SIRIUS ACADEMICS COURSES

Syllabus
Revised: 7/18/2011

Topics in College Mathematics
3 Credit Hours

Term/Year:	
Reference Number:	
Classroom:	
Instructor:	
Office Hours:	
Office Area:	
Phone Number:	
Email:	
Web Page:	

IMPORTANT COLLEGE DATES

Course Start Date:	
Drop with 100% refund	
Withdraw with "W" grade	
Course End Date:	

COURSE DESCRIPTION

This course is designed for students who plan to major in fields that do not require an in-depth study of mathematics. The major topics introduced in this course are set theory, symbolic logic, geometry and measurement, introductory combinatorics, probability, descriptive statistics, and history of mathematics.

REQUIRED TEXT AND INSTRUCTIONAL MATERIALS

SIRIUS Academics course materials include a book with a MathXL access code and an online component.

Meisel, B., & Shawver, J. (2011). *Topics in college mathematics* (2nd ed.). Jacksonville: Florida State College at Jacksonville, SIRIUS Academics. ISBN:

LEARNING OUTCOMES

When you finish this course, you will be able to

- Represent mathematical information symbolically and visually through use of sets and Venn diagrams

- Demonstrate an understanding of the fundamentals of mathematical logic and be able to differentiate between a valid argument and a fallacy

- Use geometry and measurement techniques to develop spatial and measurement sense and to solve real-world applications

- Estimate and check answers to mathematical problems in order to determine reasonableness

- Demonstrate an understanding of units of measurement and use metric and U.S. customary systems to solve real-world problems

- Utilize basic combinatorics to develop data for determining probability

- Use statistical methods to summarize data visually and numerically

Specific Learning Objectives. Specific learning objectives are found at the beginning of each chapter in the book. Use the objectives to identify what the chapter will cover and what you should know when you are finished reading. In a very real sense, this is much like skimming the headlines of a newspaper before you delve into a particular story. The objectives provide you with a basic framework for learning and understanding; however, these objectives should not limit your knowledge of or interest in the subject.

LEARNING MANAGEMENT SYSTEM (COURSE PLATFORM)

The online component of the course is delivered in a learning management system supported by the institution.

TECHNOLOGY REQUIREMENTS

Please use the following checklist to determine your computer readiness. You should own or have access to
- Computer with personal access to the Internet (e.g., computer with a modem or cable modem connection)
- An email account
- Web-browser software--at least Internet Explorer 7.0, Firefox 3.0, Safari 3.1, or

above
- Windows XP or Vista or higher operating system (or MAC OS X or higher)
- Anti-virus software
- Word-processing software
- The latest versions for plug-ins, including Acrobat Reader, Flash Player, JAVA, and Quicktime
- Additional hardware, including speakers and microphone

Browser Settings: "Pop-ups" must be permitted for MathXL. See your browser's Help for instructions on how to view or change these browser options.

MathXL Support: If you experience any type of problem with the MathXL site, please contact the MathXL Customer Support Center directly before contacting your instructor or the College help desk.

Online tutorials, user guides, and a searchable support database are available at the MathXL Support site (http://www.mathxl.com/support/contactus_stu.htm). If you cannot find an answer to your question or problem within these pages, contact MathXL Customer Support by phone at 800.677.6337 (toll free).

ACCESSIBILITY

If you require specific accommodations to complete this course, contact your institution's coordinator for disability services. You may also wish to notify your instructor.

ABOUT MATHXL

1. **Logging in Procedures:** To create an account in MathXL, go to http://www.mathxl.com; click *First Time User* (Register with Access Code), and use the access code that came with your textbook, along with the class ID of (Write yours here), during the registration process. Once you have registered, click the *Browser Check* to make sure your computer contains all the needed plug-ins to view the problems. Finally, click *How to Enter Answers* and go through the tutorial so that you can begin your work in MathXL.

2. **Working in MathXL:** Now begin your work in MathXL. Click the Homework and Tests button. Then click *Assignment 1-1,* which correlates with textbook Chapter 1, section 1. Once your assignment opens, click the first problem. If you know how to solve it, then do so. If not, read through the examples in the textbook or watch the video in MathXL (not all problems have videos linked to them). If you need more than the explanation provided, click *View an Example* or *Help Me Solve This* (both of these options are available on every problem in the homework). Once

you have answered a question, click *Check Answer.* If it is incorrect, click *Help Me Solve This.* MathXL will walk you through how to solve the problem. After MathXL explains an answer, it will give you another problem to try. Click *Similar Exercise* and keep working the problem until you get it correct. If for any reason you don't get a problem correct, or you feel you need more explanation on a problem, click the Ask My Instructor button and type your question. MathXL will send to your instructor an email with the problem attached. Finally, when you finish an assignment, click *Save.* The weekly homework assignments are generally due on Sunday nights.

3. **Attendance:** MathXL records the amount of time spent working problems and navigating through the course. Each week, you are expected to work at least 3 hours (or 4 to 5 hours in a 12-week class) to complete the material associated with the assignments for each week.

4. **Quizzes:** There are seven quizzes in the course, all given in MathXL. Each quiz covers the previous week(s) of online homework. The quizzes will appear under the Homework and Tests button in MathXL. You are allowed three attempts, and only your best score will count. Make sure you allow yourself ample time to take a quiz, and then review your mistakes prior to taking it again. See the Calendar of Activities for the scheduled quizzes in the course. Quizzes are typically due by midnight on Tuesdays.

5. **Tests:** In addition to the homework and quizzes, there are three proctored tests given during the course. The first test will cover the material from the first three chapters. The second test will cover the material from chapters 4 and 5. The final test will cover the material from chapters 6 and 7. In order to adequately prepare for these tests, we recommend that you take the practice tests located in MathXL as many times as you like. (Note: After your first attempt on the practice test, a homework exercise will generate based on the problems you missed. Complete this assignment before taking the test a second time.) You are permitted only one attempt on all tests, so study well before taking them.

FIRST WEEK OF CLASS

Getting online and active in the course during the first week is very important. You should set aside time to read and print the Syllabus and Student Orientation and familiarize yourself with the course set-up and navigation. Locate the course documents, discussion forums, quizzes or tests, and where to submit assignments. Finally, go to http://www.mathxl.com/support/tours.htm to complete an orientation explaining how to register and enter answers in MathXL.

ONLINE COURSES

To receive credit for attendance during the first week of class, complete and submit the Course Contract to indicate that you agree to abide by the course conditions outlined in the Syllabus. Failure to complete this requirement by the end of the first week could result in a drop for nonattendance, based on your institution's policy.

During the first week, to ensure your success in this course, the following is recommended:

1. Contact your instructor using the instructor's preferred method of communication and introduce yourself.
2. Introduce yourself on the discussion board.
3. Register in MathXL and complete assignments 1-1 and 1-2 with a grade of 70% or above.

All tests in online classes require proctored exams. Each student will have to take these tests in an approved proctored testing center (remote students will take these tests in an approved proctored test site).

BLENDED COURSES

If you are taking this as a blended course, please note the following:

1. Classroom meetings will be primarily for the purpose of answering questions and engaging in discussions about the material and its purpose in the real world. Time outside of class will be spent completing all the assignments and quizzes, which means that this course contains a substantial online component.

2. The mix of classroom instruction and online instruction will vary based on the instructor's preferences.

LEARNING COMMUNITIES

Students learn through interactions with each other, with the instructor, and with written, auditory, and visual learning materials. To facilitate interactive learning among learners and between learners and faculty, a major goal of this course is to encourage the development of

learning communities--that is, to help learners and faculty get to know and better understand each other. Toward this end, the instructor will post a brief written autobiography introducing herself/himself; this will be available online as a part of the first week of class. You are asked to also introduce yourself by posting a brief biography on the discussion board; a picture is also recommended. In addition, a discussion forum (Cyber Café) has been provided to informally discuss things with other classmates without intervention of the faculty member.

DISCUSSION

Several discussion questions are scheduled during the session. In all formal discussions, you are to carefully read the question first, post an answer to the question, read the responses of your classmates, and then post your replies. Learners who participate in discussions are likely to experience a higher level of learning and retention of the information contained in the course. To encourage your active participation in the course, you will receive credit for your contributions to the discussions.

Your discussion grade will be based on

- Thoroughness, accuracy, and insightfulness of your responses

- Your use of correct spelling and grammar and correct sentence and paragraph format (ALWAYS spell check your responses)

- Your responses to other student posts

Sample discussion question:

> The skills you have developed in statistics apply to many fields, and many of these pay quite well.

> Go to the web and find two careers that require skills in statistics (or mathematics in general). *Can you envision yourself being in one of these careers? Why or Why not?* Be sure to list the sites you have visited on the web. Then read and reply to the posts of your classmates.

ASSESSMENTS

Homework. There are homework assignments covering the material for each chapter. These assignments will be completed in MathXL. As you complete the homework, MathXL provides several types of assistance to help you solve the problems. Remember that when you are doing the homework, you are learning and preparing for other assessments.

Quizzes. There is a quiz covering the material for every chapter. The quizzes are completed in MathXL. Upon completion of the material and homework in each chapter, you should be ready to access and take your online quiz. The items for each quiz are randomly generated. You may retake the quiz as many as three times. The highest score will be recorded.

Tests. In addition to the weekly quizzes, three proctored tests are given during the course. Each student will be required to go to an appropriate testing center to take these tests. The first test will cover chapters 1, 2, and 3. The second will cover chapters 4 and 5. The third test will cover chapters 6 and 7.

In addition to these assessments, term grades will be based on discussion forum participation.

GRADING

The discussion forum participation, homework, quizzes, and tests will be used to compute the final grade in the course. Your final letter grade will be determined by totaling the points for all of these as indicated in the chart below.

Discussions in the Course Shell(7 @ 15 points each)	105
History of Math Assignment in MathXL	10
Homework in MathXL (29 @ 5 points each)	145
Quizzes in MathXL (7 @ 20 points each)	140
Tests in MathXL (3 @ 200)	600
Total Points	**1000 Points**

A	900-1000 points
B	800-899 points
C	700-799 points
D	600-699 points
F	0-599 points

CALENDAR OF ACTIVITIES

Week	Topic	Dates
Week 1	**Problem Solving and Estimation** Post Introduction in the Discussion Board (in Blackboard). Complete Discussion 1 in the Discussion Board (in Blackboard). Complete Assignments 1-1 and 1-2 in MathXL. Take Quiz 1 in MathXL.	
Week 2	**Set Basics and Subsets** Complete Assignments 2-1 – 2-3 in MathXL. Begin Discussion 2.	

Week 3	**Venn Diagrams and Infinite Sets** Complete Assignments 2-4 and 2-5 in MathXL. Complete Discussion 2. Take Quiz 2 in MathXL.	
Week 4	**Beginning Logic** Complete Assignments 3-1 and 3-2 in MathXL. Begin Discussion 3. Watch the Video in MathXL, and complete the History of Math assignment in MathXL. Note: No quizzes or tests cover this assignment.	
Week 5	**Valid Arguments** Complete Assignments 3-3 – 3-5 in MathXL. Complete Discussion 3. Take Quiz 3 in MathXL.	
Week 6	**First Proctored Test, Chapters 1 – 3**	
	Take Practice Test 1 in MathXL several times as well as complete the practice homework for Test 1, which is generated after your first practice test. Take Test 1.	
Week 7	**The Metric System and Dimension Analysis** Complete Assignments 4-1 and 4-3 in MathXL. Take Quiz 4 in MathXL. Complete Discussion 4.	
Week 8	**Beginning Geometry** Complete Assignments 5-1 and 5-2 in MathXL. Begin Discussion 5.	
Week 9	**Perimeter, Area, and Volume** Complete Assignments 5-3 and 5-4 in MathXL. Complete Discussion 5. Take Quiz 5 in MathXL.	
Week 10	**Second Proctored Test, Chapters 4 – 5** Take Practice Test 2 in MathXL several times as well as complete the practice homework for Test 2, which is generated after your first practice test. Take Test 2.	
Week 11	**Probability and Odds** Complete Assignments 6-1 – 6-3 in MathXL. Begin Discussion 6.	
Week 12	**Conditional Probability, Combinations, and Permutations** Complete Assignments 6-4 – 6-6 in MathXL. Complete Discussion 6. Take Quiz 6 in MathXL.	

Week 13	**Basics of Statistics** Complete Assignments 7-1 and 7-2 in MathXL. Begin Discussion 7.	
Week 14	**Normal Distribution** Complete Assignments 7-3 and 7-4 in MathXL. Complete Discussion 7. Take Quiz 7 in MathXL. Please complete the course evaluation.	
Week 15	**Third Proctored Test** Take Practice Test 3 in MathXL several times as well as complete the practice homework for the test, which is generated after your first practice test. Take Test 3.	
Week 16	**Posting of Grades**	

CALENDAR OF ACTIVITIES (12-Week Course)

Week	Topic	Dates
Week 1	**Problem Solving and Estimation** Post Introduction in the Discussion Board (in the course shell). Complete Discussion 1 in the Discussion Board (in the course shell). Complete assignments 1-1, 1-2, and 2-1 in MathXL. Take Quiz 1 in MathXL.	
Week 2	**Sets and Venn Diagrams** Complete Assignments 2-2 – 2-5 in MathXL. Complete Discussion 2. Take Quiz 2 in MathXL.	
Week 3	**Beginning Logic** Complete Assignments 3-1 – 3-3 in MathXL. Begin Discussion 3. Watch the Video in MathXL, and complete the History of Math assignment in MathXL. Note: No quizzes or tests cover this assignment.	
Week 4	**Valid Arguments** Complete Assignments 3-4 and 3-5 in MathXL. Take Quiz 3 in MathXL. Complete Discussion 3.	

Week 5	**First Proctored Test, Chapters 1, 2, and 3** Take Practice Test 1 in MathXL several times as well as complete the practice homework for Test 1, which is generated after your first practice exam. Take Test 1.	
Week 6	**Metric System and Dimension Analysis** Complete Assignments 4-1 – 4-3 in MathXL. Take Quiz 4 in MathXL. Complete Discussion 4.	
Week 7	**Geometry** Complete Assignments 5-1 – 5-4 in MathXL. Take Quiz 5 in MathXL. Complete Discussion 5.	
Week 8	**Second Proctored Test, Chapters 4 and 5** Take Practice Test 2 in MathXL several times as well as complete the practice homework for Test 2, which is generated after your first practice exam. Take Test 2.	
Week 9	**Probability and Odds; Permutations and Combinations** Complete Assignments 6-1 – 6-6 in MathXL. Take Quiz 6 in MathXL. Complete Discussion 6.	
Week 10	**Statistics and the Normal Distribution** Complete Assignments 7-1 – 7-4 in MathXL. Take Quiz 7 in MathXL. Complete Discussion 7. Please complete the course evaluation.	
Week 11	**Third Proctored Test** Take Practice Test 3 in MathXL several times as well as complete the practice homework for the test, which is generated after your first practice test. Take Test 3.	
Week 12	**Posting of Grades**	

FREQUENTLY ASKED QUESTIONS FOR Florida State College at Jacksonville STUDENTS

1. What learning management system is used at Florida State College at Jacksonville for the online portions of this course?
This course is delivered in the Blackboard® and MathXL® online course platforms.

2. Where do I acquire the required texts and instructional materials for this course?
All SIRIUS Academics course materials are purchased at the time of registration. Once you have paid your college tuition and fees, you will have access both to the course materials in Blackboard and through Connections to the code required to download the SIRIUS Academics e-book.

If you have not already downloaded the MyScribe application and your e-book for this course, please view your schedule in Connections for your CaféScribe code and instructions.

Quick tutorials and instructions on how to get started with CaféScribe are available at the following Website: www.afpd-fscj.org/cafescribe.html .

If you are having difficulty with the download, installation, or operation of MyScribe/CaféScribe and would like more in-depth help, access one of the following:

- ♣ 24/7 Customer Support at 1-877-612-2233 (toll-free)

- ♣ The customized support page at http://fscj-support.cafescribe.com

If you would like to also purchase a printed copy of the e-book, you may do so at any campus bookstore; the cost of the printed book is $24.95.

3. Do I have to have Internet access at home?
It is recommended that you have reliable and consistent Internet access. The College does, however, have many student computer labs available to students who wish to use them.

4. What if I need special accommodations to take the course?
If you require specific accommodations to complete this course, contact the Office of Services for Students with Disabilities.

5. How long will I have to wait for a response from the instructor to my email?
Faculty respond to email within 48 hours.

6. What is proper email etiquette?
Email to other learners and the instructor needs to be addressed in a manner appropriate to polite interactions.

7. What will help me succeed in this course?
- **Strong discipline and desire to succeed.** You'll need to log in to class often

during the typical week, motivating yourself to meet the requirements for success.

- **Ability to work well independently.** You'll develop the support of fellow learners all taking the same coursework together, but it will be different than a typical classroom environment. If you work well independently, your chance of success is higher.
- **Computer savvy.** If you're not familiar with the Internet and email communication, we recommend that you take a computer enrichment class prior to enrolling in this course. Faculty assume you know how to access and send data on the Internet.

8. What about academic dishonesty?

Academic dishonesty, in any form, is expressly prohibited by the rules of the District Board of Trustees of Florida State College at Jacksonville. Academic dishonesty incorporates the following:

- Cheating, which is defined as the giving or taking of any information or material with the intent of wrongfully aiding oneself or another in academic work considered in the determination of a course grade.
- Plagiarism, which is defined as the act of stealing or passing off as one's own work the words, ideas, or conclusions of another as if the work submitted were the product of one's own thinking rather than an idea or product derived from another source.
- Any other form of inappropriate behavior which may include but is not limited to falsifying records or data; lying; unauthorized copying, tampering, abusing or otherwise unethically using a computer or other stored information; and, any other act of misconduct which may reasonably be deemed to be a part of this heading.

Any student alleged to have committed any act of academic dishonesty as defined herein shall be entitled to due process as defined in District Board of Trustees' Rule 6Hx7-2. 18 prior to the administration of disciplinary action, including suspension and dismissal.

9. What if I experience technical difficulties?

If you have any problems with Blackboard, viewing online content, email, or Connections, visit the Florida State College at Jacksonville Online Support Center . There you can browse helpful guides and material, search the knowledge base, and contact the technical support team directly via completion of an online form or live chat. The Support Center is also available via phone at 904.632.3151 or at 866.886.4952 (toll free).
If you experience any type of problem with the MathXL site, please contact the MathXL Customer Support Center directly and inform your instructor. Online tutorials, user guides, and a searchable support database are available (http://www.mathxl.com/support/contactus_stu.htm). If you cannot find an answer to your question or problem within these pages, contact MathXL Customer Support by phone at 800.677.6337 (toll free).

10. What is the Florida State College at Jacksonville Code of Ethics?

Consistent with The Code of Ethics of the Education Profession in Florida, 6B-1.06, Principles of Professional conduct for the Education Profession in Florida, an obligation to

the learner requires that an individual shall not harass or discriminate against any learner on the basis of race, color, religion, sex, age, national or ethnic origin, political beliefs, marital status, handicapping condition, sexual orientation, or social and family background and shall make reasonable effort to assure that each learner is protected from harassment or discrimination.

11. May I repeat this course?

Learners repeat a course in an attempt to improve a grade previously earned. State Board Rule 6A-14.0301 limits such attempts to courses where a "D," "F," or "FN" grade was earned. A learner has only three total attempts in any course, including the original grade, repeat grades, and withdrawals. Upon the third attempt in a course, the learner must be given an "A," "B," "C," "D," or "F."

When students repeat a course at Florida State College at Jacksonville, only the last grade earned is calculated in their cumulative grade point average (GPA). However, students with an excessive number of "W" or "FN" grades and students who repeat courses to improve their GPA may jeopardize their admission to programs in the Florida State University System (SUS) or other institutions.

12. *What are "I" grades and when are they used?*

- An "I" grade may be assigned at the instructor's discretion upon request by the student to permit the student time to complete required course work, which s/he was prevented from completing in a timely way due to nonacademic reasons. The instructor may require the student to document the request to assist in the decision. The instructor may choose not to grant the request. The "I" grade should be considered only when the student has the potential to earn a passing grade if the missing work is made up.
- The instructor shall prescribe in a written agreement with the student the remaining course work required for completion and removal of the "I" grade. A copy of this agreement will be kept on file in the office of the appropriate dean. All work must be completed within the first eight weeks of the subsequent term unless the instructor agrees to a longer timeframe extension of time (not to exceed one year). When the work is completed, the instructor will submit a grade change form with the grade earned. If the work is not completed within the prescribed timeframe, the "I" will automatically change to an "F" grade. The student will be informed of the final grade assigned.
- To be eligible for an "I" grade, the student must be passing the course at the time of the request, and must have completed at least 75% of the course work.

13. Is there a General Education Competency in this course?

Student work in this class may be collected by the College for the purpose of

assessing institutional effectiveness and measuring general education competencies. The artifacts collected and submitted for this purpose will be done so anonymously.