MATH 82 Algebraic Foundations
4 Credits
Time: TR 11:30 A.M.~1:20 P.M.
Classroom: Mana’opono 114
CRN 62265

INSTRUCTOR: Andrew Won
OFFICE: Hale Kako’o 107
OFFICE HOURS: MW 12~1 P.M. and TR 10~11 A.M.
TELEPHONE: (808) 236-9280
E-MAIL: won618@hawaii.edu
EFFECTIVE DATE: January 8~May 11, Spring 2018
MML Course ID: won83867

Windward Community College Mission Statement

Windward Community College offers innovative programs in the arts and sciences and opportunities to gain knowledge and understanding of Hawai‘i and its unique heritage. With a special commitment to support the access and educational needs of Native Hawaiians, we provide O’ahu’s Ko‘olau region and beyond with liberal arts, career and lifelong learning in a supportive and challenging environment — inspiring students to excellence.

Catalog Description

MATH 82 covers elementary algebra topics. Topics include linear equations and inequalities, graphing, linear systems, properties of exponents, operations on polynomials, factoring, rational and radical expressions and equations, quadratic equations, and applications. (4 hours lecture)

Pre-Requisite(s): Satisfactory Placement, or a Grade of ”C” or better in Math 21, Math 21B, Math 24, Math 28, or Math 75X. Co-Requisite(s): None

Activities Required at Scheduled Times Other Than Class Times

Homework; consultation with instructor.

STUDENT LEARNING OUTCOMES

The student learning outcomes for the course are:

1. Use algebraic techniques to analyze and solve applied problems
2. Graph linear and quadratic equations
3. Solve equations, inequalities, and systems
4. Utilize precise mathematical language and symbols to effectively communicate mathematics in written and/or oral form

Note: All SLOs assessments are embedded in class activities, homework, quizzes, or Exams.

This course syllabus is subject to change.
COURSE CONTENT

Concepts or Topics (What students should know or understand)

- Linear Equations and Inequalities in One Variable
- Linear Equations and Inequalities in Two Variables
- Functions
- Systems of Linear Equations
- Exponents and Polynomials
- Factoring and Applications
- Rational Expressions and Applications
- Roots and Radicals
- Quadratic Equations

Skills or Competencies/Responsibilities of Students. Success in this course will be enhanced by:

1. a positive, inquiring attitude towards learning mathematics;
2. setting aside adequate time for studying and working of problems;
3. reading the text carefully and making use of other learning materials whenever necessary;
4. seeking assistance from the instructor and the Math Lab personnel whenever necessary;
5. completing assignments by the designated date;
6. regular class attendance, participation and maintaining accurate class notes.

Course Tasks

The mode of instruction is primarily through class activities, in addition to discussion-problem solving, where the initial portion of each class period may be utilized to discuss and clarify any questions from the preceding class meeting and/or homework, and the remaining portion is used to discuss new material. Lectures, directed student explorations, group work, appropriate technologies, and projects will also be used as appropriate. After the completion of each unit, a review and an exam will be conducted.

The student will demonstrate competency in the objectives by participating in and completing all class activities, by completing and turning in all assignments as requested, by taking chapter tests, and by taking a final exam over concepts and skills covered in the entire course. Class activities, chapter tests, and the final exam are to be taken in the classroom and without any references unless otherwise stipulated by the instructor.

It is the student's responsibility to obtain and complete all assignments that are given in any class meeting for which the student is unable to attend. Unless permission is granted by the instructor beforehand, assignments and tests must be completed and submitted to the instructor at the specified date and time.

Points will be assigned to each graded homework assignment, class activity, and test as follows:

- **Class Activities.** As the primary mode of instruction for this course is class activities, class participation will be required throughout the semester. **There will be no make-up for missed class activities.** Class activities may include, but not limited to:

  o Quizzes (unannounced)
  o Short report
  o Worksheet
  o Teaching
  o Presentation
  o Group discussion

This course syllabus is subject to change.
• **Homework.** There will be weekly homework assignments. All homework must be turned in at the designated date. **No late homework will be accepted.** If you miss a class when homework is due, you must arrange to deliver your homework to the instructor before the deadline.

• **Unit Exams** Five unit-exams are given in class at the end of each unit. A unit exam will be 75 minutes in length and will be scored on a 100-point scale. **The student must achieve a minimum of 70% of the possible points for each unit exam.** Without this minimum requirement, a passing grade for the course is not possible.

• **Practice Tests.** At least a day before each chapter test you will be assigned a practice test as preparation. This practice test must be fully completed on the day of the chapter test in order to take the test.

• **Retests.** After each unit exam, a unit retest deadline will be given. One retest is allowed without penalty for each unit exam if it is done by the specified unit retest deadline. The better of the two exam scores will count towards your grade. No retests will be given after the unit retest deadline. Retests are arranged by appointments with your instructor.

  To take a retest, all of the following must be met:
  o All problems from the Chapter Test at the end of the chapter must be completed and shown to the instructor.
  o The student must meet with the instructor to review mistakes made on the first form of the test taken.
  o Additional math activities as designated by the instructor must be completed.
  o The retest must be taken by the designated unit retest deadline.

• **Final Exam.** The final exam will cover the concepts and skills in the entire course. The final exam is two hours in length. **The student must achieve a minimum of 60% of the possible points for the final exam.** Without this minimum requirement, a passing grade for the course is not possible. **If you do not take the final exam, you will automatically receive a grade of F for this course.**

  Retesting for the final exam is available if the 60% minimum is not met and the 70% minimum per unit exam was met. In that event, a retest of the final exam is possible, however, the maximum score of the retest is 60% of the possible points for the final exam.

• **Make-up.** Make-up opportunity for a chapter test or final exam will be possible only upon a timely presentation of a serious and justified explanation of the student’s absence from the class test. The instructor has the right to request documentation of the student’s absence from the class and to determine if the absence from the class test is justified. A make-up test must be taken within one week of the in-class test unless otherwise specified by the instructor.

**Notes:**

  o If you are unable to attend class on an exam day, discuss your situation with me as soon as possible before the exam day. It may be possible for you to take the exam earlier than the specified day/time.
  o If you unexpectedly must be absent on an exam day, notify me before the end of the day via email. If the reason is justified, then a make-up exam will be scheduled.
  o For each student, no more than one make-up exam may be granted.

This course syllabus is subject to change.
• **Evaluation.**

<table>
<thead>
<tr>
<th>Class Activity</th>
<th>10%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Homework</td>
<td>20%</td>
</tr>
<tr>
<td>Unit Exams</td>
<td>50%</td>
</tr>
<tr>
<td>Final Exam</td>
<td>20%</td>
</tr>
</tbody>
</table>

**Course grade.** If the student has achieved a minimum of 70% of the possible points for each unit exam and a minimum of 60% of the possible points for the final exam, then a letter grade for the course will be assigned according to the level of achievement as provided in the table below:

<table>
<thead>
<tr>
<th>Letter Grade</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>90%-100% of the cumulative points possible</td>
</tr>
<tr>
<td>B</td>
<td>80%-89% of the cumulative points possible</td>
</tr>
<tr>
<td>C</td>
<td>70%-79% of the cumulative points possible</td>
</tr>
<tr>
<td>D</td>
<td>60%-69% of the cumulative points possible</td>
</tr>
<tr>
<td>F</td>
<td>Less than 60% of the cumulative points possible</td>
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<tr>
<td>CR</td>
<td>70% or above of the cumulative points possible</td>
</tr>
<tr>
<td>NC</td>
<td>Less than 70% of the cumulative points possible</td>
</tr>
<tr>
<td>W</td>
<td>Official Withdrawal</td>
</tr>
<tr>
<td>I</td>
<td>See below</td>
</tr>
</tbody>
</table>

- The **N grade will not be given** in this course.
- CR/NC grades require written instructor consent. Students must apply for CR/NC grading option at the Admissions Office by the posted deadline. If a student does not apply for CR/NC grading option at the Admissions Office by the required deadline and if s/he does not withdraw, a letter grade (A, B, C, D, or F) will be assigned for the course.
- The **W grade is given only when the student officially withdraws from the course by the posted deadline.**
- The **I grade is a temporary grade given at the instructor's option when a student has failed to complete a small part of a course because of circumstances beyond his or her control.** A student may qualify for the I grade if (a) they are unable to take the final exam and (b) taking the final exam could possibly raise their course grade. The I grade is given only after a student’s request and the instructor’s approval.

**Learning Resources and Materials**

- Option 1: Buy the printed textbook from the bookstore with an Access Code included.
- Option 2: Buy access to MyMathLab directly online and get the e-book included.

MATH LAB: La‘akea 220 – free drop-in tutorial assistance
Brainfuse Online Tutorial Assistance: [https://windward.hawaii.edu/brainfuse/](https://windward.hawaii.edu/brainfuse/)
OLA (UH online tutoring program): [https://manoa.hawaii.edu/ola/](https://manoa.hawaii.edu/ola/)
Khan Academy Videos: [https://www.khanacademy.org/math](https://www.khanacademy.org/math)
Ka Piko is WCC’s academic support hub. Please visit: [https://windward.hawaii.edu/kapiko/](https://windward.hawaii.edu/kapiko/)

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**Additional Information**

- **Grading on Homework, Class Activities, Unit Exams, and Final Exam.** To receive full marks for problems done on any graded course work, you must show mathematical steps neatly and completely as well as provide clear written explanations, in full sentences, when it is asked for. Partial credit may be awarded.

- **Absences.** It is your responsibility to attend every class meeting. Even if you are absent, you are responsible for those topics, activities, and examples covered in class that you missed. Furthermore, you are responsible for obtaining any important announcements and assignments given during the class you missed. If you are absent frequently or for an extended period of time, contact the instructor as soon as possible to discuss your situation.

- **Practice.** For each chapter, as you read through each activity, it is recommended that you write down the words, phrase or math symbols and their meanings, formulas, and properties/rules that are important for each activity. It is important for you to know these.

  After each activity has been done in class, try all selected problems in EXERCISES at the end of the activity. The answers to these selected problems are available at the back of the textbook. Then do as many other problems in the same activity as you feel is necessary to help you learn and understand the material and become comfortable with the concepts and/or properties. If you have difficulty solving problems in the exercises, review carefully the discussions in the activity and your class notes. If, after checking these sources and trying to find your mistakes, you are still unable to solve a problem correctly, make a note of the exercise number so that you can ask someone for help with that problem. You are also encouraged to reach out to the instructor for additional assistance.

  Mathematics is not a spectator sport. To succeed in mathematics, you must do problems. It is often necessary to practice a skill more than the instructor requires. For example, a textbook may provide 50 practice problems in a section and the instructor may assign only 25 of them. However, some students may need to do 30, 40, or all problems. If you are an accomplished athlete, musician, or dancer, you know that long hours of practice are necessary to acquire a skill. Do not cheat yourself of the practice you need to develop skills taught in this course.

- **Laulima.** The syllabus, course calendar, homework schedule, grades, etc. are all viewable through Laulima. Check Laulima regularly to stay up to date.

- **Calculators.** Calculator use is not allowed on class activities and exams. Students may use a calculator to speed up some of the arithmetic in their homework, if needed.

- **Communication.** It is your responsibility to stay in communication with the instructor. If you will be unable to make it to class for any reason, please inform your instructor so it may be determined if the absence is excused. The instructor may need to contact you throughout the semester and will do so via email and/or phone. It is your responsibility to check your UH email on a regular basis.

- **Electronic Devices.** The usage of electronic devices, including two-way communications devices such as cell phones, is prohibited during class. (Cell phones must be silenced and put away when entering the classroom.)

This course syllabus is subject to change.
• **MyMathLab (MML).** You are strongly recommended to utilize the online resources provided by Pearson ([https://www.pearsonmylabandmastering.com/northamerica/](https://www.pearsonmylabandmastering.com/northamerica/)). To register for a MML account, you must have an access code (accompanying the printed textbook or purchase solely) and a course ID. (See the course banner at the top of this document for MML Course ID.)

• **Academic dishonesty will not be tolerated.** All suspected cases will be investigated and reported to the Dean. Punishments will vary, but may include failure to the course. See [http://windward.hawaii.edu/Policies/](http://windward.hawaii.edu/Policies/) for more information on the UH system-wide student conduct code.

• **MySuccess.** At Windward community college, we want every student to be successful. MySuccess is a system wide effort that seeks to support students early in the semester when they first begin experiencing difficulty in class. If I feel that you are having difficulty in this course within the first few weeks of the semester (e.g. missing class, missing assignments, or low test scores) and that you would really benefit from being connected to resources outside of the classroom, I may refer you to your assigned counselor. Once referred, MySuccess will:
  
  o Call you and send an email to your Hawaii.edu account to let you know about my referral; and
  o Have the MySuccess team follow up with you by phone or email to find out what kinds of help you might need and connect you with the necessary resources to help you devise a strategy for success.

If I refer you to your assigned counselor, please know that I am doing so in an effort to connect you with all of the help you may need to do well this course. Please be advised that your success in this course is important to me.

**Important College Deadlines**

<table>
<thead>
<tr>
<th>Event</th>
<th>Date</th>
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<tbody>
<tr>
<td>Late Registration/Fee begins, Spring</td>
<td>Jan 8, 2018</td>
</tr>
<tr>
<td>In-Person Add/Drop Fee Begins, Spring</td>
<td>Jan 8, 2018</td>
</tr>
<tr>
<td>Last Day to Add/Late Register, Spring</td>
<td>Jan 12, 2018</td>
</tr>
<tr>
<td>Last Day for 100% Refund, Spring</td>
<td>Jan 12, 2018</td>
</tr>
<tr>
<td>Dr. Martin Luther King Jr. Day</td>
<td>Jan 15, 2018</td>
</tr>
<tr>
<td>Last Day for 50% Refund, Spring</td>
<td>Feb 1, 2018</td>
</tr>
<tr>
<td>Last Day to Withdraw without a &quot;W&quot; Grade, Spring</td>
<td>Feb 1, 2018</td>
</tr>
<tr>
<td>Presidents’ Day</td>
<td>Feb 19, 2018</td>
</tr>
<tr>
<td>Excellence in Education (first Friday in March)</td>
<td>Mar 2, 2018</td>
</tr>
<tr>
<td>Spring Recess</td>
<td>Mar 26~30, 2018</td>
</tr>
<tr>
<td>Last Day to Withdraw with a &quot;W&quot; Grade, Spring</td>
<td>Apr 2, 2018</td>
</tr>
<tr>
<td>Last Day to Establish credit/no-credit and audit options, Spring</td>
<td>Apr 2, 2018</td>
</tr>
</tbody>
</table>

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### Tentative Schedule (Subject to Change)

HW sets will be handed out in the first week.

<table>
<thead>
<tr>
<th>Week of</th>
<th>Class Discussion/Activity/Exams</th>
<th>HW/Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>JAN 8</td>
<td>2.3-2.5</td>
<td>Orientation, Syllabus</td>
</tr>
<tr>
<td>JAN 15</td>
<td>2.6-2.8, 3.1</td>
<td>HW (2.3-2.5) due on Tuesday</td>
</tr>
<tr>
<td>JAN 22</td>
<td>3.2-3.6; Review for Exam1 (1/25)</td>
<td>HW (2.6-2.8, 3.1) due on Tuesday</td>
</tr>
<tr>
<td>JAN 29</td>
<td><strong>Exam 1: CH 1-3 (1/30)</strong>; 4.1-4.3</td>
<td>HW (3.2-3.6) due on Tuesday</td>
</tr>
<tr>
<td>FEB 5</td>
<td>4.4, 5.1-5.3</td>
<td>HW (4.1-4.3) due on Tuesday</td>
</tr>
<tr>
<td>FEB 12</td>
<td>5.4, 5.5, 5.7; Review for Exam 2 Test (2/15)</td>
<td>HW (4.4, 5.1-5.3) due on Tuesday</td>
</tr>
<tr>
<td>FEB 19</td>
<td><strong>Exam 2: CH 4&amp;5 (2/20)</strong>; 6.1, 6.2</td>
<td>HW (5.4, 5.5, 5.7) due on Tuesday</td>
</tr>
<tr>
<td>FEB 26</td>
<td>6.3-6.6; Review for Exam 3 Test (3/1)</td>
<td>HW (6.1, 6.2) due on Tuesday</td>
</tr>
<tr>
<td>MAR 5</td>
<td><strong>Exam 3: CH 6 (3/6)</strong>; 7.1, 7.2</td>
<td>HW (6.3-6.6) due on Tuesday</td>
</tr>
<tr>
<td>MAR 12</td>
<td>7.4-7.6, 8.1; Review for Exam 4 Test (3/15)</td>
<td>HW (7.1, 7.2) due on Tuesday</td>
</tr>
<tr>
<td>MAR 19</td>
<td><strong>Exam 4: CH 7 (3/20)</strong>; 8.2, 8.3</td>
<td>HW (7.4-7.6, 8.1) due on Tuesday</td>
</tr>
<tr>
<td>MAR 26</td>
<td><strong>Spring Break</strong></td>
<td>No Class (3/26~3/30)</td>
</tr>
<tr>
<td>APR 2</td>
<td>8.4-8.7</td>
<td>HW (8.2, 8.3) due on Tuesday</td>
</tr>
<tr>
<td>APR 9</td>
<td>9.1, 9.3</td>
<td>HW (8.4-8.7) due on Tuesday</td>
</tr>
<tr>
<td>APR 16</td>
<td>9.5; Review for Exam 5 Test (4/19)</td>
<td>HW (9.1, 9.3) due on Tuesday</td>
</tr>
<tr>
<td>APR 23</td>
<td><strong>Exam 5: CH 8&amp;9 (4/24)</strong></td>
<td>HW (9.5) due on Tuesday</td>
</tr>
<tr>
<td>APR 30</td>
<td>Review for Final Exam (5/1)</td>
<td>Last day of instruction (5/2)</td>
</tr>
<tr>
<td><strong>May 7</strong></td>
<td><strong>FINAL EXAM (11:30 A.M.–1:30 P.M., 5/10)</strong></td>
<td>No Instruction</td>
</tr>
</tbody>
</table>

### DISABILITIES ACCOMMODATION STATEMENT

*If you have a physical, sensory, health, cognitive, or mental health disability that could limit your ability to fully participate in this class, you are encouraged to contact the Disability Specialist Counselor to discuss reasonable accommodations that will help you succeed in this class.*

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class. Ann Lemke can be reached at 235-7448, lemke@hawaii.edu, or you may stop by Hale ‘Akoakoa 213 for more information.

Title IX

Title IX prohibits discrimination on the basis of sex in education programs and activities that receive federal financial assistance. Specifically, Title IX prohibits sex discrimination; sexual harassment and gender-based harassment, including harassment based on actual or perceived sex, gender, sexual orientation, gender identity, or gender expression; sexual assault; sexual exploitation; domestic violence; dating violence; and stalking. For more information regarding your rights under Title IX, please visit: https://windward.hawaii.edu/Title_IX/.

Windward Community College (WCC) is committed to the pursuit of equal education. If you or someone you know has experienced sex discrimination or gender-based violence, WCC has resources to support you. To speak with someone confidentially, contact Karla Silva-Park, Mental Health Counselor, at 808-235-7468 or karlas@hawaii.edu or Kaahu Alo, Designated Confidential Advocate for Students, at 808-235-7354 or kaahualo@hawaii.edu. To make a formal report, contact the Title IX Coordinator at 808-235-7393 or wcctix@hawaii.edu.