

Society of Actuaries

Curriculum Changes Update

TIFFANY TATSUMI
Academic Administrator
Society of Actuaries



ASA Changes - Why



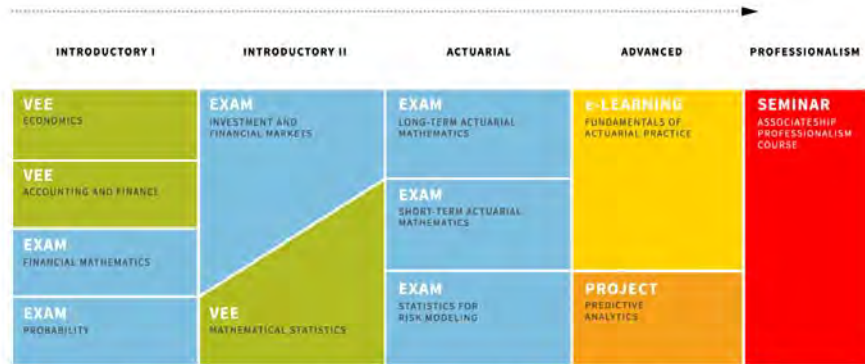
Predictive Analytics

- Previously, only requiring linear regression and time series
 - Some advanced topics on FSA tracks
- Changes introduce all actuaries to:
 - New methods (generalized linear models, decision trees, clustering, machine learning, ...)
 - Dealing with big data (avoiding overfitting, dimension reduction, communicating model value, ...)

Short-term/long-term balance

- Long-term coverages (life, annuities, pensions) a staple of actuarial education
- Short-term coverages (health, property, liability) are relative newcomers
- SOA required curriculum will provide equal treatment

ASA Pathway



YOU MUST COMPLETE 2 EXAMS BEFORE APPLYING TO VALIDATE YOUR EDUCATIONAL EXPERIENCE (EDUCATIONAL EXPERIENCES MAY HAVE OCCURRED PRIOR TO COMPLETING EXAMS).



Key Events

- Probability (P) and Financial Mathematics (FM)
 - July and August use old syllabus, but changes are minor
 - Instant, unofficial, results
- Investment and Financial Markets (IFM), Short-Term Actuarial Mathematics (STAM)
 - July and October with new syllabus
 - No instant results
- Long-Term Actuarial Mathematics (LTAM)
 - October with new syllabus
 - Same protocol as MLC



Key Events

- Statistics for Risk Modeling (SRM)
 - First administration in September, then every four months
 - Computer-based multiple choice, no instant results
 - Formal pre-requisite for the Predictive Analytics Exam
- Predictive Analytics (PA)
 - First administration in December
 - 2019 schedule yet to be determined
 - Computer-based project, no instant results



Predictive Analytics Exam

- Online modules to help candidates prepare
- Provided with a data set and a business problem
- Complete a project and write a report
- Use Excel, Word and RStudio
- Five hours in length
- Exam SRM is a prerequisite

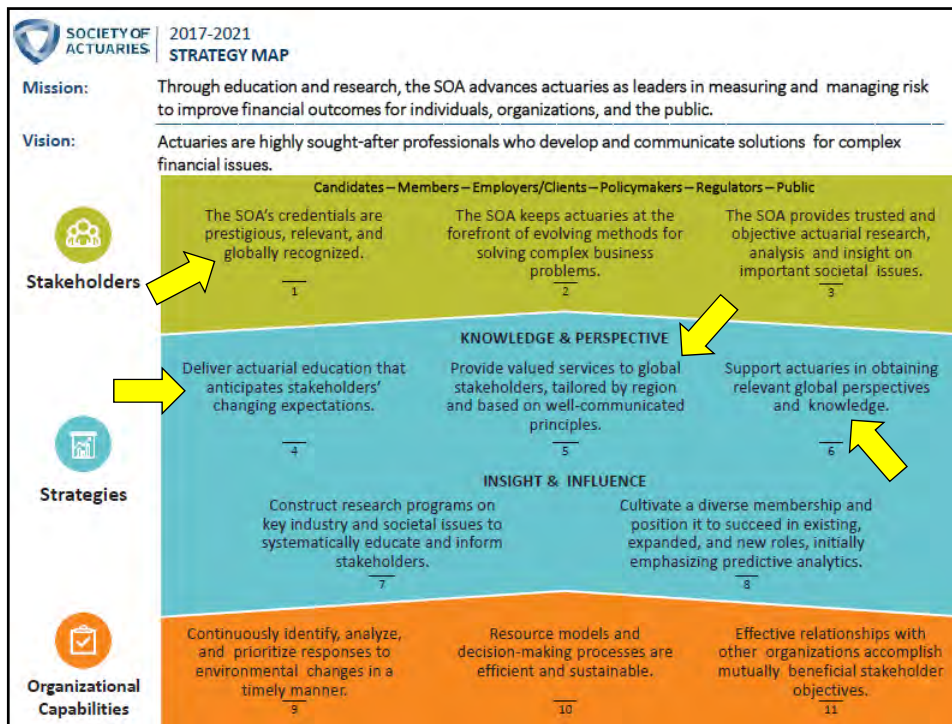


Adapting Education to International Markets



International Education Principles

- Numbers of stakeholders, members and candidates growing outside North America.
- SOA Board task force created
- Mandate:
 - Develop a set of international education principles
 - Recommend a strategy for ensuring that the education the SOA provides in an international context is relevant to key stakeholders.



Approved Updated Principles for SOA Education

- Emphasize the importance of developing actuaries with a globally relevant education and perspective while affirming the need for actuaries to be able to practice in specific local jurisdictions.
- Recommend adding more international content to both the ASA and FSA curriculums.
- Affirm the use of English in the examination context, except where required by law and sufficient demand is measured.
- Encourage the use of local languages for continued professional development offerings.