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| Professor: | Dr. Laurel Carpenter,     llcarpen@bju.edu |
| Office: | Al 46 |
| Office Hours: | Daily by appointment,     `https://calendly.com/llcarpen` |
| Preferred Contact: | MS Teams; personal correspondence by personal chat and general course/content related questions in the course general channel |
| Textbooks: | *Actuarial Exam Tactics: Learn More, Study Less* (first or second edition) by Roy Ju and Mike Jennings |
| Technology: | None Required |
| Course Website: | `http://math.bju.edu/ma199/` |

## Course Description

A weekly seminar course targeted at first-year students majoring in mathematics and actuarial science covering foundational techniques for learning both applied and theoretical mathematics with the goal of improving students' performance in courses taken during the first year.

## Course Context

This course supports the following objectives of the mathematics and actuarial programs:

MM1: Progress logically from premises to valid conclusions in a variety of mathematical contexts.

MM2: Apply mathematics to model real-life situations.

AS1: Progress logically from premises to valid conclusions in a variety of mathematical and applied contexts including analysis, statistics (both theoretical and applied), probability and finance.

AS2: Apply mathematics to actuarial problems (such as financial math and probability modeling) in exercising the biblical mandate to have dominion over the earth.

## Course Goals

The student will . . .

CG1: learn to employ the techniques of effective study and apply them to their study to develop long-term understanding of mathematics.

CG2: learn how to master mathematics more efficiently, learning more in less time.

## Course Objectives

The student will be able to . . .

1. apply two or more of the study techniques to their current math course.
2. evaluate their own study habits and identify areas in which they can improve.

3. develop a plan to incorporate review into their weekly study.

4. develop a plan to improve the efficiency of their weekly study.

## Course Requirements

The course grade will consist of

- Written assignments relative to their math course based on *Actuarial Exam Tactics* – 10 assignments at 5 pts each (due as assigned)
  The assignments will be graded based on the quality/thoughtfulness of your answers. Assignments that are not submitted will receive **-1 points**.

- Quality time spent in study for their math course (computed as quality time = time in # of hrs * quality rating/4; where quality rating is given on a scale of 1 to 4) – 20 pts
  (average for a 3-credit course 8 hrs = A-, 7 hrs = B-, 6 hrs = C-;
  average for a 4-credit course 11 hrs = A-, 9 hrs = B-, 7 hrs = C-)

- Time spent reviewing previous material in their math course – 5 pts
  (average 0.75 hr = A-, 0.65 hr = B-, 0.5 hr = C-)

- Number of practice problems completed during study for their math course – 20 pts
  (average for a 3-credit course 35 = A-, 30 = B-, 21 = C-;
  average for a 4-credit course 45 = A-, 40 = B-, 28 = C-)

- Accuracy of practice problems completed during study for their math course – 10 pts
  (average for a 3-credit course 14 = A-, 12 = B-, 9 = C-;
  average for a 4-credit course 18 = A-, 15 = B-, 12 = C-)

** Point assignments are subject to change.

## Course Evaluation

All course/assignment grades are based on the evaluation of the work communicated by the student. You will maintain the study log (see the provided Excel spreadsheet) to document your study efforts. You will post the Excel file (and keep it updated) in your personal MS Teams channel, so that your professor can keep track your progress.

This a 0 credit, pass/fail course. A pass will require a course grade of at least 70%.

## Office Hours

Office appointments can be made using the Calendly site (appointments may be made up to two weeks in advance), `https://calendly.com/llcarpen`. If there are no available times at which you are able to meet, send your professor a message including some days/times between 7:30am and 3pm when you are available.

## General Policies

### DEPORTMENT

Compliance with student handbook policies is expected during class. The classroom is to be a professional environment. That means you are to come to class prepared for the day's discussion, your attention is expected to be on course related material, and you are expected to positively contribute to the class.

Emergencies During Class

In case of emergency requiring evacuation, students will go down the stairs on the fountain side and exit the door facing Wade Hampton underneath the stairs. Students will immediately cross the street and gather by the fence with their class. If we are unable to exit the building, the professor will instruct the students on the best course of action. To be able to respond quickly to external threats, professors may keep classroom doors locked. If you are late arriving to class, you may need to knock on the door and be let in.

Absences

BJU attendance policy is in effect (see `https://home.bju.edu/bju-policies/` for details).

- You should be ready to begin discussions/presentations at the start of the class hour and should demonstration your professionalism by being engaged and attentive during class.

- For absences due to incapacitating illness or emergency, you should contact the instructor as soon as you realize you will not be in class and make arrangements to reschedule presentations if needed. All late work must be submitted by the next calendar day unless other arrangements have been made with the professor.

- Students are expected to attend all student presentations.

Late Policy

Assignments not submitted as directed by the due date will incur the following late penalty.

- Written assignments/papers/projects are penalized at 15% if submitted within 3 calendar days of the due date and are a 0 after that. Oral presentations are a 0% if not presented on the day assigned unless permission to reschedule is granted by the professor.

  Late paper submissions must include the date and time the paper is submitted.

- Work may always be completed early.

## Academic Integrity Policies

The university's Academic Integrity Policy is in effect (see `https://home.bju.edu/bju-policies/` for additional details).

Definitions of Integrity Violations

Integrity is the reflection of the character and nature of God in our actions; therefore, students will be expected to work with integrity. In academia, violations of integrity generally fall into one or more of the following categories:

- Cheating: unauthorized use or attempted use of assistance, information, or aids in any academic assignment

- Falsification: submitting work done by others, changing work after submitting an assignment, reporting false information about the completion of an assignment

- Unacceptable collaboration: working with others when not permitted, using AI to generate ideas, thoughts, or content without the explicit permission of the professor

- Facilitation of Cheating: helping another student violate academic integrity, communicating quiz/test questions to other students

- Plagiarism: the intentional or unintentional use to any degree of the ideas or words of one's source material without proper acknowledgement

All work done for this class must represent your own effort, your own understanding, and your own communication of the material.

## COURSE INTEGRITY POLICIES

If information is taken from other sources (which is at times appropriate), it always needs to be referenced and credit given where it is due. Use standard referencing techniques as taught in En 102. Solutions found on the internet are not to be copied.

- Study: While you are encouraged to study and discuss ideas together, simply copying someone else's work or repeating their ideas is neither useful nor acceptable. Your work should represent your ideas and your understanding of the material.

- Research/Papers: You are encouraged to discuss the general ideas needed to complete your work in this course with your classmates but are not permitted to "work together" on your research. Your research must represent your own ideas, your own work, and your own communication of your work.

Assignment submissions will be evaluated for plagiarism and AI usage at the discretion of the professor. If you have a question about any source you are considering using, it is wise to gain your professor's approval before using it. You are always permitted to ask your professor for help. Any help they choose to provide is acceptable.

## AI USAGE POLICY

The goal of the assignments in this course is to learn to develop the skills covered, NOT to complete the tasks assigned. The use of AI to complete or jumpstart tasks defeats the goal of the assignments. Therefore, you may not use generative AI tools in this course for any assignment without the professor's express permission. AI tools include, but are not limited to, CoPilot, Apple Intelligence, Chat GPT, Bing Chat, Google Bard, Grok, Deepseek, Grammarly, and language translators.

## DOCUMENTATION OF PERMITTED AI USE

Should an AI tool be used with permission, its use must be documented (including the tool used, a summary of the prompts provided and the portions of the assignment that were based on AI generated work). See https://style.mla.org/citing-generative-ai/ for details on citing the use of AI.