Instructor Information

Primary Instructor: Melissa Weston
Campus Phone: 913-469-8500, ext. 4215
Campus Office: CLB 221
Campus E-mail: mweston5@jccc.edu
Web Site: http://www.jccc.edu/academics/math-science/mathematics/self-paced.html
Department Office: CLB 243 (our mailboxes are here)
Division FAX: 913-469-2537 (delivery to our mailboxes is not instantaneous)
Office Hours: ATTENTION: Please make an appointment to ensure meeting with your primary instructor. Fall and Spring posted office hours are often preempted due to other college responsibilities without notice. Times other than posted office hours are available by appointment.

Tentative Hours
Monday 2:00 – 3:00 PM
Tuesday 9:00 – 10:30 AM
Wednesday 1:00 – 2:00 PM
Thursday 10:00 – 11:30 AM

Other instructors: Stacey McMillen, CLB 221, ext.4959, smcmill9@jccc.edu
Phil Veer, CLB 235, ext. 4700, pveer@jccc.edu

Course Information
Credit Hours: 3
Prerequisite: To successfully complete the pre-requisite(s) for this course, a student must earn at least a "C" or better in Math 115 (Elementary Algebra), or earn an appropriate score on the mathematics placement exam. If a student is found not to have successfully fulfilled the pre-requisite(s) for this course, the student will not be allowed to enroll in a self-paced course or, if enrolled, will be dropped from the course.

An access code of MyMathLab software required.

Supplies: A scientific calculator, ruler, compass, and protractor are required. Forbidden calculators include those with computer algebra systems (e.g., TI 89, TI 92), computers (laptops, pocket PCs, Palm Pilots, PDAs) and cellphones. MyMathLab does require a high-speed internet connection. If you do not have access at home, you can use the MRC computer lab for these exercises.

Description
This course is an informal approach to geometry. Topics will include lines, polygons, areas, volume, circles, similarity, congruence and coordinate geometry.
Course Objectives

After completing this course, the student should be able to:

1. Classify geometric figures in two and three dimensions.
2. Find the perimeter and area of two-dimensional geometric figures.
3. Find the surface area and volume of three-dimensional figures.
4. Write deductive proofs.
5. Apply theoretical results to applications.
6. Verify the congruence of geometric figures.
7. Verify the similarity of geometric figures.
8. Construct geometric figures with compass and straightedge.
9. Use coordinate equations to describe lines and circles.

Content Outline and Competencies

Available on the JCCC web site at http://catalog.jccc.edu/coursedescriptions/math/#MATH_118

Important Dates

<table>
<thead>
<tr>
<th>Date</th>
<th>Event Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>January 14, 2020 by 6:00 pm</td>
<td>Last day to pay without being dropped</td>
</tr>
<tr>
<td></td>
<td><strong>After this date, you must enroll and pay on the same day.</strong></td>
</tr>
<tr>
<td>2 weeks from enrollment waiver date</td>
<td>Last day to drop with 100% refund.</td>
</tr>
<tr>
<td></td>
<td><strong>Refunds must be requested by student.</strong></td>
</tr>
<tr>
<td>6 weeks from enrollment waiver date</td>
<td>Last day to withdraw with “No Grade” on your transcript</td>
</tr>
<tr>
<td>May 21, 2020</td>
<td>Last day to complete course without an incomplete.</td>
</tr>
<tr>
<td></td>
<td><strong>Caution: Incompletes can affect financial aid.</strong></td>
</tr>
<tr>
<td>6 months from enrollment waiver date</td>
<td>Last day to withdraw from the course with “W” on transcript or request Pass/Fail grade option. After this date withdrawal is not permitted. Courses that have been graded prior to this deadline may not be dropped.</td>
</tr>
<tr>
<td>9 months from enrollment waiver date</td>
<td>Length of time to complete a self-paced math course.</td>
</tr>
<tr>
<td></td>
<td>(Extensions require extenuating circumstances, substantial completion of the course, and the approval of the Dean).</td>
</tr>
<tr>
<td>Enrollment Waiver Date:</td>
<td><strong>Officially begins the self-paced course.</strong></td>
</tr>
</tbody>
</table>

**There is no attendance in a self-paced course.** Students will be required to set up a reasonable testing schedule with the instructor for success. Students also have the option to set up appointments with instructor for assistance. To verify your status for financial aid or other reasons you must be actively working in the course.

Course Requirements

**Five unit exams, MyMathLab homework and a comprehensive final exam are required.** Failure to complete required work will result in a zero for that unit exam, final exam or homework assignment. **The completion of the final exam officially ends the self-paced course.**

**Approved calculators are allowed on exams.** Pocket computers, PDAs, computer algebra systems, TI-92s, TI-89s, books, cell phone calculators, watches and notes are not allowed. Formulas should be memorized and books and notes are not allowed.

**Show your work on your unit and final exams.** Incorrect answers cannot receive partial credit without your accompanying work. Some questions may request a specific process, and no partial credit will be awarded without that particular process.

**Unit and final exams are taken in the JCCC Testing Center (SSC 334), or in another approved location.** When using the Testing Center, a photo ID and JCCC ID number are required. Typically, only one exam is available at any time; contact your instructor for
multiple exams to be placed in the testing center. Usually within 48 hours, your graded exam will be posted online in MyMathLab and Canvas and your next exam will be available. Weekend and holidays will have a longer response time.

**Unit exams may be retaken**, but not the final exam. You may take your unit exams up to two times each.

**Scenarios:**

- If you score below 70%, a retake will be placed in the testing center for you.
- If you score above 70% or have completed two attempts, then your next unit exam will be placed in the testing center.
- If you score above 70% and want to improve your score, contact your instructor to place a retake in the testing center. **Allow 48 hours (2 days) for the instructor to place the retake in the testing center.**

When an exam is taken more than once, the highest score for that exam is recorded. **All retakes must be completed before taking the final exam.**

**Remember!**

- The final exam may be taken only once.
- The completion of the final exam officially ends the self-paced course.
- All assignments for credit are under the “Homework Tab” in MyMathLab.

**Homework will be graded in MyMathLab (MML).** You must practice math. MyMathLab (MML) is an interactive computer tool that will allow you to practice and master the material. There will be a MML homework assignment for every section. The homework will be immediately graded by the computer and will count toward your final grade. You may retake any of the homework as often as needed until you have mastered the material.

**MyMathLab** online materials available with a purchased access code. To access the materials:

- Log on to [www.pearsonmylabandmastering.com](http://www.pearsonmylabandmastering.com)
- Register using your MyMathLab access code, and the **Course ID:** weston50513
- Choose the course: Self-Paced Geometry, Math 118-450

**IMPORTANT FACTORS for SUCCESS**

MyMathLab contains the following under the “Chapter Contents:”

- **Lecture Videos** for each section.
- **eBook** – helpful to read and follow the examples before doing homework.

Additional resources are available under the “Multimedia Library” tab.

**Floor plan for tornado shelter awareness:** [www.jccc.edu/about/campus/maps/files/pdf/clb1-emergency.pdf](http://www.jccc.edu/about/campus/maps/files/pdf/clb1-emergency.pdf)

**Evaluation**

Your course grade will be determined by your exam scores and homework, as follows:

<table>
<thead>
<tr>
<th>Type of Work</th>
<th>Number</th>
<th>Points Each</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Homework</td>
<td>61</td>
<td>0.61</td>
<td>100</td>
</tr>
<tr>
<td>Units Exams</td>
<td>5</td>
<td>100</td>
<td>500</td>
</tr>
<tr>
<td>Final Exam</td>
<td>1</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td><strong>700</strong></td>
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<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage</th>
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</thead>
<tbody>
<tr>
<td>A</td>
<td>89.5 -100%</td>
</tr>
<tr>
<td>B</td>
<td>79.5 -89.4%</td>
</tr>
<tr>
<td>C</td>
<td>69.5 – 79.4%</td>
</tr>
<tr>
<td>D</td>
<td>59.5 – 69.4%</td>
</tr>
<tr>
<td>F</td>
<td>0 – 59.4%</td>
</tr>
</tbody>
</table>

All JCCC Math students are expected to follow the Student Code of Conduct (as described in the Student Handbook), Mathematics Division Policy. Grade penalties may be assessed for incidents of academic dishonesty. Further action may be taken based on the severity of the incident.

[http://www.jccc.edu/about/leadership-governance/policies/students/student-code-of-conduct/index.html](http://www.jccc.edu/about/leadership-governance/policies/students/student-code-of-conduct/index.html)
Motivation
The biggest hurdle in a self-paced math class is having the self-discipline to study on your own.

Keys to Success:
• Set goals for each chapter and try to stick to them.
• Set aside regular times each week to work on your math, and don't let them get bumped by other activities.
• Read the textbook, study the examples, and work the suggested problems.
• Seek help when you find the going difficult.
• If you feel the urge to put your work off for a week, beware! Procrastination can easily become a habit.

Assistance
Instructor
Your instructor can help you by email or telephone or you may want to set up an appointment to visit in person (necessary to view your previously taken tests).

The Math Resource Center (MRC)
The MRC is a free service that is available to all JCCC math students, regardless of mathematical level. You are encouraged to come to the MRC to study, either individually or with a group. You may seek assistance from the tutors as needed, or you may simply use the MRC as a place to study.

Tutorial Help
Assistance from the MRC tutors is available to you as a JCCC student each hour that we are open and online. No reservations are necessary. Simply raise your hand when you need assistance and a tutor will come to you.

Hours

<table>
<thead>
<tr>
<th>Days</th>
<th>Academic Year</th>
<th>Summer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monday - Thursday</td>
<td>7:00 am – 9:00 pm</td>
<td>7:00 am – 9:00 pm</td>
</tr>
<tr>
<td>Friday</td>
<td>7:00 am – 4:00 pm</td>
<td>Closed</td>
</tr>
<tr>
<td>Saturday</td>
<td>11:00 am – 4:00 pm</td>
<td>Closed</td>
</tr>
<tr>
<td>Sunday</td>
<td>12:00 pm – 4:00 pm</td>
<td>Closed</td>
</tr>
</tbody>
</table>

Every student must log-in and out with his/her JCCC Student ID when using the MRC. The login system provides accurate records of student use of the MRC and ensures continued support by the college. (The JCCC Student ID is free to any JCCC student; it can be obtained on the 2nd floor of the library or the 1st floor of the Student Center).

MRC resource check-out collateral procedure:
To check out any resource for use in the MRC, a student will be required to leave as collateral:
  (1) A picture ID AND
  (2) One of the following: a set of car keys, a turned off cell phone, or a textbook used in a current JCCC class.

The Math Resource Center Online
To access online tutoring*, streaming instructional videos, calculator instructions and more, register for the Math Resource Center Online Community in Canvas.
  1. Log into Canvas
  2. On the right toward the bottom of the page is a box named “Open Registration Form.” Click “Math Resource Center (MRC) Online” link in the box.
  3. Follow the registration instructions.
  4. Go back to the main Canvas page and on the left toward the bottom of the page in the “My Courses” there should be a section called “Communities” and a link to the “MRC Online.”

You will need to go through the registration process one-time.

*We provide online tutoring through WebEx teleconferencing platform. You may need to update Java and download a browser plug-in. Recommended browsers: Chrome and Safari. Recommended devices: desktop, laptop computers (pc or Mac) and iOS devices. Not recommended: Firefox and Internet Explorer. Not compatible with Android devices.

JCCC provides a range of services to allow persons with disabilities to participate in educational programs and activities. If you are a student with a disability and if you are in need of accommodations or services, it is your responsibility to contact Access Services and
make a formal request. To schedule an appointment with an Access Advisor or for additional information, you can contact Access Services at (913) 469-3521 or accessservices@jccc.edu. Access Services office is located in the Success Center on the second floor of the Student Center.

**Campus Safety Information**

Classroom and campus safety are of paramount importance at Johnson County Community College, and are the shared responsibility of the entire campus population. Please review the following:

- **Report Emergencies**: to Campus Police (available 24 hours a day)
  - *In person* at the Carlsen Center (CC115)
  - *Call 913-469-2500* (direct line) – *Tip: program in your cell phone*
  - *Phone app* - download JCCC Guardian (the free campus safety app: [www.jccc.edu/guardian](http://www.jccc.edu/guardian))
    - instant panic button and texting capability to Campus Police
  - *Anonymous* reports to KOPS-Watch [www.jccc.edu/kops or 888-258-3230](http://www.jccc.edu/kops or 888-258-3230)

- **Be Alert**:
  - You are an extra set of eyes and ears to help maintain campus safety
  - Trust your instincts
  - Report suspicious or unusual behavior/circumstances to Campus Police (see above)

- **Be Prepared**:
  - Identify the red/white stripe Building Emergency Response posters throughout campus and online that show egress routes, shelter, and equipment
  - View A.L.I.C.E. training (armed intruder response training - Alert, Lockdown, Inform, Counter and/or Evacuate) – Student training video: [https://www.youtube.com/watch?v=kMcT4-nWSq0](https://www.youtube.com/watch?v=kMcT4-nWSq0)
  - Familiarize yourself with the [College Emergency Response Plan](https://www.jccc.edu)

- **During an Emergency**: Notifications/Alerts (emergencies and inclement weather) are sent to all employees and students using email and text messaging
  - students are automatically enrolled, see [JCCC Alert - Emergency Notification](https://www.jccc.edu)

- **Weapons Policy**: Effective July 1, 2017, concealed carry handguns are permitted in JCCC buildings subject to the restrictions set forth in the Weapons Policy. Handgun safety training is encouraged of all who choose to conceal carry. Suspected violations should be reported to JCCC Police Department 913-469-2500 or if an emergency, you can also call 911.

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**Course Schedule**

<table>
<thead>
<tr>
<th>Section</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Chapter 1: A Beginning of Geometry</strong></td>
<td></td>
</tr>
<tr>
<td>1.3</td>
<td>Points, Lines, and Planes</td>
</tr>
<tr>
<td>1.4</td>
<td>Segments and Their Measures</td>
</tr>
<tr>
<td>1.5</td>
<td>Angles and Their Measures</td>
</tr>
<tr>
<td>1.6</td>
<td>Angle Pairs and Their Relationships</td>
</tr>
<tr>
<td>1.7</td>
<td>Coordinate Geometry – Midpoint and Distance Formulas</td>
</tr>
<tr>
<td>1.8</td>
<td>Constructions – Basic Geometry Constructions</td>
</tr>
<tr>
<td>2.1</td>
<td>Perimeter, Circumference, and Area</td>
</tr>
<tr>
<td>2.3</td>
<td>Conditional Statements</td>
</tr>
<tr>
<td>2.4</td>
<td>Biconditional Statements and Definitions</td>
</tr>
<tr>
<td>2.5</td>
<td>Deductive Reasoning</td>
</tr>
<tr>
<td>2.6</td>
<td>Reviewing Properties of Equality and Writing Two-Column Proofs</td>
</tr>
<tr>
<td>2.7</td>
<td>Proving Theorems About Angles</td>
</tr>
</tbody>
</table>

**Exam 1** Chapters 1 & 2

| **Chapter 3: Parallel and Perpendicular Lines** | |
| **Chapter 4: Triangles and Congruence** | |
| 3.1 | Lines and Angles |
| 3.2 | Proving Lines are Parallel |
| 3.3 | Parallel Lines and Angles Formed by Transversals |
| 3.4 | Proving Theorems About Parallel and Perpendicular Lines |
| 3.5 | Constructions – Parallel and Perpendicular Lines |
| 3.6 | Coordinate Geometry – The Slope of a Line |
| 3.7 | Coordinate Geometry – Equations of Lines |
| 4.1 | Types of Triangles |
| 4.2 | Congruent Figures |
| 4.3 | Congruent Triangles by SSS and SAS |
| 4.4 | Congruent Triangles by ASA and AAS |
| 4.5 | Proofs Using Congruent Triangles |
| 4.6 | Isosceles, Equilateral, and Right Triangles |

**Exam 2 ➔ Chapters 3 & 4**

**Chapter 5: Special Properties of Triangles**
**Chapter 9: Right Triangles and Trigonometry**

**Chapter 6: Quadrilaterals**
- 5.1 Perpendicular and Angle Bisectors
- 5.2 Bisectors of a Triangle
- 5.3 Medians and Altitudes of a Triangle
- 5.4 Midsegments of Triangles
- 5.5 Indirect Proofs and Inequalities in One Triangle
- 9.1 Pythagorean Theorem and Its Converse
- 9.2 Special Right Triangles
- 6.1 Polygons
- 6.2 Parallelograms
- 6.3 Proving That A Quadrilateral is a Parallelogram
- 6.4 Rhombuses, Rectangles and Squares
- 6.5 Trapezoids and Kites

**Exam 3 ➔ Chapters 5, 6 & 9**

**Chapter 7: Similarity**

**Chapter 10: Area**
- 7.1 Ratios and Proportions
- 7.2 Proportion Properties and Problem Solving
- 7.3 Similar Polygons
- 7.4 Proving Triangles are Similar
- 7.5 Geometric Mean and Similarity in Right Triangles
- 10.1 Angle Measures of Polygons
- 10.2 Areas of Triangles and Quadrilaterals with a Review of Perimeter
- 10.3 Area of Regular Polygons
- 10.4 Perimeters and Areas of Similar Figures
- 10.5 Arc Measures, Circumferences, and Arc Lengths of Circles
- 10.6 Areas of Circles and Sectors

**Exam 4 ➔ Chapters 7 & 10**

**Chapter 11: Surface Area and Volume**

**Chapter 12: Circles and Other Conic Sections**
- 11.1 Solids and Cross Sections
- 11.2 Surface Areas of Prisms and Cylinders
- 11.3 Surface Areas of Pyramids and Cones
- 11.4 Volumes of Prisms and Cylinders
- 11.5 Volumes of Pyramids and Cones
- 11.6 Surface Area of Volumes of Spheres
- 11.7 Areas and Volumes of Similar Solids
- 12.1 Circle Review and Tangent Lines
- 12.2 Chords and Arcs
- 12.3 Inscribed Angles
- 12.4 Additional Angle Measures and Segment Lengths
- 12.5 Coordinate Plane - Circles

**Exam 5 ➔ Chapters 11 & 12**

**Final Exam: COMPREHENSIVE** (Complete departmental review for the final available in Canvas)