.

## EVALUATION

Your final grade will be determined as follows:

| | |
|---|---|
| Blackboard Homework | 20% |
| Written Homework | 15% |
| Test 1 | 10% |
| Test 2 | 10% |
| Test 3 | 10% |
| Test 4 | 10% |
| Test 5 | 10% |
| Final Exam | 15% |

Final grades will use the following scale:

| | |
|---|---|
| A | $[90, \infty)$ |
| B+ | $[87, 90)$ |
| B | $[80, 87)$ |
| C+ | $[77, 80)$ |
| C | $[70, 77)$ |
| D+ | $[67, 70)$ |
| D | $[60, 67)$ |
| F | $(-\infty, 60)$ |

No grades of "I" (incompletes) are expected for this course.

Do not expect to be "bumped" at the end of the term. A 69 is not a C.

Additionally all grades will be posted to Blackboard, so please do not flood my inbox with "what is my grade?" emails towards the end of the semester.

## SUPPORT

There are several resources available for math students.

- My office hours

- Other MATH 111I students; there is a student lounge in LeConte 311 with a chalk-board and space for students to meet and study together

- Free tutoring is available in LC 105; they are generally in there Monday-Thursday 10am-3pm, but times may vary. Check the schedule.

- Student Success Center  Offers free tutoring and free 1-on-1 ONLINE tutoring. (http://www.sa.sc.edu/ssc/)

- Khan Academy is a free resource conveniently available on the internet and they discuss many of the same topics.

## QUESTIONS

I love answering math questions but I do not like to repeat myself over and over again on logistics. Here are some standard answers to some frequently asked (but uninteresting) questions. Since all of these answers are covered in the syllabus, asking me any of these questions forfeits one Redemption Point for each offense. In that case, I also reserve the right to add as much sarcasm as I possibly can to a verbal or emailed reply. I am not to be held responsible for rolling my eyes to any of these. (But no, you cannot get "negative" Redemption Points overall, so don't worry.)

*Where is your office? What are your office hours?*

LeConte 300K 10:00am-11:00am Mondays, 8:00am-9:00am Tuesdays and Thursdays.

*What is my grade?*

Your grade is posted on Blackboard.

*Can I turn in this assignment late? Can I get an extension on this assignment?*

For a Written Homework when I have not finished grading the stack of assignments, you may hand in the assignment and I will grade it. You will know if I have finished grading the stack because grades will be on Blackboard when I'm done. After that point, your work will not be graded. All other assignments have strict deadlines that will not be moved.

*I have to [be elsewhere] during class. Is it okay if I miss class?*

Yes, but you are still responsible for the material and the completion of the homework for the section. I will not move the deadline for you. Remember that attendance is not part of your grade.

*Is this going to be on the test?*

Why would I teach you material and then not expect you to know it? This could very well be on the test!

*I came by your office at [time other than the declared office hours] and you weren't there or you told me to email you. How am I supposed to get my questions answered when you won't help?*

Contrary to popular belief, I do have a life as well as my own classwork. My office hours are designated times when you get priority. Outside of that, I \*may\* be able to help you when you drop in, or I may have other responsibilities. If you schedule an appointment with me, I will set that time aside for you. Other than that, there are no guarantees.

*Can you make the test easy/easier?*

The tests are written at an appropriate level for the class. Anything much easier/harder would be unfair. If you know the material adequately, you should do fine on the tests.

*I need to pass this class for [reason]. Can I do an extra credit assignment?*

No. We have had points available all semester long and that is the only credit that will be figured into your grade. If you wish to do additional assignments, you are welcome to it. Also, it would be unfair to the other students if you got an extra credit opportunity and they did not. But if it makes you feel better, please consult the Redemption Point policy.

# IMPORTANT DATES

24 AUG 2016 is the last day for students to DROP without a grade of W.

10 OCT 2016 is the last day for students to DROP or withdraw without a grade of WF.

The following schedule is very tentative and is subject to change throughout the semester.

| | Monday (M) | Tuesday (T) | Wednesday(W) | Thursday(Θ) |
|---|---|---|---|---|
| 15 AUG - 18 AUG | | | | A2: Number line & Intervals |
| 22 AUG - 25 AUG | A2: Number line & Intervals | A3: Integer Exponents | A4: Radicals and Rational Exponents | B2: Factoring Algebraic Expressions |
| 29 AUG - 1 SEPT | B3: Rational Expressions | C1: Solving Basic Equations | C2: Solve Quadratic Equations | C3: Solving Inequalities |
| 5 SEPT - 8 SEPT | No Class | Review | Review | **Test 1** |
| 12 SEPT - 15 SEPT | 1.3: Relationships in Data | 1.4: Functions Describing change | 1.5: Function Notation | 1.6: Graphing Calc'tor & Graph |
| 19 SEPT - 22 SEPT | 1.7: Info from Graphs | 1.8: Model Real Relationships | Review | Review |
| 26 SEPT - 29 SEPT | **Test 2** | 2.1: Ave Rate of Change | 2.2: Const Rate of Change | 2.3: Linear models |
| 3 OCT - 6 OCT | 2.4: Direct Proportionality | 2.6: Info from Linear model | 2.7: Linear Equations | Catch Up |
| 10 OCT - 13 OCT | Review | Review | **Test 3** | No Class |
| 17 OCT - 20 OCT | 3.1: Exponential Growth & Decay | 3.2: Comparing exp models | 3.3: Linear vs. Exp growth | 3.4: Graphs of exp functions |
| 24 OCT - 27 OCT | Catch Up | Review | Review | **Test 4** |
| 31 OCT - 3 NOV | 4.1: Logarithmic Functions | 4.2: Logarithm Laws | 4.4: Natural Log and Exp | 4.5: Models with exp equations |
| 7 NOV - 10 NOV | 4.6 Composition and Inverses | No Class | Catch Up | Review |
| 14 NOV - 17 NOV | Review | **Test 5** | 5.1: Shift & stretch functions | 5.2: Quadratics and their graphs |
| 21 NOV - 24 NOV | 5.3: Max and Min in models | 5.4: Quadratics in models | No Class | No Class |
| 28 NOV - 1 DEC | 6.2: Power functions | Catch Up | Review | Review |
| | | | **FINAL: 7 DEC** | |