

Future FELLOWS

September 2011, Volume 17, No. 3



“Web Notes” Only Available Online in 2012

Beginning in 2012, the reading materials linked from the CAS *Syllabus of Basic Education* will be available exclusively online. The original intent of the “Web Notes” was to make materials available for free on the CAS Web Site. When this was being implemented in 2001, there was a concern that candidates in some countries may have difficulty accessing the files, so printed versions were made avail-

able for sale.

In the past decade, however, the Internet connectivity issue has been resolved. Therefore, beginning in 2012, the CAS will no longer offer printed versions of the syllabus materials that are linked from the syllabus. In the *Syllabus* citations, “Web Notes” will be changed to “Online Publications” or “OP” in the source column. **ff**

Looking Toward the CAS Centennial

A Journey Back to Meet the First CAS President, Dr. I.M. Rubinow

By Shane Barnes, Candidate Representative to the Candidate Liaison Committee

One of the foundational principles of the Casualty Actuarial Society is to challenge its members and candidates to explore and develop new methodologies to enhance our understanding in a growing and ever-changing world. As the CAS approaches its centennial anniversary, it is evident how much this one principle has pushed the evolution of actuarial science over the last century.

During the creation of the society, the world was in a state of transformation. One of the biggest social concerns of the time was workers compensation insurance. The CAS was formed to focus its energy around new types of exposures that were very different from traditional life insurance. Dr. Isaac Max Rubinow, the first CAS president, was instrumental in forming the CAS and leading the society into the future.

Dr. Rubinow was born in Grodno, Russia (present day Belarus) in 1875 and immigrated to the U.S. At the age of 18 he was trained as a medical doctor. Dr. Rubinow left the medical profession after years of growing increasingly disheartened watching people suffer. He felt his talents would be better employed helping people in their economic turmoil. After earning his PhD in economics, he became fascinated with social insurance and wrote a book titled *Social Insurance*, which led to the development of early Social Security. The Progressive Party used his work in drafting the party's platform in 1912. One of the party's beliefs was the need for social insurance [3].

As one of the 97 charter members of the CAS, Dr. Rubinow was an actuary for a very short

DATES TO REMEMBER

EXAM REGISTRATION DEADLINES

Exam 4/C
September 8, 2011

Exams 3L, 6, and 8
September 15, 2011

Exam 3F/MFE
September 29, 2011

Exam 1/P
October 6, 2011

Exam 2/FM
October 25, 2011

EXAM REFUND DEADLINE

Exams 3L, 6, and 8
October 24, 2011

CAS SEMINARS AND MEETINGS

CASUALTY LOSS RESERVE SEMINAR
September 15-16, 2011
Aria Resort and Casino
Las Vegas, Nevada

IN FOCUS: CUTTING EDGE TOOLS FOR PRICING AND UNDERWRITING
October 3-4, 2011
The Marriott Camden Yards
Baltimore, Maryland

CAS ANNUAL MEETING
November 6-9, 2011
Hyatt Regency Chicago
Chicago, Illinois

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Life as an Actuarial Candidate—Managing the Ultimate Balancing Act

By Suzy Poole and Angelina Kim, Candidate Representatives to the Candidate Liaison Committee

If you had to pick two adjectives to describe your life during peak study season, would they be *solitary* and *sedentary*? If so, you're certainly not alone. The demands of a full-time job, 20-30 hours of weekly study time, and the efforts required to meet basic human needs (although food and sleep probably seem over-rated right now), leave you with a pretty slim margin for discretionary activities. Life as you once knew it has faded to a vague recollection.

With the CAS syllabus getting the lion's share of attention during your hours away from the office, scheduling ordinary pursuits, such as having a social life and getting some physical activity, may seem virtually impossible. Being an actuarial candidate and having a life, however, are not mutually exclusive. It is possible, and even beneficial, to creatively seek balance.

The common saying among actuarial candidates is that for every hour of an Actuarial Exam, you need to prepare by studying a hundred hours. So if you put in about three to four hundred hours of independent study time twice a year and spend about eight months of the year alone in a library, how does that affect your social life?

Let's think about a typical young professional who's just starting an actuarial career after college. The typical age would range in mid-twenties, and he or she would have friends who are starting their first full-time jobs as well. The challenge is to juggle social obligations to friends while studying for exams. How many times are friends going to call to ask if he or she will join them for happy hour and be rejected before they stop calling at all?

As life progresses, it's not just the happy hour, but family functions, weddings, children's baseball games, and other events that might be important in different people's lives. As time to spend with family and friends becomes harder and harder to coordinate with a study schedule, many people seem to take the approach of brute force. The big motto is "Exams Now and Play Later. Years Later." They cut out all social life and focus on their studies and studies alone. By the end of the whole process they have lost some friends along the way and have gotten into a few quarrels with family members for not attending important family functions due to scheduling conflicts.

How much this evolution of a decreased social life affects an actuarial candidate really depends on the individual's personality. Members of the actuarial community are not known to be the most extroverted and outgoing, but for those who are, the exam process affects them more than the introverts (in a strictly social sense). In those years spent studying alone, the extroverted candidate modifies his or her behaviors to successfully complete the exams instead of partaking in other group-oriented activities. This alters one's behavior semi-permanently.

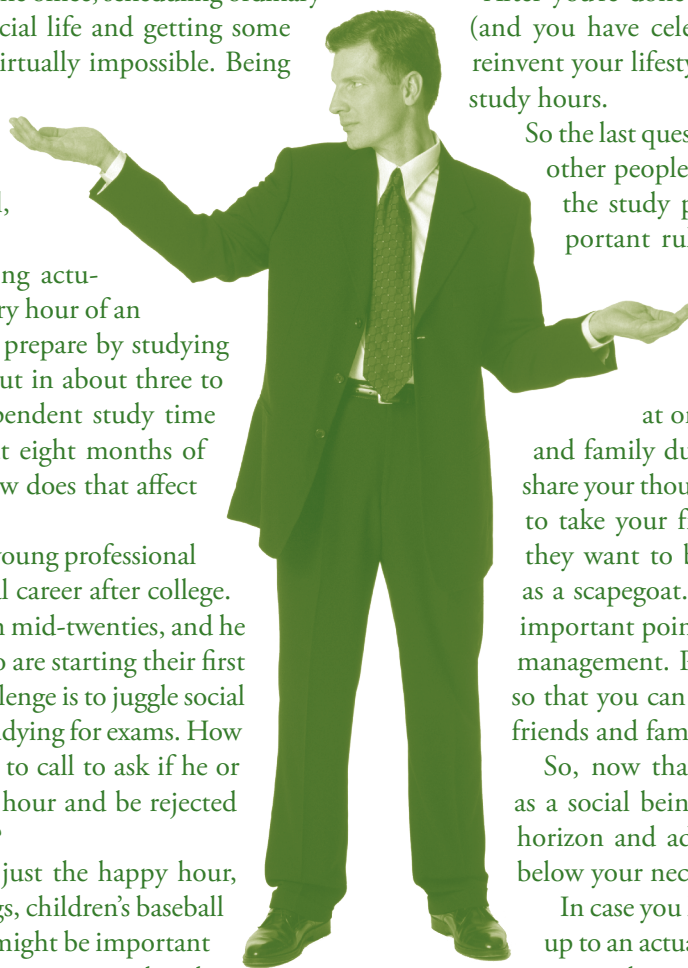
After you're done with exams and you're a Fellow (and you have celebrated for weeks), you have to reinvent your lifestyle to fit your personality *without* study hours.

So the last question is, "How do you best manage other people in your life while going through the study process?" The first and most important rule is to communicate with your friends and loved ones during study time. It is true that it will be impossible to be both in the library and at happy hour at once, but you can call your friends and family during study breaks to catch up or share your thoughts. BUT, second, remember not to take your frustrations out on them because they want to be there for you for support not as a scapegoat. This leads to the third and final important point to manage your social life: time management. Plan your studies well in advance so that you can have some nights off to see your friends and family.

So, now that you're acknowledging yourself as a social being, let's continue expanding your horizon and address the part of you that exists below your neck.

In case you haven't noticed, the weeks leading up to an actuarial exam give a whole new meaning to the concept, *sedentary lifestyle*. Between working and studying, you probably spend most of the day in a seated position. Maybe you've made peace with this seemingly inevitable sedentary state—you certainly wouldn't be the first. But have you heard that exercise improves cognitive functioning? Not only can physical activity enhance the cardiovascular system, boost muscular strength and endurance, and increase aerobic capacity, but it's great

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May-June 2011 Examination Results

Exam	Number of Candidates	Number of Passing Candidates	Number Below 50% of Pass Mark (Ineffective)	Effective Pass Ratio
Exam 1/P*	3093	1362	386	50.3
Exam 2/FM*	2824	1404	204	53.6
Exam 3F/MFE*	3404	1515	426	50.9
Exam 3L	184	69	42	48.6
Exam 4/C*	1890	745	209	44.3
Exam 5	653	178	67	30.4
Exam 5A Transitional	167	106	1	63.9
Exam 5B Transitional	222	171	1	77.4
Exam 7	9	1	1	12.5
Exam 9	958	354	51	39.0
Online Course 1 (See note below)	173	160	0	92.5
Online Course 2 (See note below)	313	295	0	94.2

*For joint Exams 1/P, 2/FM, 3F/MFE, and 4/C, the summary includes all candidates who sat for the specified examination.

Survey Summary

Exam	Percent Responding	Syllabus Coverage <i>Inadequate (1) to Adequate (5)</i>	Exam Clarity <i>Not Clear (1) to Very Clear (5)</i>	Exam Length <i>Too Short (1) to Too Long (5)</i>	Exam Difficulty <i>Easy (1) to Difficult (5)</i>	Exam Quality <i>Poor (1) to Excellent (5)</i>
3L	34.24	3.81	3.32	3.06	3.65	3.41
5	44.10	4.13	3.92	4.64	3.54	2.77
5A	52.10	3.67	3.82	4.14	3.29	3.00
5B	47.30	3.80	3.75	4.73	3.40	2.75
7	33.33	3.00	2.33	4.00	4.33	2.33
9	36.85	1.67	3.09	2.57	3.07	2.36

Pass Rates for Online Courses


Caution: Read with Care

Candidates who are starting the online courses should not misinterpret the high pass rates for the first test window of CAS Online Courses 1 and 2 as an indication that careful study and understanding of the material is not required to pass the exams.

Candidates taking exams for CAS Online Courses 1 and 2 during the first test window were very well prepared—this is the reason for the high pass rates reflected on this page.

When the CAS introduced the concept for the two online courses

in 2008, it was envisioned that the material would consist of topics that candidates would have to know at the familiarity level rather than the mastery level. The CAS worked with The Institutes to develop the online courses within this context. The exams for the online courses are similar to other CPCU exams, as is the grading with a pass mark at approximately 70 percent.

The moral of this story is that well-prepared candidates who can demonstrate what the learning objectives expect them to do will pass. 

A Journey Back to Meet the First CAS President

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period. He led the early developments of workers compensation, creating the “Standard Accident Table” that served as the ratemaking table for workers compensation in its earliest days. Another contribution he made to the CAS was a paper he wrote on liability reserves. Soon after becoming CAS president, Dr. Rubinow chose to focus his energy in the social sciences, which would be his focus until his death in 1936. Undoubtedly, he made a strong contribution to the early days of actuarial science, and his legacy can be seen in society and the actuarial profession.

Dr. Rubinow was passionate about his role in society and the contribution he made to actuarial science. On the occasion of the twentieth anniversary of the CAS, he wrote a letter to Mr. Greene, the CAS president at the time, about the CAS’s role in society, explaining, “[...]the CAS is] the only professional group which is able to handle these problems in a scientific and objective way, [we] cannot afford to lag behind” [4]. This is the spirit that led to the creation of the CAS in 1914. Dr. Rubinow went on to write about the importance of the CAS in society:

I believe that it is our duty, our civic as well as scientific duty, to assume leadership in the movement, a leadership which must be absolutely free from any group or commercial interests, a leadership which must be scientific as well as civic, for in social sciences the final test of true scientific spirit is not the mere determination of facts but the utilization of those facts for the welfare of the people [4].

Dr. Rubinow’s message is important to both candidates and members of the CAS. As candidates we are constantly pushed to enhance the science. The examination process is the first step in adapting our minds to explore new ideas. This process lays the foundation for our continuing journey in the profession. The CAS was founded by people who saw that the science should evolve. Dr. Rubinow guided the society in its infancy but set us off on a journey that we, along with our fellow actuaries, continue in the future.


CAS to Celebrate Centennial in 2014

The Casualty Actuarial Society will commemorate its one hundredth anniversary in 2014. The CAS Centennial Steering Committee is planning a festive celebration during the CAS Annual Meeting (November 9-12, 2014) in New York City—the city where the inaugural meeting of the CAS was held.

Because all CAS members will be encouraged to participate in the centennial celebration, no Spring Meeting will be held in 2014. All new Fellows and Associates for 2014 will be formally recognized at the Annual Meeting in New York.



References

- [1] CAS Overview, www.casact.org/about/index.cfm?fa=aboutTheCAS
- [2] Obituary: Rubinow, I.M. 1875-1936, www.casact.org/pubs/proceed/proceed36/36118.pdf
- [3] “Rubinow, I.M.”, en.wikipedia.org/wiki/im_rubinow#citerefcas2008
- [4] Rubinow, I.M., “A letter from Dr. I.M. Rubinow,” www.casact.org/pubs/proceed/proceed34/340133.pdf
- [5] *Social Security History: Isaac M. Rubinow*, www.ssa.gov/history/rubinow.htm 

Life as an Actuarial Candidate

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for your brain too. Exercise can actually improve your rate of learning and reduce stress levels.

Improved Rate of Learning

Does optimizing your brain functioning pique your interest? In his book, *Spark: The Revolutionary New Science of Exercise and the Brain* (2008), Dr. John Ratey presents solid evidence supporting the role of exercise in improving cognitive processes. Specifically, physical activity increases the produc-

tion of a protein called brain-derived neurotrophic factor (BDNF) in your hippocampus, a structure in your brain that’s critical to learning and memory. BDNF nourishes the brain and promotes cell growth. Sounds like a good thing, doesn’t it?

In order for learning to occur, a process called long-term potentiation (LTP) must take place—this process involves strong connectivity between neurons. Ratey contends that BDNF supports LTP, thereby increasing the rate of learning. So, connecting the dots—exercise increases BDNF produc-

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Exploring Candidate Ethics

By Dan Tevet, FCAS, Candidate Liaison Committee

There is a lot to look forward to when you pass that final exam for Associateship. You will soon get four letters after your name (eight if you become a member of the American Academy of Actuaries), recognition, respect, a bonus (most likely), and the obligation to adhere strictly to a professional code. But did you know that you do not actually have to wait for CAS membership in order for that last one to be true?

There is, in fact, a CAS Code of Professional Ethics for Candidates (see <http://casact.org/about/policiesProc/CAS-Candidate-Code.pdf>). While it is less comprehensive than the Code of Professional Conduct for CAS members, the Code for Candidates does include seven rules. Rule 1 states the following: “An Actuarial Candidate shall act honestly, with integrity and competence, to uphold the reputation of the actuarial profession.” In some ways this sounds like a simple and straightforward rule, but it does raise several difficult questions. How do I know if I am acting with integrity? We can easily identify behavior that is completely void of all honesty and integrity (see Madoff, Bernie), but there are obviously borderline cases as well.

With that in mind, I present the following dilemma.

You are an actuarial analyst at Big Insurance Company (BIC), having started your career there three years ago. To date, you have completed four CAS exams. Your job responsibilities mostly involve assisting in performing rate reviews. BIC has always used traditional actuarial methods in its rate reviews, but for the upcoming review the company is considering a predictive modeling approach. Your boss, Seasoned Actuary (SA), who is an FCAS and has been doing actuarial work for many years, has recently been studying predictive modeling and has expressed great confidence in using modeling tech-

niques for rate reviews. He has frequently made comments like “Using predictive analytics will greatly increase the accuracy of our rate filings, and we should be embracing this change.” Your knowledge of predictive modeling is limited, but you have begun studying modeling and you generally agree with his assessment.

Over the next few months, with guidance from SA, you perform the rate review using a predictive modeling approach. After working through the various kinks, it is time to analyze the results. You have a meeting with SA, and he is absolutely shocked by the model output. Among other things, the results call for several significant rate decreases. Using the prior ratemaking methodology the largest indicated rate decrease would be around 5%, but the new modeling approach indicates decreases as large as 25% for certain groups of insureds.

SA has reviewed your work and agrees that the analysis is sound, but he is visibly upset with the result. Suddenly, he starts reversing his previous statements in support of a predictive modeling approach. He begins saying “Well, the model says we should decrease rates by 25%, but there is a lot of uncertainty in the modeling process. A predictive model is kind of a black box, and I don’t think we can trust these results.”

Of course, if SA truly did distrust the results he shouldn’t use them. But you suspect that that is not the case. Your sense is that BIC management is generally happy with its current rates, and while a 5% decrease is easy to sell, SA does not want to have to tell management that his analysis indicates a 25% decrease.

What do you do? One option is to accept SA’s decision. After all, he is far more knowledgeable than you about actuarial work, so who are you to question him? If he is acting dishonestly then he is in violation of the CAS Code of Professional Conduct, but you are in no position to make that call.

As a CAS candidate, however, you do also have a code of ethics to which you must adhere. In the interest of acting “honestly, with integrity and competence” do you push this issue further? Perhaps you should meet with him and say something like “I understand your concern with the indicated 25% decrease, but I don’t think that it is right to dismiss a result just because you don’t like it. For months you were championing the modeling approach. Why reject it now?”

Or, you can pursue some other strategy.

Future Fellows would like your feedback. If you were in this situation, what would you do and why?

Please submit your best response(s) to CLC@casact.org. 



Life as an Actuarial Candidate

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tion, which leads to more efficient LTP—you get better at learning. Feel like going for a quick run?

Stress Reduction

OK, be honest—have any friends or family members suggested that you’ve been just a tad grouchy lately? An already grueling study schedule that ramps up even more as your exam date approaches can make anyone tense. If this is sounding familiar, you might be the perfect candidate for an exercise intervention.

Scientific studies have shown that physical activity improves quality of life by reducing anxiety, improving mood, and even helping you to get a good night’s sleep (Fox, 1999). Ratey provides further information on the physiology behind these improvements. Essentially, when you’re experiencing stress, your body releases hormones that can increase your blood pressure and heart rate. Exercise can work to curtail this response to stress, leaving you more relaxed and pleasant to be around

(which, by the way, may help you to be more successful as you pursue social opportunities).

So the next time you are two hours into a major study session, and you still need to tackle 15 practice problems and a hefty stack of flashcards, think about slotting in a brisk walk or some quick calisthenics. Better yet, grab a friend to join you.

Actuarial candidates often experience a “zen time” toward the end of the exam process, when they find exam/life balance. Being proactive about striving for balance early on is a big step toward having exams “fit” into your life more successfully.

References

- Fox, K.R. (1999). The influence of physical activity on mental well-being. *Public Health and Nutrition: 2(3a)*, 411–418.
- Ratey, J. J. (2008). *Spark: The Revolutionary New Science of Exercise and the Brain*. ff

Reviewing CAS Continuing Education Policy FAQs

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make an “effective attempt” at an FCAS examination earn 15 units of structured credit toward their continuing education requirement for the year in which the examination was taken. An “effective attempt” is defined as a score greater than zero on the CAS’s 0 to 10 scale.

Consistent with the CAS Continuing Education Policy, you are expected to maintain a log of your CAS Continuing Education activities and are obligated to annually attest to your compliance.

I was recognized as an ACAS at the Spring 2012 meeting, completing my qualification for membership by having successfully completed a Fall 2011 examination. What is the year for which I must comply with the CAS Continuing Education Policy?

You are not required to earn Continuing Education credit during the 2011 partial year after your completion of the ACAS requirements. You will first be expected to certify your compliance with the CAS Continuing Education Policy as of December 31, 2012 and annually thereafter. [See FAQ for complete response.]

I became an ACAS with an exam taken in November 2011, but I also earned continuing education

credits earlier in 2011. Does continuing education credit earned prior to my completion of the ACAS requirement count toward my compliance with the CAS continuing education requirements?

No. You first became subject to the CAS Continuing Education Policy in 2011, but new members are not required to earn continuing education credit in their first partial year.

You will be expected to complete a pro rata portion (50%) of the CAS continuing education requirements during 2012. Continuing education credits earned during 2011 but subsequent to your successful completion of CAS admission requirements (i.e., after taking your Associateship exam) can be used to satisfy compliance with the CAS Continuing Education Policy for 2012.

A new member who completes his or her final membership requirement (e.g., the Professionalism Course) after the final ACAS exam is considered subject to the CAS CE Policy as of the date of completion of the final requirement. The year that that requirement is completed will be the new member’s “partial year.”

Editor’s Note: Please read the entire CE Policy and FAQs for a fuller understanding. ff

CAS Promotes Social Media Outlets

The CAS has reached over 2,600 followers on Facebook, Twitter, and LinkedIn! In an effort to further promote our social media outlets, the CAS has new marketing signage which will be used at CAS and other industry meetings. Show your support by visiting our social media pages and following the CAS!

Visit www.casact.org and follow us through the social media widgets on the CAS Web Site. 



**JOIN
THE CAS
SOCIAL
NETWORK!**



Visit www.casact.org
and click on the widgets!

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

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*.

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Reviewing CAS Continuing Education Policy FAQs

By J. Michael Boa

As a reminder of the CAS Continuing Education (CE) Policy, which will first apply to actuarial services rendered on or after January 1, 2012, *Future Fellows* is providing this excerpt from the list of Frequently Asked Questions (FAQs) that were published along with the Policy last year. The questions below are geared specifically to active candidates.

You are encouraged to review the complete CAS CE Policy for all of the details on the requirements. The policy, along with the complete list of FAQs and responses, is available through the Professional Education section of the CAS Web Site.

Who is subject to the CAS Continuing Education Policy?

All ACAS and FCAS members are subject to the CAS Continuing Education Policy.

Who is required to obtain continuing education under this Policy?

All ACAS and FCAS members who perform “Actuarial Services” are subject to this requirement. [See FAQ for complete response.]

I am an ACAS, but am still taking actuarial exams. Do I need to comply with the CAS Continuing Education Policy?

Yes. All ACAS and FCAS members are subject to the CAS Continuing Education Policy. Time that you spend in independent study for the actuarial examinations can be counted toward the continuing education requirements of the CAS Continuing Education Policy. In addition, if you attend a preparation seminar for the actuarial examinations, seminar time qualifies for “structured credit.” Finally, members who

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