

### Basic Course Information

Semester	<b>Summer 2018</b>	Instructor's Name	<b>Caroline Bennett</b>
Course Title & #	<b>Math 91: Intermediate Algebra</b>	Instructor's Email	<b>caroline.bennett@imperial.edu</b>
CRN #	<b>30209</b>	Webpage	<b>N/A</b>
Room	<b>Centinela, B Yard</b>	Office	██████████
Class Dates	<b>6/18/18 – 7/26/18</b>	Office Hours	<b>N/A</b>
Class Days	<b>M T W Th</b>	Office Phone #	██████████
Class Times	<b>4:30 pm – 8:15 pm</b>	Who students should contact if emergency or other absence	██████████
Units	<b>5.0</b>		██████████

### Course Description

A further study of the concepts of algebra. Topics covered include linear and quadratic equations, relations, functions and graphs, radical expressions and equations, logarithmic and exponential functions, conic sections, and sequences and series. (Nontransferable, AA/AS degree only)

### Student Learning Outcomes

1. Solve quadratic equations by factoring, completing the square, and quadratic formula. (ILO2)
2. Solve equations involving radicals. (ILO2)
3. Recognize and graph conic sections from their equations. (ILO2)
4. Perform operations on functions algebraically. (ILO2)
5. Solve an application involving exponential functions. (ILO2, ILO5)

### Course Objectives

1. Demonstrate an understanding of radical expressions and equations.
2. Demonstrate an ability to solve applications, inequalities and absolute value inequalities.
3. Demonstrate an understanding of quadratic functions, including graphing and equations.
4. Demonstrate an understanding of functions and relations, including one-to-one functions.
5. Demonstrate an understanding of logarithmic and exponential functions and their graphs.
6. Classify and graph ellipses, parabolas, and hyperbolas.
7. Demonstrate an understanding of sequences and series and their operations.

### Textbooks & Other Materials

CALCULATOR: A scientific calculator is **required**. **NO** graphing calculators or cell phones on exams.

TEXT (required): Lial, Margaret, John Hornsby, and Terry McGinnis (2012). *Intermediate Algebra (Custom Edition for Coastline Community Colleges, adapted from 11<sup>th</sup> and 12<sup>th</sup> ed.)*. Pearson. ISBN: 978-0-321729385

### Course Grading Based on Course Objectives

**EVALUATION:**

Attendance & Class Participation	100
Pre-Requisite Quizzes	80
Quizzes (10 x 14 pts. each)	140
4 Exams × 120 points each	480
Final Exam (cumulative)	+ 200
	1000

**GRADING SCALE**

900 – 1000	A
800 – 899	B
700 – 799	C
600 – 699	D
Below 600	F

The grade that is earned, according to the point scale above, is the grade that will be received. Grades are not subjective. Grades are not negotiable. All students will be treated equally.

**NOTE:** The final exam in this course is cumulative and mandatory for all students.

~~**NOTE:** Math 91 has a “common final”, which means every Math 91 student from every section takes exactly the same final exam, which is written by one or more instructors not currently teaching Math 91 that particular semester. This promotes fairness and consistency across all Math 91 sections.~~

### Course Requirements and Instructional Methods

**PRE-TEST:** A series of pre-requisite quizzes will be given during the first week or two of class, to help students assess their readiness for Math 91. Any student who receives less than 100% on any of these quizzes may raise their score to 100% by working through the corresponding *pre-requisite skills worksheets* (these will be made available after each pre-requisite quiz). **AS WITH ALL MATH COURSES, PREREQUISITE SKILLS ARE CRUCIAL FOR YOUR SUCCESS.**

**EXAMS AND QUIZZES** closely reflect the material covered in class and on the homework. A tentative exam schedule is provided in this syllabus; however, exam dates (with the exception of the final exam) may be subject to change, in accordance with the pace of the class. If an exam date is changed, you will be notified sufficiently in advance. Quiz dates are not listed in the calendar, but will be announced weekly.

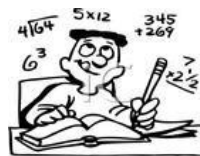
**QUIZZES** occur every week in which there is not an exam (and even during exam weeks during summer/winter sessions). Quizzes come directly from homework problems, and they are **open-note** (not open-book). **Students may work in groups** of up to 3 during quizzes (not for exams). All group members from each group receive the same quiz score.

**MAKE-UPS:** There are no make-up exams. Do not miss a scheduled exam. No exam scores will be “dropped”. However, your **lowest regular exam score (excluding the Final Exam) will be replaced by your Final Exam score (by percentage) if that exceeds your lowest exam score.** If you miss an exam, then that will count as your “lowest” score, to be replaced by your final exam score.

**OUT OF CLASS ASSIGNMENTS:** The Department of Education policy states that one (1) credit hour is the amount of student work that reasonably approximates not less than one hour of class time and two (2) hours of out-of-class time per week over the span of a semester. The Western Association of Schools and Colleges (WASC) has adopted a similar requirement. **Since this is a 5 unit class, this means that you should expect and plan for a minimum of 10 – 20 hours to be spent working on algebra *outside of class* each week.**



## HOMEWORK



HOMEWORK should always be taken seriously in a math class. Math is a skill that you can become good at by *practicing it*. Coming to class and taking good notes is important, but doing homework is what deepens your understanding and sharpens your skills. **Repetition “makes it stick”**. Homework also helps you assess your own problem areas. When you struggle with homework problems, it will help you to ask more informed questions during the following class (instead of just saying “I’m lost” or “I can’t do this”), so that I or a tutor can better help you.

You are expected to keep up and practice the new material learned each day before the following class period. Generally, odd-numbered exercises will be assigned from the text as practice for each section that we cover, so that you may practice and reinforce what we learn in class each day, and check your answers as you practice. The textbook practice problems are not collected for points. This is **your** opportunity to practice and master each skill we cover in class, and to identify areas that you may need more help with.

In lieu of collecting homework for points, in-class “Homework Quizzes” will occur frequently (1-2 per week), consisting of problems **directly** from the homework exercises. Therefore, the best way to prepare for the Homework Quizzes will be to stay caught up with the textbook exercises. Furthermore, exam problems will be based mostly off of the homework problems; therefore, the textbook exercises provide you with vital practice for both the quizzes and exams. In short, **the textbook exercises are well worth a significant investment of your time, even though it is not collected for points.**

Math is best learned when it is practiced regularly. **The 6-week summer session is extremely fast-paced**. We cannot omit any material. We must cover everything that is covered in the regular 16-week semester, but do it in 6 weeks, which means we will move at **roughly 2.5 times the pace** of a regular fall/spring semester. Therefore, **it is a very bad idea to wait until the weekend to start your homework.**

One of the smartest things you can do is structure a time in your daily schedule that will be devoted to working on math outside of class (every day – not just when an exam is coming up).

In fact, **you should always begin your homework as soon as possible after each class**, especially if math is a difficult subject for you. Here are some further tips:

- 1) If there is a particular homework problem you would really like to see in class, ask me before or at the beginning of class. I will try to accommodate requests if there is time; if there is not sufficient time, then we can arrange to meet after or outside of class for help.
- 2) Take advantage of the free tutoring available through Denis Montoya. Keep an organized list of your questions/problems that you are stuck on, so that you can make the most effective use of your tutoring time.

## Attendance

- A student who fails to attend the first meeting of a class or does not complete the first mandatory activity of an online class will be dropped by the instructor as of the first official meeting of that class. Should readmission be desired, the student's status will be the same as that of any other student who desires to add a class. It is the student's responsibility to drop or officially withdraw from the class. See General Catalog for details.
- Regular attendance in all classes is expected of all students. A student whose continuous, unexcused absences exceed the number of hours the class is scheduled to meet per week may be dropped. For online courses, students who fail to complete required activities for two consecutive weeks may be considered to have excessive absences and may be dropped.
- Absences attributed to the representation of the college at officially approved events (conferences, contests, and field trips) will be counted as 'excused' absences.

Any in-class activities or worksheets that are missed due to an absence CANNOT be made up. Furthermore, on quizzes and exams you are responsible for all material covered in class, regardless of whether or not you were here. Therefore, if you do miss class, you should obtain lecture notes from a classmate, and obtain any worksheets or other materials you missed from the instructor (although, you will not get points for them, since they fall under the heading of "Attendance & Class Participation")

Although you may be dropped for excessive absences, you should never *assume* the instructor has dropped you if you simply stop showing up. It is your responsibility to ensure that you have dropped through WebSTAR by the deadline (July 17, 2018) to receive a "W" instead of a failing grade.

## Classroom Etiquette

**School is place to act with respect.** Remember that different students have different paces and styles of learning, and that all students have the right to ask questions in class. As a student, you have the right to a safe and comfortable learning environment. **You do not have the right to impinge on other students' learning. Talking or other disruptive classroom behavior WILL affect your grade.**

Students who disrupt or interfere with a class may be sent out of the room and required to meet with the Campus Disciplinary Officer before returning to continue with coursework. For further information, refer to the Standards of Student Conduct on pages 43-44 of the 2016-2017 General Catalog.

### **Attendance & Class Participation points:**

- You don't receive points just for attending class or lose points just for missing class, per se. However, **several in-class activities will be worth points which you can only receive if you are in class that day.** Any activities you miss by being absent CANNOT be "made up".
- Unlike exam points and homework points, **class work points can be both earned and lost.** Points are lost through disrespectful or disruptive behavior such as talking in class, leaving class early, answering cell phones, etc.

**Best ways to lose Attendance & Class Participation points during class:**

- Pack up and leave during lecture.
- Wear headphones/earbuds in class.
- Use your phone during class.
- Talk with classmates during lecture.
- Dishonesty (e.g., putting names of absent classmates on group work or quizzes).

**Academic Honesty**

- Plagiarism is to take and present as one's own the writings or ideas of others, without citing the source. You should understand the concept of plagiarism and keep it in mind when taking exams and preparing written materials. If you do not understand how to correctly 'cite a source', you must ask for help.
- Cheating is defined as fraud, deceit, or dishonesty in an academic assignment or using or attempting to use materials, or assisting others in using materials, which are prohibited or inappropriate in the context of the academic assignment in question.
- Anyone caught cheating or will receive a zero (0) on the exam or assignment, and the instructor may report the incident to the Campus Disciplinary Officer, who may place related documentation in a file. Repeated acts of cheating may result in an F in the course and/or disciplinary action. Please refer to the General School Catalog for more information on academic dishonesty or other misconduct. Acts of cheating include, but are not limited to the following: (a) plagiarism; (b) copying or attempting to copy from others during an examination or on an assignment; (c) communicating test information with another person during an examination; (d) allowing others to do an assignment or portion of an assignment, (e) use of a commercial term paper service
- The consequences of academic dishonesty are severe and may include the possibility of expulsion. For further information, refer to the Standards of Student Conduct on p. 36 and pp. 43-44 of the 2016-2017 General Catalog.

**Student Rights and Responsibilities**

Students have the right to experience a positive learning environment and due process. For further information regarding student rights and responsibilities please refer to the IVC General Catalog available online at [http://www.imperial.edu/index.php?option=com\\_docman&task=doc\\_download&gid=4516&Itemid=762](http://www.imperial.edu/index.php?option=com_docman&task=doc_download&gid=4516&Itemid=762)

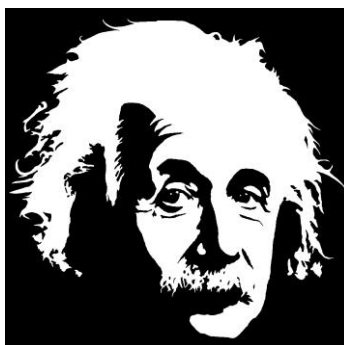
**Anticipated Class Schedule / Calendar**

(\*With the exception of the Final Exam, these dates are tentative and subject to change with advance notice!)

<b>Monday</b>	<b>Tuesday</b>	<b>Wednesday</b>	<b>Thursday</b>
6/18 8.1 – 8.2 Assessment; Functions	6/19 8.3 – 8.4 Assessment; Functions	6/20 9.1 – 9.2 Inequalities	6/21 9.3 – 9.4 Inequalities
6/25 10.1 – 10.2 Roots and Radicals	6/26 <b>Review; Exam 1</b> Roots and Radicals	6/27 10.3 – 10.4 Roots and Radicals	6/28 10.5 – 10.6 Roots and Radicals
7/2 10.7 – 11.1 Roots & Radicals; Quadratics	7/3 11.1 – 11.2 Quadratics	7/4 <b>HOLIDAY</b> ☺ <b>NO CLASS!</b> ☺	7/5 <b>Review; Exam 2</b> Quadratics
7/9 11.3 – 11.4 Quadratics	7/10 11.4 – 11.5 Quadratics	7/11 12.1 – 12.2 Exponential/Log Functions	7/12 <b>Review; Exam 3</b> Exponential/Log Functions
7/16 12.3 – 12.4 Exponential/Log Functions	7/17 12.5 – 13.1 Exponential/Log Functions	7/18 13.2 – 13.3 Conic Sections	7/19 <b>Review; Exam 4</b> Conic Sections
7/23 13.4 – 13.5 Conic Sections	7/24 14.1 – 14.2 Sequences and Series	7/25 14.3 – 14.4; Sequences/Series; <b>Review</b>	7/26 <b>FINAL EXAM</b>

**IMPORTANT DATES AND DEADLINES:**

- June 20 Last day to add a class
- June 24 Last day to withdraw without owing fees and/or be eligible for a refund
- July 17 Last day to withdraw and receive a “W”
- July 26 Final Exam (comprehensive)



*“Never regard your study as a duty, but as the enviable opportunity to learn to know the liberating influence of beauty in the realm of the spirit for your own personal joy and to the profit of the community to which your later work belongs.” -- Albert Einstein*