

Science, Technology, Engineering, & Mathematics (STEM) Division 3322 College Drive, Vineland, NJ 08360 856-691-8600

MA 091: Mathematics & Beginning Algebra

**Syllabus** 

Lecture Hours/Credits: 3/3

### **Catalog Description**

Prerequisites: Required Accuplacer score

This course emphasizes solving adding, subtracting, multiplying, and dividing whole numbers and decimals; basic geometry with area and perimeter of squares, rectangles, triangles; area and perimeter of circles. Multiplying and dividing fractions and mixed numbers; adding and subtracting fractions and mixed numbers with common and uncommon denominators. Ratios, proportions, percent's, and simple interest; adding, subtracting, multiplying, dividing real numbers; the introduction to solving equations with one variable; and graphing and solving basic inequalities with interpreting them in interval notation.

#### **Textbook and Course Materials**

It is the responsibility of the student to confirm with the bookstore and/or their instructor the textbook, handbook, and any other materials required for their specific course and section.

Click here to see current textbook prices at <a href="mailto:cccnj.bncollege.com">cccnj.bncollege.com</a>.

#### **Evaluation Assessment**

# **Online Proctoring**

All courses offered at RCSJ, whether they are web-enhanced, hybrid, or fully online, may include assessments that make use of Online Proctoring. To find out more about Online Proctoring, and to learn about the minimum technical requirements, visit rcsj.edu/elearning/online-proctoring.

### **Grading Distribution**

Grading to be determined by individual instructors. Individual instructors may include the following assessment(s):

- Orientation video and assignment
- Modules
- Participation
- Homework
- Sample Tests
- Tests
- Worksheets
- Videos

# **Grading**

The grading scale for each course and section will be determined by the instructor and distributed the first day of class.

# **Rowan College of South Jersey Core Competencies**

(Based on the NJCCC General Education Foundation - August 15, 2007; Revised 2011; Adopted 2014)

This comprehensive list reflects the core competencies that are essential for all RCSJ graduates; however, each program varies regarding competencies required for a specific degree. Critical thinking is embedded in all courses, while teamwork and personal skills are embedded in many courses.

- 1. **Written and Oral Communication**: Students will communicate effectively in both speech and writing.
- 2. **Quantitative Knowledge and Skills:** Students will use appropriate mathematical and statistical concepts and operations to interpret data and to solve problems
- 3. **Scientific Knowledge and Reasoning:** Students will use the scientific method of inquiry, through the acquisition of scientific knowledge.
- 4. **Technological Competency:** Students will use computer systems or other appropriate forms of technology to achieve educational and personal goals
- 5. **Society and Human Behavior:** Students will use social science theories and concepts to analyze human behavior and social and political institutions and to act as responsible citizens.
- 6. **Humanistic Perspective:** Students will analyze works in the fields of art, history, music, or theater; literature; philosophy and/or religious studies; and/or will gain competence in the use of a foreign language
- 7. **Historical Perspective:** Students will understand historical events and movements in World, Western, non-Western or American societies and assess their subsequent significance.
- 8. **Global and Cultural Awareness:** Students will understand the importance of a global perspective and culturally diverse peoples.
- 9. Ethical Reasoning and Action: Students will understand ethical issues and situations.
- 10. **Information Literacy:** Students will address an information need by locating, evaluating, and effectively using information.

# **MA 091 Core Competencies**

This course focuses on three of RCSJ's Core Competencies:

Please add core competencies

# **Student Learning Outcomes: Mathematics & Beginning Algebra**

Successful completion of MA 091 will help students:	RCSJ Core Competencies	Evaluation / Assessment (Additional means of evaluation may be included by individual instructors)
Add, subtract, multiply, and divide whole numbers and real numbers		<ul> <li>Orientation video and assignment</li> <li>Modules</li> <li>Participation</li> <li>Homework</li> <li>Sample Tests</li> <li>Tests</li> <li>Worksheets</li> <li>Videos</li> </ul>
Add, subtract, multiply, and divide decimals		<ul> <li>Orientation video and assignment</li> <li>Modules</li> <li>Participation</li> <li>Homework</li> <li>Sample Tests</li> <li>Tests</li> <li>Worksheets</li> <li>Videos</li> </ul>
Manipulate basic geometric shapes and formulas		<ul> <li>Orientation video and assignment</li> <li>Modules</li> <li>Participation</li> <li>Homework</li> <li>Sample Tests</li> <li>Tests</li> <li>Worksheets</li> <li>Videos</li> </ul>
Multiply and divide fractions		<ul> <li>Orientation video and assignment</li> <li>Modules</li> <li>Participation</li> <li>Homework</li> <li>Sample Tests</li> <li>Tests</li> <li>Worksheets</li> <li>Videos</li> </ul>

Successful completion of MA 091 will help students:	RCSJ Core Competencies	Evaluation / Assessment (Additional means of evaluation may be included by individual instructors)
Add and subtract fractions with common and uncommon denominators		<ul> <li>Orientation video and assignment</li> <li>Modules</li> <li>Participation</li> <li>Homework</li> <li>Sample Tests</li> <li>Tests</li> <li>Worksheets</li> <li>Videos</li> </ul>
Compare values with ratios and proportions		<ul> <li>Orientation video and assignment</li> <li>Modules</li> <li>Participation</li> <li>Homework</li> <li>Sample Tests</li> <li>Tests</li> <li>Worksheets</li> <li>Videos</li> </ul>
Find percent and simple interest		<ul> <li>Orientation video and assignment</li> <li>Modules</li> <li>Participation</li> <li>Homework</li> <li>Sample Tests</li> <li>Tests</li> <li>Worksheets</li> <li>Videos</li> </ul>
Solve a basic equation for a given variable		<ul> <li>Orientation video and assignment</li> <li>Modules</li> <li>Participation</li> <li>Homework</li> <li>Sample Tests</li> <li>Tests</li> <li>Worksheets</li> <li>Videos</li> </ul>

Successful completion of MA 091 will help students:	RCSJ Core Competencies	Evaluation / Assessment (Additional means of evaluation may be included by individual instructors)
Graph and solve basic inequalities with interpretation in interval notation		<ul> <li>Orientation video and assignment</li> <li>Modules</li> <li>Participation</li> <li>Homework</li> <li>Sample Tests</li> <li>Tests</li> <li>Worksheets</li> <li>Videos</li> </ul>

# **Topical Outline**

- Whole Numbers
- Integers and Introduction to Variables
- Fractions
- Decimals
- Ratios, Proportions & Percent
- Introduction to Algebra

#### **Affirmative Action Statement**

The Board of Trustees is committed to providing a work and academic environment that maintains and promotes affirmative action and equal opportunity for all employees and students without discrimination on the basis of certain enumerated and protected categories. These categories are race, creed (religion), color, national origin, nationality, ancestry, age, sex (including pregnancy and sexual harassment), marital status, domestic partnership or civil union status, affectional or sexual orientation, gender identity or expression, atypical hereditary cellular or blood trait, genetic information, liability for military service, or mental or physical disability, including AIDS and HIV related illnesses.

For questions concerning discrimination, contact Almarie J. Jones, Special Assistant to the President, Diversity and Equity/Title IX and Compliance, 856-415-2154 or <a href="mailto:aiones@rcsi.edu">aiones@rcsi.edu</a> or (Cumberland) Nathaniel Alridge, Jr., JD, Director, Diversity and Equity/Title IX and Judicial Affairs, 856-691-8600, ext. 1414 or <a href="mailto:nalridge@rcsi.edu">nalridge@rcsi.edu</a>. For disability issues or any barriers in the learning or physical environment related to a document condition/disability please contact: Gloucester campus – Dennis M. Cook, Director, Department of Special Services, ADAAA/504 Officer at 856-415-2265 or <a href="mailto:dcook@rcsi.edu">dcook@rcsi.edu</a>; or Cumberland Campus – Meredith Vicente, Senior Director, Physical & Learning Disabilities, Center for Academic & Student Success (CASS) at 856-691-6900 ext. 1282 or <a href="mailto:mvicent1@rcsi.edu">mvicent1@rcsi.edu</a>

## **Department of Special Services**

The Department of Special Services, located in the Enrollment and Student Services building, within the Testing Center, welcomes students of all abilities. The staff members in Special Services are committed to providing support services and ensuring equal access to eligible students with documented conditions/disabilities as outlined by the Americans with Disabilities Act (ADA) and the Americans with Disabilities Act with Amendments Act (ADAAA). For more information, please visit our website-<u>Department of Special Services</u> or call 856-691-8600 x1445 or x1487.

# Reporting Allegations of Sexual Assault Resource Referrals (8/2020) Cumberland Campus

There are multiple safe places for students to report allegations of sexual assault, both on and off campus. Reports of sexual assault can be made to any of the following offices listed in the chart below.

All students are encouraged to report alleged crimes on campus. Employees <u>must</u> report crimes that pose an immediate threat to the campus to the Security Office, the local Police Department or the Sheriff's Office.

Service	Resource	Phone Number/Location/Website
	Vineland Police Dept.	856-691-4111
Non-	Millville Police Department	856-825-7010
Confidential Reporting	Cumberland Co. Sheriff's Office	856-451-4449
Law Enforcement	Cumberland County Emergency Services	9-1-1
	Cumberland Campus Security 856-200-4706 (Direct)	Andres Lopez, Director Safety and Security 856-691-8600, ext. 1777
Non- Confidential	Almarie J. Jones Special Assistant to the President Diversity and Equity, Title IX and Compliance	856-415-2154 College Center, room116 ajones@rcsj.edu
On-Campus Reporting Support Services	Nathaniel Alridge, Jr., JD, Director Diversity and Equity, Title IX and Judicial Affairs	856-200-4712 <u>nalridge@rcsj.edu</u> Academic Building, 2 <sup>nd</sup> floor
	Kellie W. Slade Executive Director Student Services, Student Life	856-200-4615 <u>kslade@rcsj.edu</u> Student Life Building (near gym)
Confidential On-Campus	Heather Bense, LCSW, ACS Director ———	856-200-4759 <u>hbense@rcsj.edu</u> Academic Building downstairs
Counseling and Support Services	John Wojtowicz, LSW, VACW Mental Health Counselor	856-200-4760 jwojtowicz@rcsj.edu
	Student Counseling and Wellness Center	Academic Building – 1 <sup>st</sup> floor
Confidential Off-Campus Full-Service Support	Center for Family Services – Services Empowering	24/7 Hotlines Cumberland Co. – 1-800-225-0196
	Rights of Victims (SERV)	Camden & Glo. Co. 1-866-295-7378  centerffs.org/serv
Sexual Assault Nurse Examiner on Site	Inspira Medical Center Vineland	1505 W. Sherman Ave., Vineland, NJ 856-641-8000