Division of College Readiness
Developmental Mathematics Department
https://learning.hccs.edu/programs/developmental-mathematics

Math 0332: Corequisite Support of Math 1332 | Lecture | 13562
Summer 2020 | 8 Weeks
Online | Online | MW 11 a.m.-12:20 p.m.
3 Credit Hours | 48 hours per semester

Instructor Contact Information

Instructor: Professor: Akpan
Office: Online
HCC Email: anietie.akpan@hccs.edu

Office Phone: 713-718-0000
Office Hours: M-R 9:30 am-9 pm.
Office Location: Online

Please feel free to contact me concerning any problems that you are experiencing in this course. Your performance in my class is very important to me. I am available to hear the concerns and just to discuss course topics.

Instructor’s Preferred Method of Contact
I will respond to emails within 24 hours Monday through Friday; I will reply to weekend messages on Monday mornings.

What’s Exciting About This Course
Online class is fun and excited: you don’t have to drive your car to school, you don’t waste gas, you study at your space, no one gets into your nerves, you take your exam, quiz, and homework at the comfort of your home.

My Personal Welcome
Welcome to business math corequisite support class —I’m delighted that you have chosen this course! One of my passions is to know as much as I can about math in day-to-day life and I can hardly wait to pass that on. I will present the information in the most straightforward way I know, so that you can grasp the concepts and apply them now and hopefully throughout your life.

As you read and wrestle with new ideas and facts that may challenge you, I am available to support you. The fastest way to reach me is by my HCC email. The best way to really discuss issues is in person and I’m available during posted office hours to tackle the questions. My goal is for you to be successful in the college math course. So please visit me or contact me by email whenever you have a question.
Prerequisites/Corequisites

TSIA ABE level 5 or 6; TSIA Math Score 336 – 349 with Intermediate Algebra Diagnostic Score 0 – 3; Math 0106: Pass with “C” or better.

**Corequisites**: MATH 0332 is a corequisite support course for MATH 1332. Students should be aware that sections of these courses are **LINKED**. Therefore, developmental math students who enroll in MATH 0332 must also enroll in the linked section of Math 1332 (in the same semester). Developmental students **must maintain satisfactory attendance in BOTH** Math 0332 and Math 1332. If a developmental student withdraws or drops from one course in the corequisite pair, then he/she will be dropped from the other linked course. Corequisite courses must be taken during the same semester. Please carefully read and consider the repeater policy in the **HCCS Student Handbook**.

Canvas Learning Management System

This section of MATH 0332 will use **Canvas** ([https://eagleonline.hccs.edu](https://eagleonline.hccs.edu)) to supplement in-class assignments, exams, and activities. **Your frequent visit to the Canvas is highly recommended as the source of my communicating with you will be through Canvas.** HCCS Open Lab locations may be used to access the Internet and Canvas. **USE FIREFOX OR CHROME AS THE INTERNET BROWSER.**
Instructional Materials

Textbook Information
This class has No specific Textbook, but math 1332 textbook will be used. Materials covered will be broken down and expand by your math1332 instructor

Temporary Free Access to E-Book

For temporary free access to MyLab Math, the online eBook and workbook, go to https://www.pearsonmylabandmastering.com and register using the MyLab Math Course ID: akpan33965. Please Note: Use the same Code from Math 1332 plus my Code to complete your homework. Your Homework grade is 10% of your overall grade. You do not wait until the end of the semester to start doing your homework. The class is only 8 weeks. If you include exams and the final exam, we have barely 7 weeks.

Other Instructional Resources

Students must have access to the workbook and Math 1332 textbook. Any additional supplemental material will be provided by the instructor as needed.

Tutoring
HCC provides free, confidential, and convenient academic support, including writing critiques, to HCC students in an online environment and on campus. Tutoring is provided by HCC personnel in order to ensure that it is contextual and appropriate. Visit the HCC Tutoring Services website for services provided.

Libraries
The HCC Library System consists of 9 libraries and 6 Electronic Resource Centers (ERCs) that are inviting places to study and collaborate on projects. Librarians are available both at the libraries and online to show you how to locate and use the resources you need. The libraries maintain a large selection of electronic resources as well as collections of books, magazines, newspapers, and audiovisual materials. The portal to all libraries’ resources and services is the HCCS library web page at http://library.hccs.edu.

Supplementary Instruction
Supplemental Instruction is an academic enrichment and support program that uses peer-assisted study sessions to improve student retention and success in historically difficult courses. Peer Support is provided by students who have already succeeded in completion of the specified course, and who earned a grade of A or B. Find details at http://www.hccs.edu/resources-for/current-students-supplemental-instruction/.
Course Overview

Contemporary Mathematics is a course designed for liberal arts, non-mathematics, non-science, and non-business majors. The course provides students with an appreciation of the history, art, and beauty of mathematics in the world around us. Topics include an examination of sets with applications, an introduction to logic and truth tables, probability and statistics, financial management, mathematical modeling and its applications.

Core Curriculum Objectives (CCOs)

Given the rapid evolution of necessary knowledge and skills and the need to take into account global, national, state, and local cultures, the core curriculum must ensure that students will develop the essential knowledge and skills they need to be successful in college, in a career, in their communities, and in life. Through the Texas Core Curriculum, students will gain a foundation of knowledge of human cultures and the physical and natural world, develop principles of personal and social responsibility for living in a diverse world, and advance intellectual and practical skills that are essential for all learning.

- **Critical Thinking**: to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information.
- **Communication Skills**: to include effective development, interpretation and expression of ideas through written, oral and visual communication.
- **Quantitative and Empirical Literacy**: to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions.

Program Student Learning Outcomes (PSLOs)

Students in the Mathematics Program will:
1. Engage in problem solving strategies, such as organizing information, drawing diagrams and modeling.
2. Use symbolic representations to solve problems. This includes manipulating formulas, solving equations, and graphing lines.
3. Build the foundational mathematical skills that will enable a student to successfully complete a college level mathematics course.

Course Student Learning Outcomes (CSLOs)

1. Apply the language and notation of sets.
2. Use the tools of logic to determine the validity of an argument or statement.
4. Demonstrate fundamental probability techniques and apply those techniques to solve problems.
5. Interpret and analyze various representations of data.
6. Demonstrate the ability to choose and analyze mathematical models to solve problems from real-world settings, including, but not limited to, personal finance, health literacy, and civic engagement.

Learning Objectives

Upon completion of MATH 0332, the student will be able to:
Students will:
1.1 Use Venn diagrams to solve application problems.
1.2 Identify sets and subsets and perform set operations.
1.3 Be familiar with the basic concepts of probability.
2.1 Express statements using symbols.
2.2 Form the negation of a statement.
2.3 Express compound statements symbolically.
2.4 Construct truth tables.
2.5 Determine truth value of compound statements.
2.6 Use truth tables to show that statements are equivalent.
2.7 Use truth tables to determine validity of arguments.
3.1 Convert fractions and decimals to percents.
3.2 Convert percents to decimals and fractions.
3.3 Find simple and compound interest.
3.4 Find the future value of a given annuity.
3.5 Find the monthly payment and the total interest for a given simple interest amortized loan.
4.1 Find the probability of an event.
4.2 Use tree diagrams to find possible outcomes and use combinations and permutations.
4.3 Solve application problems involving probability.
5.1 Be familiar with the fundamentals of statistics.
5.2 Assess a statistical study.
5.3 Find the mean, median, and mode of given sets of raw data.
5.4 Interpret statistical tables and graphs.
5.5 Identify normal and skewed distribution curves.
5.6 Determine variance and standard deviation from a given sample.
5.7 Find the margin of error associated with a given sample.
5.8 Apply linear and quadratic functions.
5.9 Apply exponential and logarithmic functions.
Student Success

Expect to spend at least twice as many hours per week outside of class as you do in class studying the course content. Additional time will be required for written assignments. The assignments provided will help you use your study hours wisely. Successful completion of this course requires a combination of the following:

- Reading the textbook
- Attending class in person and/or online
- Completing assignments
- Participating in class activities

There is no short cut for success in this course; it requires reading (and probably re-reading) and studying the material using the course objectives as a guide.

Instructor and Student Responsibilities

As your Instructor, it is my responsibility to:

- Provide the grading scale and detailed grading formula explaining how student grades are to be derived
- Facilitate an effective learning environment through learner-centered instructional techniques
- Provide a description of any special projects or assignments
- Inform students of policies such as attendance, withdrawal, tardiness, and making up assignments
- Provide the course outline and class calendar that will include a description of any special projects or assignments
- Arrange to meet with individual students before and after class as required

As a student, it is your responsibility to:

- Attend class in person and/or online
- Participate actively by reviewing course material, interacting with classmates, and responding promptly in your communication with me
- Read and comprehend the textbook
- Complete the required assignments and exams
- Ask for help when there is a question or problem
- Keep copies of all paperwork, including this syllabus, handouts, and all assignments
- Attain a raw score of at least 50% on the departmental final exam
- Be aware of and comply with academic honesty policies in the HCCS Student Handbook
Assignments, Exams, and Activities

Unit Tests

Unit tests are designed to help student study and succeed in the college level tests.

More information is coming. Stay tuned.

College Level Final Exam Review Test

A minimum of 20 item test based on the college level final exam review will be administered with feedback to be given 1-3 weeks before the final exam week.

Grading Formula

In this class, you will be using MyLab Math, Canvas. You may write in a breakdown of your grade calculation by points or percentage. More information is coming.

An update to this will follow soon:

| Exam one: | 20% of your grade |
| Exam two: | 20% of your grade |
| Exam three | 20% of your grade |
| Homework | 15%-30% of your grade |
| Final Exam | 25% of your grade |

<table>
<thead>
<tr>
<th>Grade</th>
<th>Overall Percentage</th>
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<tbody>
<tr>
<td>A</td>
<td>90% +</td>
</tr>
<tr>
<td>B</td>
<td>80%-89%</td>
</tr>
<tr>
<td>C</td>
<td>70%-79%</td>
</tr>
<tr>
<td>IP</td>
<td>&lt;70% first time</td>
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<tr>
<td>F</td>
<td>&lt;70% not first time</td>
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<tr>
<td>FX</td>
<td>Excessive absence</td>
</tr>
</tbody>
</table>

Developmental Math Department Grading Policy:

The grade of D is not allowed in developmental math courses. The grade of FX is given when a student fails due to lack of attendance. **A grade of IP is given only one time.** A grade of W may be given on or before the official withdrawal date but not at the time of final grade submission.

Further support will be recommended for students who pass this class and do not pass the college level class.

HCC Grading Scale can be found on this site under Academic Information: [http://www.hccs.edu/resources-for/current-students/student-handbook/](http://www.hccs.edu/resources-for/current-students/student-handbook/)
## Course Calendar

**Under construction**

<table>
<thead>
<tr>
<th>Week</th>
<th>Dates</th>
<th>Topic/What’s due</th>
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<tbody>
<tr>
<td>1</td>
<td>6/8/2020</td>
<td>My Syllabus</td>
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<td>16</td>
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</tbody>
</table>

### Syllabus Modifications
The instructor reserves the right to modify the syllabus at any time during the semester and will promptly notify students in writing, typically by e-mail, of any such changes.

### Instructor’s Practices and Procedures

#### Missed Assignments

#### Academic Integrity
Here’s the link to the HCC information about academic integrity (Scholastic Dishonesty and Violation of Academic Scholastic Dishonesty and Grievance): [http://www.hccs.edu/about-hcc/procedures/student-rights-policies--procedures/student-procedures/](http://www.hccs.edu/about-hcc/procedures/student-rights-policies--procedures/student-procedures/)

### Attendance Procedures
MATH 0332 is a corequisite support course for MATH 1332. Students should be aware that sections of these courses are **LINKED**. Therefore, developmental math students who enroll in Math 0332 must also enroll in the linked section of Math 1332 (in the same semester). Developmental students **must maintain satisfactory attendance in BOTH** Math 0332 and Math 1332. If a developmental student withdraws or drops from one course in the corequisite pair, then he/she will be dropped from the other linked course. Corequisite courses must be taken during the same semester. Please carefully read and consider the repeater policy in the HCCS Student Handbook.

Attendance will be taken when you will join the virtual meeting. **The last day to withdraw month/day/year. (please check in HCCS website)**
**Student Conduct**
When we meet via Webex, adult behavior is expected for both every student and instructor.

**Electronic Devices**
The use of electronic devices by students in the classroom is up to the discretion of the instructor. Any use of such devices for the purposes other than student learning is strictly prohibited unless authorized as an appropriate ADA accommodation from the ADA Counselor.

**Mathematics Program Information**
- Mathematics related Scholarships: T-Stem: [https://www.hccs.edu/t-stem](https://www.hccs.edu/t-stem)

**HCC Policies**
Here’s the link to the HCC Student Handbook [http://www.hccs.edu/resources-for/current-students/student-handbook/](http://www.hccs.edu/resources-for/current-students/student-handbook/) In it you will find information about the following:
- Academic Information
- Academic Support
- Attendance, Repeating Courses, and Withdrawal
- Career Planning and Job Search
- Childcare
- disAbility Support Services
- Electronic Devices
- Equal Educational Opportunity
- Financial Aid TV (FATV)
- General Student Complaints
- Grade of FX
- Incomplete Grades
- International Student Services
- Health Awareness
- Libraries/Bookstore
- Police Services & Campus Safety
- Student Life at HCC
- Student Rights and Responsibilities
- Student Services
- Testing
- Transfer Planning
- Veteran Services

**EGLS³**
The EGLS³ (Evaluation for Greater Learning Student Survey System) will be available for most courses near the end of the term until finals start. This brief survey will give invaluable information to your faculty about their teaching. Results are anonymous and will be available to faculty and division chairs after the end of the term. EGLS³ surveys are only available for
the Fall and Spring semesters. -EGLS3 surveys are not offered during the Summer semester due to logistical constraints.

http://www.hccs.edu/resources-for/current-students/egls3-evaluate-your-professors/

**Campus Carry Link**

Here’s the link to the HCC information about Campus Carry:

http://www.hccs.edu/departments/police/campus-carry/

**HCC Email Policy**

When communicating via email, HCC requires students to communicate only through the HCC email system to protect your privacy. If you have not activated your HCC student email account, you can go to HCC Eagle ID and activate it now. You may also use Canvas Inbox to communicate.

**Housing and Food Assistance for Students**

Any student who faces challenges securing their foods or housing and believes this may affect their performance in the course is urged to contact the Dean of Students at their college for support. Furthermore, please notify the professor if you are comfortable in doing so.

This will enable HCC to provide any resources that HCC may possess.

**Office of Institutional Equity**

Use the link below to access the HCC Office of Institutional Equity, Inclusion, and Engagement (http://www.hccs.edu/departments/institutional-equity/)

**disAbility Services**

HCC strives to make all learning experiences as accessible as possible. If you anticipate or experience academic barriers based on your disability (including long and short term conditions, mental health, chronic or temporary medical conditions), please meet with a campus Abilities Counselor as soon as possible in order to establish reasonable accommodations. Reasonable accommodations are established through an interactive process between you, your instructor(s) and Ability Services. It is the policy and practice of HCC to create inclusive and accessible learning environments consistent with federal and state law. For more information, please go to http://www.hccs.edu/support-services/disability-services/

**Title IX**

Houston Community College is committed to cultivating an environment free from inappropriate conduct of a sexual or gender-based nature including sex discrimination, sexual assault, sexual harassment, and sexual violence. Sex discrimination includes all forms of sexual and gender-based misconduct and violates an individual’s fundamental rights and personal dignity. Title IX prohibits discrimination on the basis of sex-including pregnancy and parental status in educational programs and activities. If you require an accommodation due to pregnancy please contact an Abilities Services Counselor. The Director of EEO/Compliance is designated as the Title IX Coordinator and Section 504 Coordinator. All inquiries concerning HCC policies, compliance with applicable laws, statutes, and regulations (such as Title VI, Title IX, and Section 504), and complaints may be directed to:
Office of the Dean of Students
Contact the office of the Dean of Students to seek assistance in determining the correct complaint procedure to follow or to identify the appropriate academic dean or supervisor for informal resolution of complaints.


Department Chair Contact Information

### College - Level Math Courses

<table>
<thead>
<tr>
<th>Chair of Math</th>
<th>Susan Fife</th>
<th>SW Campus</th>
<th>713-718-7241</th>
<th>Stafford, Scarcella, N108</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Admin. Assistant</td>
<td>Tiffany Pham</td>
<td>SW Campus</td>
<td>713-718-7770</td>
<td>Stafford, Scarcella, N108</td>
</tr>
<tr>
<td>- Admin. Assistant</td>
<td>Christopher Cochran</td>
<td>SW Campus</td>
<td>713-718-2477</td>
<td>Stafford, Scarcella, N108</td>
</tr>
<tr>
<td>Math Assoc. Chair</td>
<td>Jaime Hernandez</td>
<td>CE Campus</td>
<td>713-718-7772</td>
<td>San Jacinto Building, Rm 369</td>
</tr>
<tr>
<td>Math Assoc. Chair</td>
<td>Ernest Lowery</td>
<td>NW Campus</td>
<td>713-718-5512</td>
<td>Katy Campus Building, Rm 112</td>
</tr>
<tr>
<td>Math Assoc. Chair</td>
<td>Mahmoud Basharat</td>
<td>NE Campus</td>
<td>713-718-2438</td>
<td>Codwell Hall Rm 105</td>
</tr>
</tbody>
</table>

### Developmental Math Courses

<table>
<thead>
<tr>
<th>Chair of Dev. Math</th>
<th>Jack Hatton</th>
<th>SE Campus</th>
<th>713-718-2434</th>
<th>Felix Morales Building, Rm 124</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Admin. Assistant</td>
<td>Carmen Vasquez</td>
<td>SE Campus</td>
<td>713-718-7056</td>
<td>Felix Morales Building, Rm 124</td>
</tr>
<tr>
<td>Dev. Math Assoc. Chair</td>
<td>Hien Nguyen</td>
<td>SE Campus</td>
<td>713-718-2440</td>
<td>Felix Morales Building, Rm 124</td>
</tr>
<tr>
<td>Dev. Math Assoc. Chair</td>
<td>Adnan Ulhaque</td>
<td>SW Campus</td>
<td>713-718-5463</td>
<td>Stafford, Learning Hub, Room 208</td>
</tr>
<tr>
<td>Technical Support Specialist</td>
<td>Douglas Bump</td>
<td>SE Campus</td>
<td>713-718-7317</td>
<td>Angela Morales Building, Rm 101</td>
</tr>
</tbody>
</table>

For issues related to your class, please first contact your instructor. If you need to contact departmental administration, then contact the appropriate Associate Chair. If further administrative contact is necessary, then contact the appropriate Department Chair.
Catalog Description: This is a course designed for liberal arts, non-mathematics, non-science, and non-business majors. The course provides students with an appreciation of the history, art, and beauty of mathematics in the world around us. Topics include an examination of sets with applications, an introduction to logic and truth tables, probability and statistics, financial management, mathematical modeling and its applications. 3 credits

Prerequisites: TSIA ABE level 5 or 6; TSIA Math Score 336 – 349 with Intermediate Algebra Diagnostic Score 0 – 3; Math 0106: Pass with “C” or better.

Course Description: Basic math concepts required to be successful in Math 1332. Topics include introductory concepts for set theory and logic; conversion among fractions, percentages and decimal numbers; rounding of decimal numbers, order of operations, use of personal finance formulas, evaluate factorial, combination and permutation; interpret histograms, bar charts and line graphs; basic concepts of statistical concepts.

Corequisite: MATH 0332 is a corequisite for MATH 1332. Students must maintain satisfactory attendance in both Math 0332 and Math 1332. Withdrawing from MATH 0332 will necessitate withdrawal from MATH 1332. Corequisite courses must be taken during the same semester.

HCC Math Pathway:

Credit: 3 hours credit (3 Lecture)

Audience: This course is for students who require state mandated remediation.

Course Goal: This course is intended to provide support for students who are taking Math 1332.

Course Student Learning Outcomes (SLO):
1. Apply the language and notation of sets.
2. Use the tools of logic to determine the validity of an argument or statement.
4. Demonstrate fundamental probability techniques and apply those techniques to solve problems.
5. Interpret and analyze various representations of data.
6. Demonstrate the ability to choose and analyze mathematical models to solve problems from real-world settings, including, but not limited to, personal finance, health literacy, and civic engagement.

**Course Objectives:** Upon completion of this course, a student will be able to:

1. Use Venn diagrams to solve application problems.
2. Identify sets and subsets and perform set operations.
3. Be familiar with the basic concepts of probability.
4. Express statements using symbols.
5. Form the negation of a statement.
6. Express compound statements symbolically.
7. Construct truth tables.
8. Determine truth value of compound statements.
9. Use truth tables to show that statements are equivalent.
10. Use truth tables to determine validity of arguments.
11. Convert fractions and decimals to percents.
12. Convert percents to decimals and fractions.
13. Find simple and compound interest.
14. Find the future value of a given annuity.
15. Find the monthly payment and the total interest for a given simple interest amortized loan.
16. Find the probability of an event.
17. Use tree diagrams to find possible outcomes and use combinations and permutations.
18. Solve application problems involving probability.
20. Assess a statistical study.
21. Find the mean, median, and mode of given sets of raw data.
22. Interpret statistical tables and graphs.
23. Identify normal and skewed distribution curves.
24. Determine variance and standard deviation from a given sample.
25. Find the margin of error associated with a given sample.
26. Apply linear and quadratic functions.
27. Apply exponential and logarithmic functions.


**Workbook:** *Learning Guide with Integrated Review Worksheets,* Bonnie Rosenblatt & Christina Gawlik

**Course Outline:** The content in this outline is suggested for your usage. All the sections of Math 1332 listed below are required. However, Math 1332 instructor may choose a difference sequence. If you are an instructor of Math 0332 only, then you must work your Math 1332 instructor regarding:

- course calendar,
- calculator policy,
- inclusion or exclusion of optional topics,
- homework assignments and due dates,
- scheduling of unit tests ahead of major exams in college math,
- scheduling of final exam review test ahead of final exam week.

In this outline, all worksheet refers to the Learning Guide with Integrated Review Worksheets (LGwIRW). Students may purchase the workbook from the Pearson web sit or obtain the electronic version in MyLab Math. Instructors of Math 0332 are free to modify existing
resources, and incorporate additional support resources to meet their needs. For instance, if the Math 1332 instructor uses scientific calculator for his or her class, you will modify your calculator instruction and support accordingly.

It is suggested that the even numbered problems of Math 1332 textbook be used as guided examples in class and ask students to practice the odd numbered problems for homework. Instructors may wish to obtain the step-by-step solution manual.

<table>
<thead>
<tr>
<th>Math 1332 Chapter 2 Topics (6 hours)</th>
<th>Math 0332 Support Topics and Resources (Suggested)</th>
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</thead>
<tbody>
<tr>
<td>2.1 Basic Set Concepts</td>
<td>Review the Syllabus</td>
</tr>
<tr>
<td></td>
<td>Review roster, set-builder, and word description.</td>
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<tr>
<td></td>
<td>Review distinction between equivalent and equal sets.</td>
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<td></td>
<td>Conduct guided practice LGwIRW 2.1 pages 13-20</td>
</tr>
<tr>
<td>2.2 Subsets</td>
<td>Review subsets (⊆) versus proper subsets (⊂)</td>
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<tr>
<td></td>
<td>Study Skills – Motivation Strategies</td>
</tr>
<tr>
<td></td>
<td>Guided practice LGwIRW pages 21-23</td>
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<tr>
<td>2.3 Venn Diagrams &amp; Set Operations</td>
<td>Review set operations: union, intersection, complements</td>
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<td>Review Venn Diagrams with two sets</td>
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<td></td>
<td>Study Skills – Improving Concentration</td>
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<tr>
<td></td>
<td>Guide practice LGwIRW pages 24-35</td>
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<tr>
<td>2.4 Set Operations and Venn Diagrams with Three Sets</td>
<td>Perform set operations involving three set</td>
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<tr>
<td></td>
<td>Use Venn Diagrams with three sets</td>
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<td></td>
<td>Use Venn Diagrams to prove equality of sets</td>
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<td>Guide practice LGwIRW pages 36-43</td>
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<thead>
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<th>Math 1332 Chapter 3 Topics (7 hours)</th>
<th>Math 0332 Support Topics and Resources (Suggested)</th>
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</thead>
<tbody>
<tr>
<td>3.1 Statements, Negations, and Quantified Statements</td>
<td>Recognize if a statement is true or false</td>
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<tr>
<td></td>
<td>Review Quantified Statements</td>
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<tr>
<td></td>
<td>Review Negation of a Statements</td>
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<tr>
<td></td>
<td>Review Negations of Quantified Statements</td>
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<tr>
<td></td>
<td>Guide practice LGwIRW pages 35-51</td>
</tr>
<tr>
<td>3.2 Compound Statements and Connectives</td>
<td>Review “And Connectors” &amp; “Or Connectors”</td>
</tr>
<tr>
<td></td>
<td>Review Construction of Compound Statements.</td>
</tr>
<tr>
<td></td>
<td>Study Skills – How to Plan Your Time</td>
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<td>Guide practice LGwIRW pages 52-54</td>
</tr>
<tr>
<td>3.3 Truth Tables for Negation, Conjunction, and Disjunction</td>
<td>Identify Truth Values for Connectives</td>
</tr>
<tr>
<td></td>
<td>Review Truth Tables for Negation, Conjunction and Disjunction</td>
</tr>
<tr>
<td></td>
<td>Guide practice LGwIRW pages 55-58</td>
</tr>
<tr>
<td>3.4 Truth Tables for the Conditional and the Biconditional (omit biconditional)</td>
<td>Review The rationale behind the conditional “if-then” statement</td>
</tr>
<tr>
<td></td>
<td>Determine circumstances when the conditional statement is true</td>
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<td></td>
<td>Study Skills – Preparing and Overcoming Anxiety for tests</td>
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<td></td>
<td>Guide practice LGwIRW pages 59-63</td>
</tr>
</tbody>
</table>
### 3.5 Equivalent Statements and Variations of Conditional Statements (omit variation forms)
- Write a contrapositive for a conditional statement.
- Write the converse and inverse of a conditional statement.
- Guide practice LGwIRW pages 64-66

### 3.7 Arguments and Truth Tables (focus on truth tables and diagrams to determine validity)
- Recognize and use forms of valid and invalid arguments
- Guide practice LGwIRW pages 69-72

<table>
<thead>
<tr>
<th>Math 1332 Test 1</th>
<th>Administer &amp; provide feedback on Unit Test prior to college math Test 1</th>
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</thead>
</table>

<table>
<thead>
<tr>
<th>Math 1332 Chapter 8 Topics (9 hours)</th>
<th>Math 0324 Support Topics and Resources (Suggested)</th>
</tr>
</thead>
</table>
| 8.1 Percent, Sales Tax, and Discounts | Review fractions to percents (vice-versa)  
Review decimals to percents (vice-versa)  
Review percent increase and decrease  
Guided practice LGwIRW pages 221-226 |
| 8.2 Income Tax | Introduce Form 1040  
Review income, adjustments, adjusted gross income, deductions  
Guide practice LGwIRW pages 227-232 |
| 8.3 Simple Interest | Review simple interest formula \( I = \text{prt} \)  
Review future value of simple interest, \( A = P + \text{Prt} \)  
Review convert a percentage to decimal  
Evaluate algebraic expressions  
Guide practice LGwIRW pages 233-234 |
| 8.4 Compound Interest | Interpret exponents as repeated multiplication  
Perform calculations involving the order of operations  
Review compound interest formula  
Review use of calculator for compound interest calculation  
Guided practice LGwIRW pages 234-238 |
| 8.5 Annuities, Methods of Saving, and Investments | Determining the future value of an annuity  
Determining the regular payments needed to achieve a financial goal  
Guide practice LGwIRW pages 239-244 |
| 8.6 Cars | Review mathematics of financing a car  
Guide practice LGwIRW pages 245-251 |
| 8.7 The Cost of Home Ownership | Review determine payment and interest costs for a mortgage  
Practice using calculator to evaluate formulas  
Guide practice LGwIRW pages 252-256 |

<table>
<thead>
<tr>
<th>Math 1332 Test 2</th>
<th>Administer &amp; provide feedback on Unit Test prior to college math Test 2</th>
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<table>
<thead>
<tr>
<th>Math 1332 Chapter 11 Topics (6 hours)</th>
<th>Math 0332 Support Topics and Resources (Suggested)</th>
</tr>
</thead>
</table>
| 11.1 The Fundamental Counting Principle | Review Multiplication Principle  
Practice multiply strings of integers |

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- Note: The content is extracted from a document focuses on various mathematical topics, including the process of writing a contrapositive for a conditional statement, and the use of truth tables to determine the validity of arguments. The document also outlines the topics covered in Math 1332 Chapter 8, including percent, sales tax, income tax, simple and compound interest, annuities, cars, and the cost of home ownership. The Math 1332 Test 1 and Math 1332 Test 2 sections are provided with instructions for administering the tests and providing feedback. Additionally, Math 1332 Chapter 11 focuses on the fundamental counting principle, with a suggested review of multiplication principles and practice with strings of integers.
<table>
<thead>
<tr>
<th>Math 1332 Chapter 12 Topics (7 hours)</th>
<th>Math 0332 Support Topics and Resources (Suggested)</th>
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</thead>
<tbody>
<tr>
<td>11.2 Permutations</td>
<td>Review application problems involving the counting principle</td>
</tr>
<tr>
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<td>Study Skills – Improve Note Taking Skills</td>
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<td>Guide practice LGwIRW pages 303-304</td>
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<tr>
<td>11.3 Combinations</td>
<td>Review factorial notation and simplify</td>
</tr>
<tr>
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<td>Review permutation formula</td>
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<td>Review permutation with duplicate items</td>
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<td>Practice simplifying with permutation formula</td>
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<td>Guided practice LGwIRW pages 305-310</td>
</tr>
<tr>
<td>11.4 Fundamentals of Probability</td>
<td>Distinguishing between permutations and combinations</td>
</tr>
<tr>
<td></td>
<td>Review combination formula</td>
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<td>Guide practice LGwIRW pages 311-313</td>
</tr>
<tr>
<td>12.1 Sampling, Frequency Distributions, and Graphs</td>
<td>Review definition of frequency distribution</td>
</tr>
<tr>
<td></td>
<td>Review stem-leaf plot</td>
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<td>Guide practice LGwIRW pages 339-343</td>
</tr>
<tr>
<td>12.2 Measures of Central Tendency</td>
<td>Review mean, median, mode and midrange</td>
</tr>
<tr>
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<td>Review mean for frequency distribution</td>
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<td>Guide practice LGwIRW pages 344-348</td>
</tr>
<tr>
<td>12.3 Measures of Dispersions</td>
<td>Review range</td>
</tr>
<tr>
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<td>Review square root notation and evaluate square root of perfect square</td>
</tr>
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<td>Review and practice standard deviation</td>
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<td>Study Skills – How to Remember What You Have Learned</td>
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<td>Guide practice LGwIRW pages 349-351</td>
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<tr>
<td>12.4 The Normal Distribution</td>
<td>Review z-score definition and formula</td>
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<td>Practice on evaluating z-score</td>
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<td>Study Skills – Tips for the Final Exam</td>
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<td>Guide practice LGwIRW pages 352 - 364</td>
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<tr>
<td><strong>Math 1332 Test 3</strong></td>
<td><strong>Administer &amp; provide feedback</strong> on Unit Test prior to college math Test 3</td>
</tr>
<tr>
<td><strong>Review for Final</strong></td>
<td><strong>Final exam review test</strong></td>
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<td>Go over mistakes on the final exam review test</td>
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**Comprehensive final exam during week 8**