



Exams 8 and 9 Test Time Increased to Four Hours

The test time for CAS Exams 8 and 9 has been extended from three hours to four hours on a permanent basis. The change was recently approved by the CAS Executive Council (EC). In approving the change, the EC agreed that increasing the time available to sit for these exams would allow candidates to better demonstrate their mastery of the learning objectives. The increase in test time does not reflect an increase of material or an expansion of the exams – there are no substantive planned

changes to the syllabus for either Exams 8 or 9. The EC's decision to increase the test time was made specifically to allow candidates more time to complete these exams in light of the anticipated increase in the percent of test items at higher cognitive levels. The EC's decision endorsed the position of the CAS Education Policy Committee and Syllabus Committee, which both voted to recommend that Exams 8 and 9 have test times of four hours. [ff](#)

Going Mobile with the New CAS Web Site

By Mike Boa, Director of Communications and Marketing

Access of Web sites on smart phones, tablets, and other mobile devices is exploding. Consider this:

- As of February 2012, nearly half (46%) of American adults are smartphone owners, an increase of 11 percentage points over the 35% of Americans who owned a smartphone in May 2011 (Pew Internet).
 - The number of iPad users in the United States will rise by over 90% in 2012 (eMarketer).
 - In the United States, 25% of Internet users only use their mobile device to access the Web (mobithinking.com).
 - At the end of 2011, there were 6 billion mobile subscriptions, which is equivalent to 87% of the world population (The International Telecommunication Union).
- The CAS is responding to the rapid growth in access of online content by mobile devices

with the launch of the newly redesigned CAS Web Site. With the launch, a mobile version of casact.org is now available to allow members and candidates easy access to CAS information through their smart phones and tablets.

The need for a mobile Web site was just one requirement that the Committee on Online Services and staff became aware of during their research before beginning the redesign project. Interviews with members and candidates were conducted to learn about preferences for online services so that the redesigned Web site was responsive to member and candidate needs.

In consideration of what we heard, the redesigned CAS home page presents a clean, modern, and attractive design. The user-friendly navigation uses drop-down menus for quick access to important content.

The new Web site also features an upgraded search engine that will make it easier for Web

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DATES TO REMEMBER

EXAM REGISTRATION DEADLINES

Exams 3L, 6-Canada, 6-United States, and 8

September 20, 2012

Exam I/P (November)
September 25, 2012

Exam 3F/MFE (November)
September 25, 2012

Exam 2/FM (December)
October 22, 2012

Exam I/P (January)
December 3, 2012

Exam 4/C (February)
December 20, 2012

EXAM REFUND DEADLINE

Exams 3L, 6-Canada, 6-United States, and 8

October 29, 2012

CAS SEMINARS AND MEETINGS

CASUALTY LOSS RESERVE SEMINAR
Denver, Colorado
September 5-7, 2012

IN FOCUS: TAMING CATS—
MANAGING NATURAL AND MAN-
MADE CATASTROPHE RISK
Baltimore, Maryland
October 4-5, 2012

INTRODUCTION TO ENTERPRISE RISK
MANAGEMENT
CAS Online Course
October 12-29, 2012

CAS ANNUAL MEETING
Lake Buena Vista, Florida
November 11-14, 2012

Exam-Related Strategies: Survey Results

By Kari Palmer and Sue Curtis, Candidate Liaison Committee

Have you ever wondered how your studying stacks up with other candidates? Are you using an effective study strategy? Are you getting the most out of your 15-minute reading period? Maybe you have a superstition that you count on for a high-performing exam day. Members of the Candidate Liaison Committee asked candidates to answer ten exam-related questions to help you compare your exam strategies to other candidates and to give you some new techniques to try. Of the 118 candidates who responded, almost half claimed to usually pass exams on the first attempt. Maybe some of their pre-exam day activities and superstitions are worth trying!

Overall Study Strategy

The vast majority of candidates plan for multiple passes through the material, recognizing that it is difficult to learn all the details in one pass. About half of these candidates try to learn the material fairly well on the first pass, while the others just try to get the basic idea of each paper. About 60% of candidates make a study schedule and stick to it, while the other 40% admit to not following their schedule or not making one at all. Several candidates wrote that they designed their study schedule to be somewhat flexible, as they did not always know in advance which topics would require extra time.

Among candidates who reported the highest exam success rate, the most popular strategy was to start with an overview of basic ideas and plan for two or three passes through the material. These candidates were also significantly more likely to make a study schedule and stick with it.

Use of Study Aids

Over 70% of the candidates report reading all of the original source material, a higher percentage than for any other single study source. Even some of the candidates who did not read all the source material reported reading most of it. Most candidates also use additional study guides to help focus their studying and provide additional perspective on the material. Online seminars seem to be replacing in-person seminars; about 57% of the candidates reported watching online seminars compared with 34% attending in-person seminars.

About 85% of candidates do at least a few practice exams under timed conditions. About half of the candidates reported doing one or two practice exams, while about a third use practice exams much more extensively (at least three or four, and possibly as many as five to ten). One candidate commented that doing a lot of practice exams in the week before the exam “helps make the actual exam feel like just another practice exam.” Making your own note cards and writing your own practice problems were also popular responses.

Taking the Exam

Almost 80% of candidates responding said they work the exam questions in order from beginning to end. Some other reported techniques include answering the highest point questions first, the easiest questions first, the hardest questions first, or the computation questions before the essay questions.

When asked what they do during the 15-minute reading period, about half of candidates reported reading through the problems and thinking about how to solve them along the way. Other candidates seemed more focused on formulating a strategy. Some candidates use the point sheet at the end of the exam to find questions worth the most points; others reported looking for problems they want to work on first or skip entirely based on difficulty or perceived “trickiness.” A couple of candidates described plans to pace themselves: they identify which question they should be working on after each hour has gone by (i.e., 1/4 of the exam for a 4-hour exam). So the next time you’re getting nervous or staring at the ceiling during the reading period (as some of you admit to doing!), you’ll have a few new techniques to try!

Pre- and Post-Exam Day Activities

The day before the exam, over half of the responders prefer to just flip through notes and try to relax. This is probably a much needed day of relaxation since about the same number also confess to throwing exercise and sleep out the window the months leading up to an exam! (It might be helpful to review the article “Are You Sleeping?” in the March 2012 issue of *Future Fellows* to learn about the benefits of good sleep.) Relaxing the day before the exam does seem to correlate with exam success; those candidates who reported studying hard (thorough review, practice exams) the day before the exam also reported a lower success rate.

There are also quite a few candidates with superstitions or favorite tactics on exam day. About 30% of the responders have something they do the same way on every exam. Some candidates say they are very picky about their pens, pencils, and calculators – using the same ones on every exam, bringing way too many of each, and organizing them in a very specific way on the desk. There are also food routines, like eating the same breakfast and drinking some source of caffeine. One response suggested thinking about “exactly how much caffeine is optimal to wake you up but minimize bathroom time, and what type of food enhances your concentration.” Alas, we did not find a significant correlation between these tactics and reported exam success.

An easy opportunity to minimize your stress on exam

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Exam-Related Strategies: Survey Results

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morning is to drive to the exam site a day or two before the exam, and plan to have a person on call to pick you up in case your car breaks down on the way. You can never be too careful!

Eventually, the moment of freedom comes when the proctors say those wonderful words, “Put your pencils down.” Most candidates go straight to lunch after those four grueling hours and relax with some beverages. Some of you like to talk about the exam; others prefer not to. Many candidates also like to unwind with shopping,

getting a haircut, watching TV, and catching up on sleep. Some candidates take their long-neglected spouse or significant other out for a nice dinner. And then there are the very few candidates that want to jump right in and look at the syllabus for the next exam. Whatever post-exam celebration you choose, reward yourself for the many months of hard work you’ve put in, before you start all over for the next exam! **ff**

April-June 2011 Examination Results

Exam Summary

Exam	Number of Candidates	Number of Passing Candidates	Number Below 50% of Pass Mark (Ineffective)	Effective Pass Ratio
1/P*	2831	1106	418	45.8
2/FM – April*	1755	854	138	52.8
2/FM – June*	2376	1145	182	52.2
3F/MFE*	2834	1363	283	53.4
3L	219	90	49	52.9
4/C*	2008	904	210	50.3
5	895	431	50	51.0
Transitional 5A	62	43	0	69.4
Transitional 5B	72	53	2	75.7
7	135	56	10	44.8
9	752	327	21	44.7
Online Course 1	129	111	1	86.7
Online Course 2	174	136	0	78.2
Exam ST9 for CAS	25	6		24.0

*For joint exams, the summary includes all candidates who sat for the specified exam.

Survey Summary

Exam	Percent Responding	Syllabus Coverage Inadequate (1) to Adequate (5)	Exam Clarity Not Clear (1) to Very Clear (5)	Exam Length Too Short (1) to Too Long (5)	Exam Difficulty Easy (1) to Difficult (5)	Exam Quality Poor (1) to Excellent (5)
3L	37.9%	3.27	2.95	3.53	4.30	2.83
5	27.8%	3.22	3.31	3.47	3.66	3.34
5A	43.6%	2.19	2.78	3.59	3.93	2.48
5B	29.2%	3.86	3.90	3.90	3.52	3.43
7	37.0%	3.68	3.36	3.14	3.50	3.40
9	43.2%	1.92	2.11	3.79	4.55	1.97

Actuarial Expert Testimony

Interview with Richard Fein, Ph.D., FCAS, MAAA, Principal of RIF Consulting, LLC

By Amy Beth Green, FCAS, Candidate Liaison Committee

Actuaries serve many roles, and one lesser-known role is expert witness. This interview with Richard Fein provides a glimpse into the world of actuarial expert testimony.

How did you get started in expert testimony?

My career started as an actuarial analyst at Royal Globe Insurance Company about 40 years ago. After about five years, I began working for the National Council on Compensation Insurance (NCCI), where my task was to put together rate filings and attend hearings to testify for those filings for the NCCI. These hearings are administrative proceedings that, while not the same as court proceedings, share many of the same obligations for the professional actuary. Administrative proceedings are usually before a board or an insurance commissioner, depending on the jurisdiction, and are typically public. Most times, we worked with outside counsel to help us through the hearing process. After the hearing there would be a decision. This was my first time presenting actuarial data, processes, and conclusions in an official court-like setting with the creation of a record.

I also did some legislative hearings, many of which were open to public participation. These were usually when a state legislature wanted to make changes to workers compensation laws and were interested in knowing the likely financial effect of making the changes. Legislative hearings are similar to administrative/court proceedings but have their own set of rules regarding the presentation, participation, and who may ask questions. Based on the record and situation, these hearings could result in court proceedings if action were taken by any party. These were opportunities to present technical processes, professional material, observations, and conclusions to non-technical audiences, such as hearing officers, insureds, labor, agents, brokers, and other stakeholders. Those stakeholders recognize actuaries as a profession due to our credibility. They all have their own expecta-

tions. The challenges were all similar, presenting your opinions on technical matters, clearly explaining them to your audience, while always being faithful to the tenets of professionalism.

What kind of work do you do now?

Much of the expert testimony I do is related to actuarial work products and contractual disputes among parties, including insurers, buyers, reinsurers, and government agencies. In nearly every case the issues involve professionalism, mismatched expectations, codes of conduct, and standards of practice. Typically issues involve the quality of the underlying work product, the basis for observations, and support for the conclusions, I might be asked to look at a work product and speak to what it should or should not have contained as underlying support.

I may also be asked to review someone's work product, which may draw inferences about another actuary's work or statements, many times with the question of perceived violation of certain actuarial principles, such as the Actuarial Standards Board (ASB) Actuarial Standards of Practice (ASOPs), CAS Statements of Principles (e.g., ratemaking, loss reserving), or Code of Professional Conduct (American Academy of Actuaries and CAS). These principles are looked upon and relied on by those outside our profession as our profes-



Rich Fein

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Going Mobile with the New CAS Web Site


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site visitors to quickly find the information they seek.

All of the most popular Web site features remain—passing candidate numbers, the online Syllabus of Exams, online exam registration, and much more.

Launched in July, the new Web site promises a better user experience—especially for the growing number of candidates and members accessing CAS information on the go.

The Committee on Online Services and staff welcomes input and feedback on the CAS Web site. If you wish to contribute any suggestions, send me an e-mail at mboa@casact.org. 

Navigating the CAS Syllabus

By Kudakwashe Chibanda, Candidate Representative to the Candidate Liaison Committee

To be honest, I have always been unsure of how to use the CAS *Syllabus of Basic Education* and the individual exam syllabi that it contains. Beyond downloading the required readings, I never used it much. Having spoken with colleagues, I discovered that they felt the same way. Their treatment of the syllabus was remarkably similar to mine: when preparing for an exam, we download the materials, gleefully discard excluded sections, and then immediately abandon the syllabus. None of us could really describe the difference between a learning objective and a knowledge statement. In addition, we did not know what to make of the ranges of weights, and were clueless on how to use the syllabus vis-a-vis the implementation of Bloom's Taxonomy.

I therefore jumped at the opportunity to write an article about it, because I am in the middle of the exam process, so understanding the syllabus is of the utmost importance to me and my peers. Members of the Syllabus Committee provided guidance and clarification, which was much appreciated.

(1) Learning Objectives vs. Knowledge Statements

According to the language of the syllabus, learning objectives “set forth, in broad terms, what the candidate should be able to do in actual practice.” By contrast, knowledge statements “identify some of the key terms, concepts and methods that are associated with each learning objective.” Learning objectives are umbrella terms that encompass the breadth of expected knowledge, so do not expect them to describe one specific topic. For example, Section D of Exam 9 lists “analyze a rate of return” as a learning objective. Read on its own, this seems vague, as there are five different papers covering more than 200 pages supporting that one objective. However, with the knowledge that learning objectives are umbrella terms, candidates will have a better idea of the full scope of testable material.

Knowledge statements are more specific, and serve to illustrate what can be tested, rather than exhaustively list all testable material.

Once I understood this difference, I realized just how expansive the syllabus actually is. It is often the case that past exams repeatedly test a particular knowledge statement. However, the learning objectives should clue candidates in to everything that can be tested, whether or not it has in the past.

(2) Ranges of Weights

The syllabus clearly states that the weights “should be viewed as guidance only...the actual weight may fall outside the published range.” However, this has not stopped many candidates (myself included) from using the ranges as a sure

guide for what will be tested. If a learning objective lists a range of 0-5%, I often assume the topic is of little importance. That is not the way to think of those published ranges. According to the Syllabus Committee, they “represent long-term averages, not a blueprint for any single examination.” For example, many candidates think a range of 3-7% means the topic must appear on every exam since the bottom range is not 0. That is simply not true.

It is also important to realize that past examinations are not necessarily indicative of future ones. This spring I took an exam that had several previously untested topics. At first, I felt duped by the CAS. Upon further analysis of the exam syllabus, however, I realized previously untested topics were directly addressed by not just the learning objectives, but by the knowledge statements as well. I had spent so much of my time engrossed in past exam questions that I neglected perfectly testable material. This clearly illustrated to me the importance of basing my study regimen on the syllabus and not just past exams or third-party materials.

(3) The Syllabus and Bloom's Taxonomy

The implementation of Bloom's Taxonomy has caused much consternation among candidates (including myself). Since fear of the unknown has never meshed well with actuarial candidates, many of us have tried to combat this by reading everything we can about Bloom's Taxonomy. We know this method of testing is more involved and will result in questions being asked in a manner they haven't been before. So far, I have found this challenging, because I never really know how much detail to go into, or how new questions will be phrased. Do I just need to know the method, or do I need to know everything else in the paper, in elaborate detail?

The Syllabus Committee really wants us to focus on the language of the syllabus for guidance. They say, “If the syllabus says, ‘apply the method,’ then the level of mastery required is different than if it says, ‘learn the method and discuss the advantages and disadvantages.’” The verbs used in the syllabus become of paramount importance, because they clue you in to how much detail is necessary. For example, “explain” indicates a different level of mastery than “identify.”

In addition, the summary paragraphs in each syllabus section are rich with information about what the expectation is for candidates, so read them carefully. One member of the Syllabus Committee described them as “super learning objectives” so treat them as such.

Bloom's Taxonomy also affects the ranges of weights. The Syllabus Committee notes, “Under the Bloom's paradigm, there may be fewer, more involved questions.” This will increase

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Interview with Richard Fein

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sional standards of practice. This is rightly so, since the use of the credential, FCAS or ACAS, means that you have agreed to abide by those standards.

The standards, however, may be difficult for a non-actuary to interpret. For example, how would a non-actuary determine whether a reserve estimate is “reasonable,” “sound,” or a “best estimate”? Our principles identify the basis as we put those statements into practice. Some terms have interpretations in a legal setting that have to be viewed in the context of our own considerations and general practice. For example, as professionals we understand that our best estimates typically are not deterministic, since they may be based on one realization of the underlying processes. Therefore, we disclose that a range of outcomes is possible. But when the estimate falls significantly short or greatly exceeds the actual emerging events, the perception of an actuary’s competency may be highlighted in spite of the disclosures. The degree to which the standards of practice were followed now becomes a point of contention.

How did your first case go?

Not very well. I was supposed to testify about a rate filing, but I was new and did not fully understand what was and was not important technically. It was also before the CAS Statements of Principles were published as such. In that setting, it was hard to train someone to do this work because you really needed to actually experience it and do it. We were successful but the presentation was not the best. My answers didn’t appear in print as well as I thought I had expressed them. My view of what I actually said simply fell short. That is a communication skill that you can learn, but you need to be aware of the gap.

As an expert you are acting as a professional actuary and need to know your subject area. Never go beyond what you know. If you do not know a certain subject area, you should not testify in it.

What should actuarial candidates know?

The best thing for someone with an interest in actuarial expert testimony is to keep a clear, open, professional mind about the field. Expert testimony is something that requires good preparation. To do so, you must pay attention to your craft and think like a professional actuary when you prepare a report and when you communicate. The CAS prepares you well with a foundation of in-depth knowledge for this type of work. Think about who is reading your reports and how well they would understand them.

Know your craft. Approach the development and support of every actuarial work product in light of the standards that have been defined by the long line of professionals.

Ethics and the Standards of Practice are very serious public expressions of how we view our craft. Your work is of very great consequence. If you are evaluating loss reserves, you are being asked to make statements about the biggest liabilities on an insurer’s balance sheet. If you are being asked to price a product whose financial results have consequences that affect people’s lives. You need to be sure you are aware of practice developments and the effect of the SOPs. Your principals deserve that preparation.

Thank you very much, Mr. Fein, for your time and willingness to be interviewed. ff

Navigating the CAS Syllabus

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the length of time which defines “long term average.”


It is a given that most candidates will study several hundred hours per exam. As the exams transition, however, it is even more important that study habits align with the full scope of what is testable. The only way for us to do that is to use the syllabus for more than just downloading required papers. Now that the structure and purpose of the syllabus are clearer, we can hopefully begin to use it to its fullest capacity. ff



2012 CAS Trust Scholarships Awarded

The CAS has awarded three candidates with Trust Scholarships: Abby Popejoy of the University of Illinois, Maria Schiopu of Northwestern University, and Hugo Lafortune Brunet of the University of Montreal.

A \$2,000 scholarship was awarded to each candidate as part of the 2012 CAS Trust Scholarship Program. The scholarship objective is to further students' interest in the property/casualty actuarial profession and to encourage the pursuit of CAS designations. Each candidate must be a full-time student at a college or university, demonstrate high scholastic achievement, and have taken at least one exam. A selection committee of CAS members assesses the candidates' academic records, two letters of recommendation, and a four-page essay. Congratulations to the winners!

Do you know a deserving scholarship candidate? Scholarship applications for the 2013-2014 school year will be posted on www.BeAnActuary.org in early November. An announcement will be made when the scholarship application is available. 

Resources & Reminders

Use the CAS Web Site for:

- CAS *Syllabus of Basic Education* and updates
- "Verify Candidate Exam Status" to confirm that joint exams and VEE credits are properly recorded
- "Looking at the Exam Process" series
- Feedback button to the Candidate Liaison Committee
- Feedback button to the Examination Committee
- CAS Regional Affiliates news

EXAM REGISTRATION CONFIRMATION—If you have not received a confirmation of your registration for Exams 3L, and 5-9 two weeks prior to the registration deadline, please contact the CAS Office.

REMEMBER YOUR CANDIDATE NUMBER—It is the candidate number of a passing candidate that is first posted online when exam results are available, so keep a record of your candidate number!

Candidate Liaison Committee Mission

The Candidate Liaison Committee communicates with CAS candidates, collectively and individually, who are taking CAS examinations. The committee informs candidates as to appropriate courses of action available to them. Through periodic communication, this committee informs candidates of results of examination administrations, actions taken on complaints received regarding examination questions, and reasons for syllabus and examination changes being implemented. Communication encompasses existing policies and procedures as well as changes being considered. The committee should advise the CAS and its committees of the interests of the candidates regarding matters that come before the CAS and its committees. Candidates may contact the Candidate Liaison Committee at the CAS Office address. The Casualty Actuarial Society is not responsible for statements or opinions expressed in the articles, discussions, or letters printed in *Future Fellows*.

Future FELLOWS



Future Fellows is published four times per year by the Casualty Actuarial Society, 4350 North Fairfax Drive, Suite 250, Arlington, Virginia 22203.

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ISSN 1094-169-X

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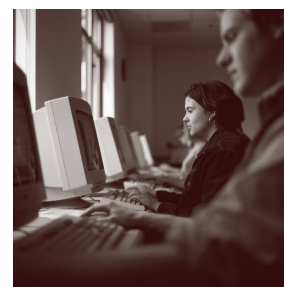
Register for the Introduction to ERM Online Course!

Conducted by professors from the University of Illinois at Urbana-Champaign, this online course will introduce actuaries to enterprise risk management (ERM) and show how actuarial skills and techniques are incorporated into ERM. The course consists of 12 lectures, some readings, a discussion forum, and an exam. The course will be delivered via the Casualty Actuarial Society's Web Site. PowerPoint lectures and accompanying audio voiceovers will be provided on CD for all participants. (Participants must have Microsoft Office PowerPoint software in order to participate in the class). The course will be taught asynchronously so participants can fit the work into their individual schedules. The exercises and exam will consist of questions based on the lecture material and readings that will test the students' understanding of the subject matter.

The course presumes no prior knowledge of ERM. Enrollment is limited to a **maximum** of 40 participants. Instructors are Stephen P. D'Arcy, FCAS; Richard W. Gorvett, FCAS, ARM, FRM; and Mark Vonnahme.

The lectures in this course cover the following topics:

1. Introduction to ERM
2. ERM in Context
3. ERM in Practice
4. ERM Framework
5. Hazard Risk
6. Financial Risk
7. Operational Risk
8. Strategic Risk
9. Risk Metrics
10. Application of ERM
11. COSO (Committee of Sponsoring Organizations of the Treadway Commission) Framework—Pros and Cons
12. Conclusion



To ensure all participants receive the course materials in a timely manner, registration for this course will close on **September 12, 2012**.

Visit <http://www.casact.org/education/onlinecourses/> for more information and to register! **ff**