### **SYLLABUS**



**School:** Department of Arts and Sciences

Course Number: MGF 2106

**Course Name:** Survey of Mathematics

**Credit Hours:** 3 credit hours

**Prerequisite:** MAT 1033 or MAT 1100 with a grade of "C" or higher or

placement scores

## **Course Description**

This course includes logic, geometry, probability and counting principles, descriptive statistics, sets and Venn diagrams, reasoning patterns, and critical thinking.

### **Course Rationale**

Rationale of the course:

- The purpose of the course is to present the utility of mathematics to students who do not intend to take other mathematics courses. The course is application driven, so you will be applying many of the concepts learned to real world applications.
- The course is set up in 10 modules which includes a quiz at the end of each module. Unit tests will include material from 2-3 of the modules presented. There are homework assignments in each module, as well as Interactive Learning Assignments, which include discussions, in various modules.

### **Program Learning Objectives**

MGF 2106 is a General Education core course in Mathematics

The student will be able to apply critical thinking skills through problem solving.

### **Course Learning Objectives**

The learners will be able to:

- **identify** the tools needed to complete the course.
- **solve** problems using inductive and deductive reasoning.
- apply the principles of set theory.
- **perform** operations on sets and apply set theory to real world applications.
- express English sentences using symbols.
- **translate** symbolic statements into English sentences.
- construct, analyze and interpret Truth Tables.
- identify and apply the rules of logic.

- **identify** valid arguments based on the rules of logic and draw logical conclusions to a valid argument.
- **convert** measurements of length, are, volume, weight and temperature.
- **identify** the basic elements of geometry and use geometric principles to solve problems.
- **apply** the formulas of perimeter, area, circumference and surface area.
- calculate the number of arrangements, permutations and/or combinations using combinatorics formulas.
- apply the principles of probability.
- **apply** basic concepts of statistics.

### **Course Resources**

# Textbook(s):

Thinking Mathematically, by Robert Blitzer; 6th Edition Pearson Publishing ISBN#978-0-321-92323-3 (text and access code from IRSC Bookstore) ISBN#978-0321867322 (text only)

This online course requires an access code to <u>MyMathLab</u> (publisher software accompanying the book). Instructions on how to register and enroll into MyMathLab are listed in BLACKBOARD under the **MyMathLab Quick Start Info folder**. (The Content material will not become available until you pass the Start Here Quiz with a 70% or higher.)

An access code is included with every new book purchased from the IRSC Bookstore. Access codes to MyMathLab (which contains an eText) may be purchased directly from www.mymathlab.com. You can use the temporary access code while you're waiting to acquire materials.

You may use the same access code for both MGF 2106 and MGF 2107, since they use the same textbook. But it is highly discouraged to take the courses simultaneously, as it is very difficult to pass them both in the same semester.

Additional Resources: A simple \$10-\$15 scientific calculator should be sufficient; but if you choose to purchase a graphing calculator, TI-83plus or TI-84 is best suited for IRSC. (TI-89, TI-92, TI-Nspire with CAS, Voyage 200 and HP-48G are prohibited. If you have a calculator not mentioned above, then you must have it approved before testing.) No other electronics (including but not limited to: cell phones, computers, smart phones, watches, etc.) may be used as a calculator and phones must be turned off while in the classrooms, Assessment Center, and ASC labs.

Note on the day of an exam, memory in all calculators must be cleared. Please make arrangements for backing up information stored on your calculator if necessary.

You will need access to a computer with internet, a notebook, and pencils. In addition to the required materials, you may wish to have colored pencils and/or highlighters for note taking and 4" x 6" notecards.

Your class materials are found within the Content page of Blackboard, including a schedule of activities, test study guides, Recordings of in-class lectures and Handouts to follow along with the lessons.

### **Course Requirements**

This course consists of a series of activities and assessments to assist you in achieving the outcomes/objectives for the course and instructional modules/ units. Each week you will work on various combinations of assignments, activities, discussions, readings, research, etc.

## **Grades and Grading Scale**

Assignment of letter grades is based on a percentage of points earned. The letter grade will correspond with the following percentages achieved. All course requirements must be completed before a grade is assigned.

A 100 - 90
B 80 - 89
C 70 - 79
D 60 - 69
F 59 - and below
W Withdraw (see policies below)

I Incomplete (see policies below)

**Note:** Calculated grades will be rounded to the nearest whole number, only if the student has a passing grade in homework assignments and quizzes.

You can find grades by clicking My Grades in Blackboard. The Blackboard gradebook will be updated periodically. To check for the most current homework or quiz average, or to review a previous quiz or test, refer to the gradebook in MyMathLab.

TOTAL WEIGHTED GRADE		
Items	Number of items	Weight
Interactive Learning Assignments (ILAs)	8	5%
Homework Assignments	32	10%
Quizzes	12	15%
Tests (including Final)	4 - 5	70%
	TOTAL	100%

### **Schedule of Activities**

The course schedule will be located in the Schedule of Activities link in the course control panel.

### **Course Guidelines**

### **Online Course**

This is an online course and therefore there will not be any face-to-face class sessions. All assignments and course interactions will utilize Internet technologies. The content of this course is fully online except for proctored exam(s).

## **Specific Course Policies**

The course begins in the Start Here folder in Blackboard. Review the material in this section and then take the Start Here Quiz. The materials within the Content area of Blackboard will not be accessible until the student passes the Start Here Quiz with a 70% or better. The Start Here quiz grade is not counted in your overall grade.

All Homework Assignments, ILAs, and Quizzes can be done online at home. However, all tests and the OPTIONAL cumulative final are proctored and you must go to any of the 5 IRSC Assessment Centers on the dates specified in the Schedule of Activities. If you are taking the test at a non-IRSC Assessment Center, arrangements need to be made with the Instructor and Director of Assessment Services, Steven Daniello (<a href="mailto:sdaniell@irsc.edu">sdaniell@irsc.edu</a>) 772-462-7583 prior to the beginning of the class.

You are required to take each unit test. A grade of zero will be posted for any test not attempted by the deadline. I do not drop a test grade, unless the Optional cumulative final is completed. It is your choice on whether or not to complete the Optional cumulative final. If you do complete it, then I will use the score from the final to replace your lowest test grade, if the final exam score is higher. If you don't take it, a grade of zero may appear in Blackboard, but that grade will not be calculated into your grade.

There is no time limit for the Homework assignments. There are due dates specified in the Schedule of Activities under the Start Here folder in Blackboard. Homework (HW) assignments have an unlimited amount of attempts per question within the due date. You should complete HW assignments before you complete quizzes and tests, however, you may complete or correct any missed HW problem after the deadline with a grade deduction of 30% on just the problems that are late. If you get a HW problem wrong, click "Similar Exercise" to get a new chance at the problem. (Check the Schedule of Activities for due dates and the final submission deadline for late homework.)

There is a time limit of 45 minutes for each Quiz within MyMathLab. Quizzes have unlimited attempts within the due date, but the entire quiz must be retaken. I will take the highest score of all attempts for each quiz. There are no make-ups for quizzes after the deadline. The Personal Information assignment in Module 0 is worth a quiz grade, as well as enrolling in MyMathLab by the deadline.

Interactive Learning Assignments (ILAs) are found in the Module Folders in Blackboard. Most of them involve watching a short video and then answering questions. You may retry the questions as many times as you like. Two of the assignments are a Discussion post which requires interaction with your classmates, so there are two parts. The first part is an initial posting; the second part involves feedback or commenting on your classmates' postings. One of the ILAs requires the use of Microsoft Excel, so make sure to review the information in Module 0 Study Activities, if you don't currently have Excel. The other ILA involves downloading a word document and working through and submitting your work.

The assignments in the Module 0 Assessments folder must be done by the deadline to prove attendance in the course. If they are not completed by the deadline, you will be dropped (withdrawn) for non-attendance. Module 0 consists of 4 assignments, which include a survey of Personal Information Questions, the Student Introduction ILA, the Time Management ILA, and

enrolling in MyMathLab. If you have not yet purchases the MyMathLab access code, you may use the temporary access link. Please check the Schedule of Activities under Start Here in Blackboard for the specific due dates.

## **Communicating with the Instructor**

When questions arise during this course, please remember to check these three sources for an answer:

- Course Syllabus;
- 2. Announcements in Blackboard; and
- 3. The "Ask the Instructor" discussion board.

If you cannot find an answer to your question post your question to the "Ask the Instructor" discussion board. This is a public forum, which is visible to the whole class. The "Ask the Instructor" discussion board can be answered to the benefit of all students by either your fellow students who know the answer to your question or the instructor. You are encouraged to answer questions from other students in the discussion forum when you know the answer to a question in order to help provide timely assistance.

If you have questions of a personal nature such as relating a personal emergency, questioning a grade on an assignment, or something else that needs to be **communicated privately**, please contact me **via Blackboard Course Messages**, found under the Tools link. Please allow 24/48 business hours for me to respond. I generally do not check email or messages on the weekends or holidays.

**All instructor correspondence should be conducted within Blackboard Course Messages.** Please do not use my IRSC e-mail account directly unless Blackboard is down, because it is difficult to identify the student and course.

### **Attendance/Participation**

Preparation for class means completing all study activities required for that week. Attendance in an online course means logging into the Learning Management System (Blackboard) on a regular basis and participating in all of the activities that are posted in the course.

### **Studying and Preparation Time**

The course requires you to spend time preparing and completing assignments. For **every credit hour** you should expect to spend at minimum of three to four (3 - 4) hours working on the course. Therefore, a 3-credit course would require approximately 9 - 12 hours of time, per week, to make the **minimum** passing grade.

### **Examination Policy**

All <u>tests</u> are proctored and need to be taken at the <u>Assessment Center</u> during the specified window. All tests will become available shortly after the drop deadline. At that time, you can take each test any day, during assessment center hours up until the deadline of the test (Check Schedule of Activities for due dates and the availability date). You may take the test any time during assessment center hours before the deadline expires from the time it becomes available. You have the choice of the 5 Assessment Centers at each IRSC campus.

You will need to take a calculator, writing utensil and a picture ID for the tests. You will be asked by an IRSC proctor to login to the **Lockdown Browser**. This will prompt you to login to Blackboard. Once you login to the Blackboard Course, click on the MyMathLab test link and look for the test. The proctor will put a password in to activate the test. A proctor will supply you with scrap paper on which you should **number your problems and show all of your work**. I will review scrap paper for **partial credit** upon the request of the student. All requests should be made in writing through Course Messages in Blackboard within two days of the test deadline. You won't be able to review the answers on your test until after the test deadline has expired.

For more specific information for each test, such as length of the test, additional materials that you may bring, etc., print and read the **Test Study Guide** found in the Study Activities link of the Module Folder in which the test occurs.

A quick link to the Assessment Center Info (Testing) is located in Blackboard in the Assessment link of the Module Folder in which the test occurs.

### **Late or Missed Assignments**

All assignments must be finished and turned in for full credit. No make-up tests are allowed, unless extreme extenuating circumstances arise before a test is due and prior approval has been given by the instructor and proper documentation is provided for the cause of the missed test. (The optional final may be taken to replace a low test grade.) There are no make-ups on missed quizzes, as the two lowest quiz grades will be dropped. Homework may be submitted after the deadline with a grade deduction of 30% on just the problems that are late. Interactive Learning Assignments (ILAs) may be submitted late for partial credit.

# **Submitting Assignments**

All Homework and Tests are submitted in MyMathLab, but you will access MML through Blackboard. Interactive Learning Assignments are submitted in Blackboard. Most quizzes are submitted in MyMathLab, but there is one assignment worth a quiz grade that must be submitted within Blackboard Module 0 Assessments. The Optional Cumulative Final is submitted through Blackboard.

#### **Instructor Feedback**

Your instructor will provide feedback within 7 to 14 days.

### Cheating/plagiarism

Any form of academic dishonesty may result in a zero for the assignment, and you may possibly be taken before the Academic Review Board for dismissal from school. Copying and pasting from the internet without citing sources is plagiarism.

**Withdrawals for Non-Attendance (WN)** are given if the student does not complete all of the assignment in the Module 0 Assessments folder by the deadline, as well as show activity in the course. (Personal Information Assignment, the Student Introduction ILA, the Time Management ILA, and enrolling in MyMathLab)

**Withdrawals** are the responsibility of the student to complete before the withdrawal date published in the academic calendar.

**Instructor Withdrawals** after the withdraw deadline are only granted under the following conditions and will not be given after the final exam is completed:

- 1) Student submits a written request via Blackboard Course Messages at least 1 week before the end of the semester; and
- 2) student is current with all assignments, tests, and attendance, having a passing grade in homework & quizzes; and
- 3) student has consulted with Guidance on any consequences of receiving a W; and
- 4) one of the following:
  - A) a documented emergency or hardship prevents the student from completing the course; or
  - B) the student attends, participates, and completes all assignments except the final exam, but has no chance of passing the course with a C or higher.

**Incompletes** are only granted under the following conditions and will not be given after the final exam is completed:

- 1) Student has completed at least two-thirds of the semester and submits a written request via Blackboard Course Messages before the date of the final exam; and
- 2) student is current with all assignments, tests, and attendance with an **overall** passing grade for at least two-thirds of the semester's coursework; and
- 3) student has consulted with Guidance on any consequences of receiving an I; and
- 4) a documented emergency or hardship prevents the student from completing the course.

If you are experiencing difficulty in your course, your first obligation is to work directly with your instructor to resolve the issue. If you are unable to settle your concerns with the assistance of your instructor, you can contact the Department Chair, Duane Chin Quee at <a href="mailto:dchinque@irsc.edu">dchinque@irsc.edu</a>.

## Subject to change notice

All material, assignments, and deadlines are subject to change with prior notice. It is your responsibility to stay in touch with your instructor, review the course site regularly, and communicate with other students to adjust as needed if there is any change in the course.

## **IRSC Resources**

Quick links to the Indian River State College's resources and policies are listed in the Institutional Resources section of the course, including:

- MyIRSC Register for classes, view grades and financial aid awards
- Student Handbook & Student Handbook Reference Guide
- Advising
- Catalog
- Drop/Add
- Equity Statement
- Financial Aid

- Incomplete Grade
- IRSC Mission Statement
- Office of Student Disabilities
- Student Activities
- Student Success Services
- Testing Services
- Transcripts
- Update Personal Information
- Withdrawal Policy

#### **Academic Resources**

Quick links to the Indian River State College's Academic Resources can be found in the Institutional Resources section in Blackboard. Quick links include:

- Academic Calendar
- Academic Support Center
- Academic Notice/ Deficiency/Suspension
- Assessment/Examination Policy
- Graduation

- How to Succeed in this Course
- Incomplete Grade
- Netiquette Rules
- Smarthinking Tutoring
- Student Responsibility
- Studying and Time Management

# **Library & Research Paper Resources**

Quick links to the Indian River State College's Library and Research Paper Resources can be found in the Institutional Resources section in Blackboard. Quick links include:

- Library Link
- Course Specific Custom Library Guides
- Ask the Librarian (24/7)
- American Psychological Association Tutorial

- APA Guidelines
- MLA Guidelines
- CSE Guidelines
- Legal Citation
- Plagiarism Policy
- Writing a Research Paper

## **Writing Expectations:**

All students should write at college level in all course communication and assignments.

### **Citation and Reference Style:**

Students should use the APA citation style unless otherwise directed by their instructor.

### **Technical Requirements**

## **Course Specific Technology Requirements**

All students should have a computer with all plugins required for Blackboard to work. This is consistent for the MyMathLAb website to work as well. Students wishing to use the supplemental PowerPoint presentation with either need to install the PowerPoint software or download the free PowerPoint reader. In addition, for some Blackboard assignments, students may need to create an assignment to be attached within the discussion. Any attached assignments should either be in Word or PDF format.

# **IRSC Computer Requirements**

Students must have a reliable computer and Internet connection throughout the course. Quick links to the Indian River State College's Blackboard Technical Information can be found in the Institutional Resources section in Blackboard. Quick links include:

- Essential Technical Skills Checklist
- Browser Support
- Blackboard Learning Center

- Blackboard Technical Support for Students
- Blackboard Learn Mobile

## **Blackboard Learning Management System (LMS)**

If you need assistance with Blackboard, please look at the tutorials on the log in page of Blackboard. Click on the Blackboard Tutorials link in the course control panel. Blackboard Video Tutorials include:

- Checking Your Grades
- Taking a Test Online
- Interacting with the Discussion Board

Note: The preferred browser is Google Chrome.

Blackboard LOG IN:

USERNAME: Student ID number (no dashes) PASSWORD: IRSC web registration/pay pin

### **Technical Support**

If you can't find your answer within the help section at the <u>IRSC Blackboard Online</u> <u>Support Center</u>, go to virtualcampus.irsc.edu and click on the Blackboard Student Help Desk icon.



Submitting an Assignment

## **Accessibility Statement**

Indian River State College provides reasonable accommodations to students with documented disabilities through the Student Accessibility Services (SAS) Office. The rights of students with disabilities which pertain to post-secondary education are provided under Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act (ADA) of 1990. Students who wish to request an accommodation for a documented disability may contact Student Accessibility Services at 772-462-7808, 772-462-7782 or e-mail accessibilityservices@irsc.edu.

# **Non-Discrimination and Non-Harassment Policy**

Indian River State College (College) is committed to maintaining a fair and respectful employment and educational environment. In accordance with federal, state and local equal opportunity laws, Indian River State College prohibits discrimination on the basis of race, color, national origin, ethnicity, sex, religion, age, disability, sexual orientation, marital status, veteran status, or genetic information.

### **Syllabus Disclaimer**

The instructor views the course syllabus as an educational contract between the instructor and students. Every effort will be made to avoid changing the course schedule but the possibility exists that unforeseen events will make syllabus changes necessary. The instructor reserves the right to make changes to the syllabus as deemed necessary. Students will be notified in a timely manner of any syllabus changes in the course Announcements or course e-mail.