Course Information

Math E-8 College Algebra
Fall 2009

Welcome!

Welcome to Math E-8 College Algebra. The instructor is Eric Connally. The teaching assistant is Elaine Rudel.

Updates, Online Handouts, and the Course Website

- This information is subject to change. For updates and contact information, refer to the links on the course website, *http://users.rcn.com/econnally/math/courses/e8* .
- Handouts, including notes, homework and exam solutions, will be posted online. See the course website for links.

Homework, Quizzes, & Exams

- Exam and homework schedules have been provided.
- Exams will be held during the second part of class. The final will be a full three-hour exam.
- Your homework will not be corrected. Instead, complete homework solutions will be posted on the website. Your homework average is based on the weekly quizzes.
- A homework-based quiz midway through each class, including exam days. Quizzes are open-book, open-notes.

Makeups

- Optional makeup exams have been scheduled.
- Optional makeup quizzes are held during undergraduate section.
- You are free to take any makeup quiz or exam, regardless your original score. Your grade is based on the higher of the original score and the makeup score. This means that makeups are risk-free.
- Note that makeups are offered only at the scheduled times. No additional arrangements will be made for students who miss quizzes, exams, or makeups.

Section

- Undergraduate section attendance is strongly encouraged. Keep in mind that if you choose not to attend a section, you won't be eligible to take that evening's makeup quiz.
- *Students taking the course for graduate credit must attend a **separate** graduate section.*

Solutions and Practice Material

- Practice material, including quizzes and exams from previous offerings of this course, are provided. Since the course changes from term to term, these materials, while hopefully useful, are not necessarily an accurate reflection of the quizzes and exams you will take.
- Complete solutions to all quizzes, exams, makeups, practice materials, homework assignments, and any problems distributed during class, will be posted online.

Grades

- Your grade is based on your quizzes, exams, and final.
- The final is worth at least 40% of your grade.
- Your lowest three quizzes will be dropped.
- If higher, your grade on the practice final replaces your lowest hourly exam grade.
- Your overall quiz average and each hourly exam are weighted equally.
- Students attending the graduate sections (for graduate credit) will receive a numerical grade from their section leader. That grade will be worth 10% of the final average; the remaining 90% will be calculated as above.

Textbook

The text is a draft available online, free of charge. Refer to the course website for links.

Calculators

You will need a graphing or a scientific calculator. The instructor is most familiar with models by Texas Instruments (TI). Used calculators can often be found online.

Syllabus

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Fall 2009

This syllabus is tentative and subject to change. Consult the course information sheet for details.

- The homework schedule refers to problem numbers in your text.
- Homework assigned for Class 1 should be completed by Class 2, and so on.
- Homework is not collected. Instead, your homework grade is based on the weekly quizzes.
- Complete solutions to all problems in the text are available online.
- Quizzes are held during every class, makeup quizzes during undergraduate section.
- The quiz for Class 2 is based on homework assigned for Class 1, and so on.
- Exams, like quizzes, are open book, open notes.
- An exam schedule is also provided.
- Exams and makeups will be held during the second part of class.
- You are welcome to use a scientific of graphing calculator during quizzes and exams.

Exam Schedule

exam	*date*	*classes covered*	*time*
Exam 1	October 1	1–3	second part of class
Makeup 1	October 25	1–5	second part of class
Exam 2	November 5	1–8	second part of class
Makeup 2	November 19	1–10	second part of class
Practice Final	December 10	comprehensive	all 3 hours
Final	December 17	comprehensive	all 3 hours

Homework Schedule

Class 1 · Sep. 3 · *Basic Ideas of Algebra*

§0.1	4, 7, 11, 26, 30, 33–38, 44–47, 53–55
§0.2	5, 13, 20–24, 28–30, 34, 35
§0.3	1–11, 23–25, 30–31, 37–40, 47–50
§0.4	5–10, 16–22, 24–30, 38, 42–44, 48, 56
§0.5	3–6, 15–18, 25–29, 34, 37, 41, 42

Class 2 · Sep. 10 · *Functions*

§1.1	1–16, 26–30, 34–37, 39
§1.2	5, 7–15, 17–25, 30–32, 37–40
§1.3	3–9, 13, 16, 17
§1.4	3–10, 15, 19, 22, 26, 27, 31–33

Class 3 · Sep. 17 · *Linear Functions*

§2.1	9–15, 32–36, 39, 46–52, 58–62
§2.2	6–12, 25–29, 35–39, 44, 59–61
§2.3	17–22, 52–58, 67, 73–76, 82–86, 94–96
§2.4	3–5, 11–16, 24–26, 41–43, 54–56, 64–66, 71–73, 89–92, 97, 98
§2.5	2, 8, 14, 23, 30–34, 36, 48
§2.6	1–6, 22–23, 34–35, 44, 46, 47

Class 4 · Sep. 24 · *Power Functions*

§3.1	3–8, 13–15, 23–36, 39
§3.2	7–10, 21–38, 45. 46. 49–54
§3.3	1–12, 27–32, 45, 47, 48–53, 65
Tools	*Excellent resource if you're rusty*

Class 5 · Oct. 1 **(Exam 1)** · *Modeling*

§3.4	7–20, 24–30, 34–37

Class 6 · Oct. 8 · *More on Functions*

§4.1	1–10, 23–26
§4.2	1–4, 9–14, 19–22, 28–34, 40, 44–47
§4.3	3–10, 14–21

Class 7 · Oct. 15 **(Makeup 1)** · *Quadratics*

§5.1	5–8, 21–24, 29–41, 48–51, 55, 63, 64

Class 8 · Oct. 22 · *Quadratics*

§5.2	5–12, 24–27, 33–37, 49–50
§5.3	18–21, 55–58, 66–68
§5.4	5–10, 27–31, 35–37, 52, 53, 56, 57
Tools	*Excellent resource if you're rusty*

Class 9 · Oct. 29 · *Exponentials*

§6.1	3–17, 21–24, 31–33, 40–42
§6.2	5–18, 33–36, 40, 42
§6.3	1–12, 24–28, 44–47
§6.4	1–17, 39–42, 46–50, 61–64

Class 10 · Nov. 5 **(Exam 2)** · *Modeling*

§6.5	1–6, 13–15, 19, 20

Class 11 · Nov. 12 · *Polynomials*

§7.1	1–4, 8–12, 17–20, 27–29, 34–40, 43–45, 50–52
§7.2	6–12, 20–26, 31–34, 38–40, 44–46
§7.3	7–18, 27–30, 34–37, 40–43
§7.4	1–3, 12–15, 17, 19–21

Class 12 · Nov. 19 **(Makeup 2)** · *Polynomials*

§8.1	1–6, 13–17

Holiday · Nov. 26 · *Thanksgiving*

Class 13 · Dec. 3 · *Rationals*

§8.2	1–5, 12–15, 23–28, 31–38, 45–48, 54–59, 60–63, 69–74
§8.3	4–8, 16–18, 27–30, 35–38, 45–47, 51
§9.1	3–10, 16, 17, 22, 24
§9.2	4–6, 11–15, 22–24, 28–34, 39–42
§9.3	1–4, 10–14, 16–18, 21, 22

Class 14 · Dec. 10 **(Prac. final)** · *3 hours*

Class 15 · Dec. 17 · **Final Exam** · *3 hours*