



CAS Is CERA Award Signatory

In October, the Treaty Board for the CERA Global Credential unanimously approved the CAS as an award signatory. The CAS may now begin to award the Chartered Enterprise Risk Analyst (CERA) credential. The global CERA Web Site (<http://www.ceraglobal.org/>) contains details about this international designation.

The CAS is in the process of implementing its CERA credentialing process. The CAS requirements to qualify for the CERA designation are:

- Meet all requirements for Associateship in the CAS
- Credit for CAS Exams 7 and 9
- Successful completion of the specific three-day ERM seminar, and
- Successful completion of the U.K. Enterprise Risk Management Specialist Technical Exam (ST9 exam)

Fellows of the CAS would be required to successfully complete the seminar and the ST9 exam.

The first three-day seminar is tentatively scheduled for March 2012. As they become

available, details will be posted in the Admissions/Exams section of the CAS Web Site. The seminar will cover ERM learning objectives tested in the ST9 exam in order to prepare candidates for successful completion of the exam.

The next administration of the ST9 exam will be held in April 2012. The ST9 syllabus is available on the Institute and Faculty of Actuaries' Web Site (see <http://www.actuaries.org.uk/research-and-resources/documents/subject-st9-enterprise-risk-management-syllabus-2012-exams>). There will be a special registration process for those taking the ST9 exam to fulfill the CAS CERA requirements in order to bypass the requirement to be a student or member of the Institutes and Faculty of Actuaries to sit for the exam. Details will be provided in the Admissions/Exams section of the CAS Web Site. The CAS registration deadline will be earlier than the deadline for Institute and Faculty students and members.

For a transition period, the CAS is pursuing a second path to CERA. The Experienced Prac-

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Instant Unofficial Test Results Given for CAS Online Courses

Beginning with the October-December 2011 test window, candidates taking the exam for CAS Online Courses 1 and 2 will receive unofficial pass/fail results at the conclusion of their exam.

The unofficial pass/fail result will be displayed on the computer screen at the conclusion of the exam. In most test centers, a printed copy of the candidate's unofficial pass/fail result will

be available upon completion of the computer-based test from the proctor in the administrative area outside the testing room. The candidate, however, should carefully read the result that is displayed on the computer screen at the conclusion of the exam.

When the official grades have been processed, candidates will receive an e-mail from The Institutes stating that their grades are available.

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DATES TO REMEMBER

EXAM REGISTRATION DEADLINES

Exam 1/P
December 8, 2011

Exam 2/FM
December 21, 2011

Exam 4/C
December 21, 2011

Exam 3F/MFE
March 8, 2012

Exams 3L, 5, 7, and 9
March 29, 2012

EXAM REFUND DEADLINE

Exams 3L, 5, 7, and 9
May 7, 2012

CAS SEMINARS AND MEETINGS

RATEMAKING & PRODUCT
MANAGEMENT (RPM)
SEMINAR
Philadelphia, Pennsylvania
March 19-20, 2012

ENTERPRISE RISK
MANAGEMENT (ERM)
SYMPOSIUM
Washington, D.C.
April 18-20, 2012

CAS SPRING MEETING
ARIZONA GRAND RESORT
Phoenix, Arizona
May 20-23, 2012

The Evolving CAS Exam: Shift in Question Types

By Shira L. Jacobson, FCAS, Candidate Liaison Committee

If you have recently sat for an upper-level exam, you may have noticed some new question types. Questions are now posed with an increased emphasis on thorough understanding and evaluation. These changes are part of an ongoing CAS process to develop questions that allow candidates to demonstrate a deep understanding of syllabus material.

Educators often refer to a tool called Bloom's Taxonomy to classify questions into six categories. (See *Future Fellows*, "What is Bloom's Taxonomy," December 2010.) The levels range from Level 1, broadly characterized as knowledge, to Level 6, characterized as evaluation. Higher levels within the taxonomy stress synthesis, comparison, and subtlety of understanding. Over time, CAS exams will incorporate higher-level questions within this metric. To help you prepare, we've provided some examples of changes within the taxonomy, as well as a recent CAS exam question that demonstrates the shift.

In each of these examples, the question covers a similar topic, but the question at the higher Bloom's level may require combining multiple concepts, weighing multiple options, or evaluating whether a choice is appropriate. While the syllabus remains rather stable, the questions may encourage you to think more about how the subject matter is interrelated.

For a specific recent example, we look at Question 20 from

Spring 2011 Exam 7:

An actuary is modeling a cat-exposed loss portfolio covering two lines of business and has the following loss history.

Year	Loss	
	Line 1	Line 2
2005	\$33,000,000	\$23,000,000
2006	28,000,000	22,000,000
2007	31,000,000	26,000,000
2008	27,000,000	21,000,000
2009	26,000,000	12,000,000
2010	22,000,000	20,000,000

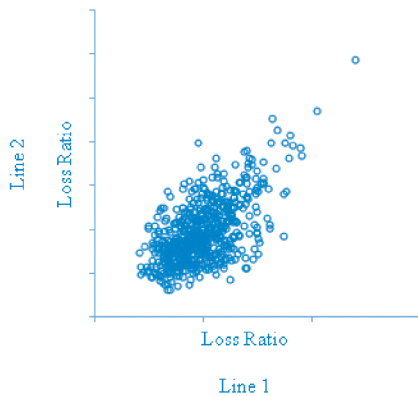
- Fully describe and calculate two statistical measures that can be used to quantify the dependence between these lines of business based on the loss history above.
- Explain which of the two measures described in part a. above would better describe the dependence between these lines of business. Use the properties of these measures to support your answer.

There is also available a scatter-plot that represents the relationship between these two lines of business for the entire industry for 2005 through 2010. For each company in the industry, a point represents a pair of

Old Type CAS Question	Bloom's Level	New Type CAS Question	Bloom's Level
- Identify three copula types.	1-Knowledge	- Identify a copula that would be appropriate to model the relationship between two lines of business shown in a scatter-plot.	6-Evaluation
- Identify two differences between the parallelogram method and the extension of exposures method.	2-Comprehension	-Explain why the extension of exposures method is preferable in a described situation.	3-Application
- Define claims-made and occurrence policies.	1-Knowledge	-Explain how claims-made coverage reduces pricing risk.	4-Analysis
- Develop a rate indication using the pure premium method.	3-Application	- Derive the indicated pure premium rate formula starting from the fundamental insurance equation.	5-Synthesis
- Identify two criteria for a good exposure base.	1-Knowledge	- Evaluate recent sales price of a house as an exposure base for homeowners insurance.	6-Evaluation

loss ratios for a given year.

- c. Based on the scatter-plot above, identify a copula that



would be appropriate to model the relationship between these two lines of business. Fully explain your answer.

- d. Discuss a possible effect on the various tail-based risk measures of not selecting a copula that properly models the relationship between these two lines of business.

This question incorporates many different elements from the exam syllabus. In addition to naming statistical measures, you are asked to comment on their applicability. This means that you need to remember the independence measures and understand when

each one might be most useful. The question then goes further, asking you to provide a copula that would describe the correlation illustrated in the accompanying scatter plot and to discuss the effect of that choice.

This question brings together several concepts, from standard correlation measures to copula selection, and asks you to explain why your choices are valid and appropriate. Understanding the effect of your choice demonstrates that you grasp what features of a copula are relevant to this example.

More “traditional” exam questions might have asked you to identify several copula types, along with their assumptions about tail dependence. This question, on the contrary, asks you to make and defend a specific choice, informed by your knowledge of correlation and copulas.

CAS exams are always evolving, and higher-level questions are part of this process. The questions should provide a broader coverage of syllabus material by asking the candidate to synthesize ideas and techniques. While awareness of these question types should help you to prepare, your basic preparation process probably won’t change. The goal is still to understand and be able to apply the concepts and techniques presented in the syllabus. Be ready for a shift in question types, but don’t abandon your tried-and-true study habits. **ff**

Taking a New Look at Exam Length

The CAS Examination Committee considers various factors in estimating how long it should take the average candidate to complete each exam. As one part of this process, the committee has used subject matter experts in a consulting role to review completed drafts of each exam. These experts also provide comments on content, length, and difficulty. While this insight remains a valuable part of the review process, the committee is experimenting with a new dimension in the review process—namely, including colleagues who have recent experience with the exam environment. The committee expects this addition to further improve its understanding of overall content, length, and difficulty of exams.

The Examination Committee now asks new Fellows to be its consultants. Selected consultants take an exam under timed conditions before the exam is administered, in order to help committee

officers better estimate the exam’s length and to verify the clarity and readability of each test item.

Although the consultant may use study resources for this assignment, the consultant is not provided with model solutions. The consultant completes the exam within the relevant timeframe (e.g., four hours) and writes out each answer. The committee officers use both the time the consultant took to complete the exam and the completeness of the responses as data points in the determination of exam length.

These new consultants are recruited for this special review from new Fellows who were top performers on recent exams. So if you do an exceptional job on your next exam, you could be asked to be a special consultant to the Examination Committee! **ff**

CAS Is CERA Award Signatory

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tioners Pathway (EPP) would permit the CAS to award the CERA designation to its current members who are leading practitioners of ERM who, by their experience, have demonstrated the level of knowledge and understanding comparable to, or surpassing, that achieved by other CERA designees. Details on EPP will be released as they become available.


In announcing the CAS’s right to award the CERA designation, Ralph Blanchard, then CAS president, wrote, “Our recognition to award the CERA designation and our eventual credentialing of CAS members will help strengthen the standing of qualified CAS members in the field of risk management.” **ff**

Instant Unofficial Test Results

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Candidates may then log into their account on The Institutes Web Site (www.TheInstitutes.org) to access their grades. Candidates should go to the Web site and click on the log in button in the upper right portion of the screen. On the log in screen, candidates will be able to enter their ID and PIN or follow the prompts to obtain those if they do not know them.

The grade report for each candidate will show the candidate's overall score on the exam in ten point increments (e.g., 60 to


69%, 70 to 79%, and so on). It will similarly show the candidate's performance by assignment using those same ten point increments. Numeric scores are not released. Once grades have been released, The Institutes will send a copy of the grades directly to the CAS Office to be added to the candidates' admissions records. The CAS will post the list of passing names in approximately two weeks when the online exam status is updated for all candidates. 

Registering for Online Courses 1 and 2

Smile and Dial

By Shira L. Jacobson, FCAS, Candidate Liaison Committee

You may be used to registering for your exams online—but note that to register for CAS Online Courses 1 and 2, you'll need to pick up the phone.

These two courses are administered by The Institutes (formerly AICPCU), so registration differs slightly from CAS exams. After you have gone through an online course and are ready to register for the exam, just dial 800-644-2101 or 610-644-2100, extension 6000, and inform Customer Service that would like to take the exam. You will be put on an eligibility list for your local Prometric test center. Then you will be able to set up an appointment with Prometric for your exam date and time. 

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!

Announcing 2012 CAS Trust Scholarship Program

The CAS Trust Scholarship Committee is now accepting applications for the 2012 school year. The objective of the scholarship is to further students' interest in the property/casualty actuarial profession and to encourage the pursuit of the CAS designations.

Eligibility – You must meet all requirements to be considered

- U.S. or Canadian citizen or permanent resident visa
- Currently attending a U.S. or Canadian college or university as a full-time student and continuing as a full time student at a U.S. or Canadian college or university in the 2012-2013 academic year
- Applicants must have sat for at least one actuarial exam by March of 2012
- Applicants should demonstrate high scholastic achievement and strong interest in the casualty actuarial profession, mathematical aptitude, and communication skills.

Preference will be given to applicants who have not yet won the CAS Trust Scholarship.

You must submit the following:

- The 4-page CAS Trust Scholarship application and attached essay.
- The 2 recommendation letters included in this application, preferably completed by internship supervisors, instructors and/or advisors at your educational institution who know you well. Only 2 recommendation letters will be considered.
- A current official transcript.

**Incomplete applications will be disqualified without any consideration to partial information received.*

Completed applications are due by March 1, 2012. Winners will be notified of award decisions by May 25, 2012.

Know a deserving candidate? Scholarship applications for the 2012-2013 school year are now available at <http://www.casact.org/academic/index.cfm?fa=scholarship>. 

The Universal Language

By Kudakwashe Chibanda, Candidate Liaison Committee

A friend of mine loves to make fun of actuaries. She's an underwriter, and any chance she gets, she tells that joke about how to tell the difference between an introverted and extroverted actuary. According to her, actuaries have a very narrow scope of knowledge that can only be applied to a limited area (as if underwriters are boundless in their scope).

I always argue that because actuarial skills are a universal language that is spoken everywhere, we can literally pick up and move halfway across the world. To prove my point, I sought out actuaries who did literally pick up and move halfway across the world.

1. Rade Musulin

First up - Down Under. You can't go wrong with the Great Barrier Reef, kangaroos, and Hugh Jackman. However, my knowledge of the actuarial market in Australia was very limited. Luckily, Rade Musulin came to the rescue (that name will sound familiar to those of you who have taken Exam 6-U.S. as he authored the paper on regulatory acceptance of computer modeling). Rade is an American who moved to Sydney with his Australian wife and children. The move was for personal reasons but did not negatively affect his career at all. As a CAS Associate, Rade was able to get an excellent position with Aon Benfield, without needing to take any special equivalency exams.

Rade asserts one advantage of CAS membership is being "in an excellent position to move overseas, because the CAS designations are well respected and transferrable." Rade also notes that "a major advantage CAS members have is their focus on casualty in the education process." Australia's actuarial education is heavily centered on university courses, and the casualty, life and pension practices are combined, so they have less casualty actuarial acumen than a typical CAS candidate in the States.

Another obvious advantage is the predominance of the English language, and the similarity of the corporate culture to that in the States.

As for the challenges, Rade notes that there is less regulation in the overseas industry. He also warns candidates of the requirement of U.S. citizens to continue paying taxes while living abroad. But even that is not enough for him to run for the first Qantas flight home. He thoroughly enjoys watching his teenage son put on a formal school uniform every morning—jacket and tie included.

2. Ronald Kozlowski

Next up, is a city-state known as "The Pearl of The Orient." There we find Ron Kozlowski, who serves on the CAS board of directors. Ron majored in actuarial science at the University

of Illinois (not because he knew he wanted to be an actuary, but rather so he could get first dibs on finance and math courses). Having attained his FCAS, Ron focused mainly on reserving and M&A. Like Rade, Ron moved overseas having lived and worked in the States for 22 years. He moved after his wife was offered an international position, and was able to stay with Towers Watson, leading their Asian non-life practice. Oh and if you're still scratching your head about "The Pearl of the Orient"—it is Hong Kong. You will be in good company if you make a move to Asia, because there are currently about 24 CAS Fellows practicing there.

Ron advises candidates to learn as many diverse skills as they can in order to keep abreast of the needs of different countries, which may not have as sophisticated a market as the U.S. For example, data is often more limited in other countries, where the property-casualty market is not as mature and developed.

The biggest challenge for Ron has not been the actuarial work, but rather dealing with the humidity of Hong Kong. In addition, Chinese food in Asia tastes nothing like American Chinese food. Lastly, and perhaps most unfortunately, he is a football fan who has had to acclimate himself to soccer and rugby.

3. Daniel Lowen

While in Asia, I spoke with Daniel Lowen, a former teacher and PhD student who then switched to actuarial science. Daniel decided to leave his comfortable condo in Cambridge, Mass., and move to India in 2010. He trains actuaries to support the U.S. practice of Ernst & Young, so he does not need to get a transfer for his FCAS. The P&C market is so highly regulated that the need for actuaries is reduced in India. However, the exam process is so stringent that few people become qualified, such that demand remains high.

If you are not a morning person, you might consider a move to Bangalore, where most people get to the office after 10:00. The office party scene is also quite robust for the social butterflies amongst you, with many celebrations organized for everything from reaching the billable-hours goal, to buying a new motorbike. You can leave your jacket and tie at home, because the dress code is more casual than in the States.

The challenges Daniel faces in India include the immigration process, which requires annual review. In addition, language can be a surprising barrier. Although English is the official business language, it is not uncommon for people to converse in their native tongues.

Daniel advises candidates to consider how their career progression would be affected by an international move. For someone in the middle of their career, it is not always clear

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How to get the most benefit

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discussed and reviewed in a case study format among small groups. This gives the candidates opportunities to apply the Code, Statements, and Standards to real life examples to determine possible actions in a specific situation.

3. **Guest Speakers:** Guest speakers, usually from the CAS Board or executives from nearby insurance companies, will share their thoughts and experiences in dealing with difficult situations that tested their professional conduct.
4. **A Mock Trial:** As a capstone event for the course, a consulting actuary is on trial for possible violations of the Code, Statements, and Standards. During the mock trial, you will be given the opportunity to be the jury that determines if the actuary violated his duties and professionalism requirements. The trial includes a real attorney from the American Academy of Actuaries. No matter what your verdict, you will see how not adhering to the Code, Statements, and Standards may lead to serious ramifications.

So how can you get the most out of the Course on Professionalism?

Be on time and attend all of the sessions. Almost all candidates who fail the course do so because they were late for one or more sessions. Make sure you give yourself adequate time

to get to the hotel and make it to the seminar on time.

Come prepared! Read all of the pre-readings and have a general understanding of what the Code, Standards, and Statements are and how to apply them. The interactive sessions include discussions in small groups. Candidates who are not familiar with the pre-readings will struggle in the interactive sessions.

You should be ready to interact and participate. Many of the sessions encourage open discussion on the issues and how best to resolve them. At the same time, candidates should come with an open mind and be willing to accept other viewpoints. The scenarios presented are often not black and white, and there will be more than one possible course of action.

Finally, commit yourself to the seminar. Put away your smart phone. Try to leave the office behind as much as possible so you can concentrate on the course. It is tough for everyone to be away from the office for a couple of days. However, candidates should plan to check work emails and messages only during the breaks or in the evening. Keep in mind that if you are caught browsing the internet on your phone or laptop during the course you may fail.

By following the advice outlined above, you will not only accomplish the goals of the Course on Professionalism, but probably enjoy the time as well. You will certainly leave the seminar better prepared to be an actuary! **ff**

Vendor Links

The CAS provides vendor information on review seminars and study aids as a service to its candidates. The CAS takes no responsibility for the accuracy or quality of the seminars and study aids announced in *Future Fellows*. Please note that candidates are expected to read the material cited in the *Syllabus* and to use other material as a complement to the primary sources rather than a substitution for them. **ff**

ACTEX Publications/Mad River Books
<http://www.actexamdriver.com/>
Exams 1, 2, 3F, 3L, 4, 5, 6, 7, 8, 9

The Actuarial Bookstore
<http://www.actuarialbookstore.com>
Exams 1, 2, 3F, 3L, 4, 5, 6, 7, 8, 9

All 10, Inc.
<http://www.all10.com/>
Exams 5, 6, 7, 8, 9

A.S.M.
<http://www.studymanuals.com/>
Exams 1, 2, 3F, 3L, 4

The Infinite Actuary
<http://www.theinfiniteactuary.com>
Exams 1, 2, 3F, 3L, 4, 5, 6, 7, 8, 9

Jim Daniel's Actuarial Seminars
<http://www.actuarialseminars.com>
Exams 3L, 4

Midwestern Actuarial Forum
<http://www.casact.org/affiliates/maf/>
Exam 3F, 3L

New England Actuarial Seminars
www.neas-seminars.com/misc/
Exams 2, 3F, 3L, 4, 5, 6, 7, 8, 9

Slide Rule Books
<http://www.sliderulebooks.com>
Exams 1, 2, 3F, 3L, 4, 5, 6, 7, 8, 9

To Print or Not to Print...

Should the CAS continue to print and mail copies of *Future Fellows*—or should it only be available electronically?

Please let the Candidate Liaison Committee know your thoughts by completing the brief online survey (see <http://www.surveymonkey.com/s/QBTTR56>). Please respond by January 31, 2012. **f**

The Universal Language

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where they would fit into the structure if they decide to move back. For that reason, Daniel advises that candidates consider a move when they are ready to develop their management skills.

Editor's Note: This article is continued in the online edition of Future Fellows that is posted on the Admissions/Exam page of the CAS Web Site (www.casact.org). It will include:

4. David Sommer in Brazil,
5. Kyle Rudden in Trinidad and Tobago,
6. Leigh Miselis in the U.K., and
7. Annemarie Sinclair in South Africa. **f**

Resources & Reminders

Use the CAS Web Site for:

- CAS *Syllabus of Basic Education* and updates
- "Notice of Examinations"
- "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
- CAS Regional Affiliates news

Last Chance for Exams 5A & 5B

The last administration of transitional Exams 5A and 5B will be held on May 9, 2012. The exam registration deadline is March 29, 2012. **f**

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



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Postmaster: Please send all address changes to: The Casualty Actuarial Society, 4350 North Fairfax Drive, Suite 250, Arlington, Virginia 22203.

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FSC LOGO

How to get the most benefit from the CAS Course on Professionalism

By Kendall P. Williams, FCAS, Candidate Liaison Committee chairperson and Course on Professionalism facilitator.

You have just passed Exam 5 and filled out the form to attend the CAS Course on Professionalism. You have received your confirmation from the CAS Office and made your travel reservations.

You may be thinking...

Now what? Why does the CAS require me to attend this seminar anyway? What are all of these pre-readings? What am I supposed to learn? Is this going to be a big waste of time? These are all questions you might be asking yourself as you prepare for your Course on Professionalism.

The Committee on Professional Education holds several Courses on Professionalism each year to help prepare candidates to be Associates of the CAS. This month, approximately 220 candidates will attend seminars in Atlanta and San Diego. The course has several goals, including:

- Learning about the Code of Professional Conduct and how it applies to members of the actuarial profession in their everyday work

- Learning about the Actuarial Standards of Practice and Statements of Principles that apply to being a casualty actuary and how to use them in your work
- Understanding the consequences of violating the Code of Professional Conduct and Standards of Practice
- Learning the function of the Actuarial Board for Counseling and Discipline (ABCD), and how to contact the ABCD for counseling or to report violations
- Learning the requirements for continuing professional education

The course is broken into three major components:

1. **Educational Sessions:** In these sessions, the pre-readings are reviewed and discussed to make sure everyone is familiar with the content.
2. **Interactive Examples:** These examples comprise the majority of the seminar. Difficult ethical situations are

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