# Special Projects in Mathematics I MTH-291-300

# Rowan College at Burlington County Science/Mathematics/Technology Division Spring 2016

Credits: 1

Prerequisites: permission

Meeting Days: Wednesday or Friday (Once per week)

**Meeting Times:** 12:30 PM – 1:20 PM

**Meeting Location:** Meet at Laurel 114, Mount Laurel Campus

## **Instructor Information:**

Jonathan Weisbrod, Mathematics Lecturer

Email: jweisbrod@bcc.edu Phone: 856-242-5387

#### **Office Hours:**

Monday: 9:00 – 9:50 Laurel Hall 110/114 (Mt. Laurel)

Tuesday: 5:00 - 5:50 Parker 413E (Pemberton)

Wednesday: 12:00 – 12:50 Laurel Hall 110/114 (Mt. Laurel)

Thursday: 4:00-4:50 Parker 413E (Pemberton)

Friday: 1:00 – 1:50 Laurel Hall 110/114 (Mt. Laurel)

#### **SECTION 1: Course Information**

**Course Description:** This course involves independent study and research on some topic or in some area of mathematics. Projects include a statement of objectives, a literature search, and a written report. Lab hours depend on the project (usually two hours per week per credit).

#### **Required Text and other Materials**

Chartrand, Gary. Mathematical Proofs, A Transition to Advanced Mathematics, 3rd Ed. Pearson, 2013.

### **SECTION 2: Course Information**

#### **Course and Classroom Policies**

Students are expected to attend all classes in their entirety. If you miss a class, you must contact the instructor for an alternative to make up the missed time.

# **Criteria for Grade Determination**

The final grade is awarded on the following scale:

90-100 A

85-89 B+

80-84 B 75-79 C+ 70-74 C 60-69 D 0-59 F

#### **Assessment Methods**

50% Summary of Chapters
20% Discussion Participation
20% Homework Completion
10% Conference Reaction Paper

<u>Summary of Chapters</u>: Students must complete a summary of the first 11 chapters of the textbook. For full credit, all important key terms must be defined and explained thoroughly. The summaries must be completed using LaTeX and submitted by 12:00 PM on Wednesday of the week due.

<u>Discussion Participation</u>: Each student is required to attend a discussion face-to-face each week on the current course content. For full credit, the student must be prepared to effectively participate in meaningful discussion.

<u>Homework Completion</u>: Students will be assigned readings in the textbook and homework exercises. Completion of the readings and homework is essential in order to participate in the classroom discussions.

<u>Conference Reaction Paper</u>: Each student is required to attend a professional mathematics conference and write a reaction paper.

#### **Course Schedule or Calendar**

Week	Reading	Assignment
1	Chapter 0 of Textbook	Summary of the reading
2	Chapter 1 of Textbook	Summary of the reading
3	Chapter 2 of Textbook	Chapter 1: # 4, 6, 8, 20, 22, 25, 32, 46, 58, 60 Summary of the reading
4	Chapter 3 of Textbook	Chapter 3: # 2, 6, 8, 14, 16, 18, 20, 28, 30, 32 Summary of the reading
5	Chapter 4 of Textbook	Summary of the reading
6	Chapter 5 of Textbook	Chapter 4: # 2, 4, 6, 10, 14, 22, 42, 44, 46, 52, 54
7	Chapter 6 of Textbook	Summary of the reading Chapter 6: # 5, 9, 13, 21, 23
8		Fibonacci Sequence Paper
9	Chapter 7	Summary of the reading
10	Chapter 8	Summary of the reading
		Chapter 8: # 11, 12, 13, 18, 54, 57, 58
11	Chapter 9	Summary of the reading
12		MAA-NJ Spring Conference Reaction Paper
13	Chapter 10	Summary of the reading
14		Proposal for Research Project

### **SECTION 3: College Information**

#### **College Policies**

In order for students to know their rights and responsibilities, all students are expected to review and adhere to all regulations and policies as listed in the College Catalog and Handbook. These documents can be accessed at <a href="http://www.rcbc.edu/pages/198.asp">http://www.rcbc.edu/pages/198.asp</a>. Important policies and regulations include, but are not limited, to the following:

- College Attendance Policy
- Grading Standards for this class have been explained above.

Withdraw (W)

Students can withdrawal from this course between

January 19 and February 1 with a 50% refund

February 2 and March 21 with 0% refund

Incomplete Grades (I & X) will only be awarded in extreme situations.

• Student Code of Conduct

Please carefully review the Academic Dishonesty/Plagiarism and Civility Codes.

• Use of Communication and Information Technology

# **Academic Honesty Policy**

Rowan College at Burlington County is committed to maintaining a culture of academic integrity. College students, faculty, administrators and staff are expected to adhere to the following fundamental academic and non-academic values: honesty, trust, fairness, respect and responsibility. Academic dishonesty encompasses acts of cheating fabrication, plagiarism, and facilitating academic dishonesty. Initial acts of academic dishonesty will be communicated by faculty members to the students as well as the respective division dean. Persistent academic integrity violations may be reviewed by the Academic Integrity Committee. If students commit more than two offenses of academic dishonesty, disciplinary probation, suspension or dismissal may occur. Students may appeal a sanction to the Chief Academic Officer of the College, or his/her appointed designee, within five college working days. A written decision will be provided within fifteen college working days. This decision shall be final.

The following tiered approach shall be implemented:

- 1. First offense: The faculty member shall determine how the act of academic dishonesty shall be addressed. Such determination shall be based on the nature of the dishonesty.
- 2. Depending on the severity of a second offense or multiple offenses of academic dishonesty, the student may receive a failure for the course.
- 3. Repeated acts of academic dishonesty will be reviewed and appropriate decisions about the status of the student shall be applied.

Please note: Faculty are required to report all violations of the Academic Integrity Policy to their respective division dean. All acts of academic dishonesty are tracked in a college-wide database which is accessible to faculty by their division dean. Students may face severe repercussions for any act of academic dishonesty, up to and including dismissal from the college. The division dean reserves the right to convene an Academic Integrity Committee hearing for any act of academic dishonesty.

#### **Educational Technology Statement**

Rowan College at Burlington County advocates the use of technology to enhance instruction. Students should assume that classroom and online technology will be used throughout their coursework at RCBC, as it will most certainly be used in their future education and careers. The College provides on-campus facilities for the convenience of the RCBC community. Various college departments, including the Office of Information Technology and the Office of Distance Education, provide technology training and assistance to faculty and students.

RCBC offers a variety of free services for its students including those listed below. Descriptions of these services, as well as many others, can be found in the College Catalog and Handbook and on the RCBC website at http://www.rcbc.edu/pages/109.asp.

- \* Academic Advisement (<a href="http://www.rcbc.edu/advising">http://www.rcbc.edu/advising</a>)
- \* Career Services (<a href="http://www.rcbc.edu/careers">http://www.rcbc.edu/careers</a>)
- \* Educational Opportunity Fund (EOF) (<a href="http://www.rcbc.edu/eof">http://www.rcbc.edu/eof</a>)
- \* Financial Aid (http://www.rcbc.edu/financialaid)
- \* International Students Office (http://www.rcbc.edu/international)
- \* Library/Integrated Learning Resource Center (ILRC) (<a href="http://www.rcbc.edu/library">http://www.rcbc.edu/library</a>)
- \* Office of Veteran Services (<a href="http://www.rcbc.edu/vets">http://www.rcbc.edu/vets</a>)
- \* Student Support Counseling (<a href="http://www.rcbc.edu/cpit">http://www.rcbc.edu/cpit</a>)
- \* Tutoring Center (http://www.rcbc.edu/tutoring)
- \* Test Center (http://www.rcbc.edu/testcenter)
- \* Transfer Services (http://www.rcbc.edu/transfer)

# Office of Student Support and Disability Services

RCBC welcomes students with disabilities into the college's educational programs. Access to accommodations and support services for students with learning and other disabilities is facilitated by staff in the Office of Student Support (OSS). In order to receive accommodations, a student must contact the OSS, self-identify as having a disability, provide appropriate documentation, and participate in an intake appointment. If the documentation supports the request for reasonable accommodations, the OSS will provide the student with an Accommodation Plan to give to instructors. Contact the Office of Student Support at 609-894-9311, ext. 1208 or disabilityservices@bcc.edu.

## **Tutoring Center**

RCBC offers free tutoring in a variety of disciplines for all currently enrolled students. Appointments are scheduled at the mutual convenience of the student and tutor; and, all tutoring takes place in designated locations on college property. <a href="http://www.rcbc.edu/tutoring">http://www.rcbc.edu/tutoring</a> or x1495 or x2096.

#### **Career Planning and Services**

RCBC's Career Services Center provides a full range of free career resources and assistance to students and alumni. Career Services has an online job board with on and off campus positions as well as internships. Make an appointment to receive assistance with resume and cover letter writing or preparing for an interview. Student can also take a career assessment and meet with a career counselor to identify a career path and choose a major. For information or to schedule an appointment, visit <a href="http://www.rcbc.edu/careers">http://www.rcbc.edu/careers</a> or email <a href="major.careerservices@bcc.edu">careerservices@bcc.edu</a>.