A Look Back: A Message from the President of the NBEO, 1965

In September 1965, Dr. Darrell B. Carter was serving as the President of the National Board of Optometry when he included in the “News Letter” his insightful observations regarding the closely intertwined profession of optometry and the National Board of Optometry:

The National Board of Optometry has just conducted its 14th annual examination. Over 400 candidates took this examination; some 27 states are utilizing NBO results as fulfilling part or all of their written state board examination.
All of these facts are evidence that the National Board of Optometry has become a viable and important agency in optometry. The NBO is dedicated to one basic purpose – the conducting of an examination of high standards. The increasing utilization of NBO results by the various state boards is evidence that the NBO is fulfilling its purpose.

In addition to serving as a standard examination by which individual candidates for licensure in optometry may be judged as to their academic preparation, the NBO examinations are acting as an elevating force upon optometric education. The examination offers the various schools and colleges of optometry the opportunity to evaluate their “product,” the academic preparation of their graduates, against a national yardstick. Such comparison is most useful in revealing strong areas and specific deficiencies in the educational program of the institution making the evaluation.

The growth in stature of the National Board of Optometry is part of the growth of optometry. The development of the National Board stands with the granting of the Doctorate in Optometry by our university schools of optometry and the increasing role of optometry in the areas of public health and government-supported research as milestones of the past ten years. The growth of optometry may be likened to an enhancement reverberating circuit. The growth of each part advances the growth of every other part.

In some ways, circumstances have changed dramatically since Dr. Carter penned his eloquent description of National Board activities in 1965, but in other ways, very little has changed. The number of optometry schools and colleges has risen significantly, as has the number of optometry students that sit for NBEO exams (from 400+ to roughly 1400). All states now require National Board scores for consideration for licensure as compared to the 27 states that required them in 1965. The scope of optometry has expanded to an enormous degree. The NBEO examinations have undergone major transformations in variety, format, and sophistication as this expansion has unfolded.

However, the overall philosophy behind the National Board’s mission has remained constant. The NBEO of Fall 2010, as in the autumn of 1965, exists primarily for the purpose of producing comprehensive, high-quality, consistently administered examinations; scoring these exams using criterion-referenced (domain) standards; and reporting scores to state boards of optometry. Once released, these scores are utilized as a major component in determining eligibility for optometric licensure. The protection of the public, through knowledge and skills assessments, remains our principal function, now as in 1965.

Dr. Darrell Carter is retired from the University of California, Berkeley School of Optometry. He resides in Glen Ellen, California where he stays busy tending his grape vines, gardening, and helping to raise his step-grandson. He and spouse Mary Kate enjoy frequent travels. They went to Hawaii twice this past summer. Dr. Darrell Carter’s daughter, Dr. Janet Carter, is the immediate Past President of the NBEO Board of Directors.
A Look Ahead: A Message from the President of the NBEO
Christina M. Sorenson, O.D.
October 2010

It is quite an honor to have followed in the footsteps of the excellent leaders who have served over the years as President of the NBEO Board of Directors. Dr. Darrell Carter’s analysis of the optometry profession’s maturation, with the parallel symbiosis and growth evidenced by the steady increase in the sophistication of optometric education, national board exams, and state optometry board use of exam results, was exceptionally intuitive and visionary.

In 2010, the NBEO Board of Directors and Charlotte office staff are experiencing one of the busiest, most productive years ever. After successfully negotiating the hurdles involved in the move from Bethesda to Charlotte, the Exam Restructure, and the development of the new, multifunctional OEDIS database system, our focus has been redirected toward the decision to standardize CSE administrations through One-Site testing, the March 2010 Part I ABS Piracy Scheme investigation and resolution, the development of CSE Injections Skills Testing, and a relocation of the entire NBEO headquarters to accommodate the new National Center of Clinical Testing in Optometry (NCCTO). Each of these current topics will be addressed within this quarter’s TESTPOINTS™.

Now, as in 1965, the National Board continues to strive toward optimal refinement and improvement of the first-rate system by which the optometry profession carefully and reliably safeguards the public interest. Simultaneously, the NBEO continues to support and encourage the profession’s advancements in scope of practice as it is ever-willing to incorporate new information and skills into its diverse examinations.

Dr. Sorenson received her Doctor of Optometry degree from the University of Missouri-St. Louis before completing her residency at the Kansas City Department of Veterans Affairs Medical Center in Low Vision Rehabilitation. She is a Fellow of the American Academy of Optometry as well as a member of both the Arizona and American Optometric Associations. She was named Arizona Optometrist of the Year in 2006. Dr. Sorenson was appointed by the Governor of Arizona to the Arizona State Board of Optometry in 2001 and served as its Vice-President and President. She has served as a member of the Association of Regulatory Boards of Optometry (ARBO) Board of Directors since 2003 and was the President of ARBO in both 2007-2008 and 2008-2009. She has practiced optometry at Mayo Clinic Arizona, Department of Ophthalmology, Scottsdale, Arizona, and recently was appointed Assistant Dean of Clinical Education at the Midwestern University Arizona College of Optometry in Glendale, Arizona.
Recently, the NBEO Board of Directors announced the conversion of the traditional, twice-yearly Part III Clinical Skills Examination (CSE) administered at each individual optometry school/college to a more contemporary, effective, standardized, and comprehensive examination to be given throughout the year in the NBEO’s single-site National Center of Clinical Testing in Optometry (NCCTO). This is consistent with the current trend among healthcare professions to administer their clinical skills exam administrations in a single testing site (e.g., National Board of Osteopathic Medical Examiners) or a very few testing sites (e.g., National Board of Medical Examiners). This new testing design permits a more consistently administered, uniformly scored, stable exam that produces a superior and more reliable evaluation of true candidate skills achievements.

The National Board participated in multi-year, multi-organizational discussions that led to the well-considered decision to implement one-site testing for Part III CSE. The NBEO sought input from the American Optometric Student Association (AOSA), faculty/administration from several schools and colleges, all ASCO Board members, and the CSE Committee and Council. At the Board of Director’s mid-year meeting in June 2010, the Board and the AOSA President reviewed various reports concerning a single-site CSE administration, including a lengthy response from NBEO to an ASCO Task Force based on a large number of comments from the leadership of the academic institutions.

Though a regional testing concept was considered, it appeared that this scenario would not significantly improve CSE score consistency because of the continued need for a far greater number of examiners and patients than will be required in a single-site exam setting. In addition, the greater costs involved with establishing and staffing multiple test centers necessarily would have been reflected in significantly higher exam fees.

The Board deferred making a decision until the input from additional stakeholders could be obtained. In this endeavor, the NBEO presented the one-site proposal to the ARBO House of Delegates this past summer, with representatives from 33 optometry regulatory boards. The one-site concept was positively received by the state boards. Several NBEO BOD members and the NBEO Executive Director met again with the AOSA and additional detailed discussion was entertained. Ultimately, the AOSA members understood the multiple advantages offered by a single-site CSE, and were satisfied with the restructure of Part III to a single-site format.

After engaging in many discussions with a large number of stakeholders in optometry, the NBEO Board of Directors unanimously, enthusiastically approved the Part III One-Site Clinical Skills Examination in order to achieve a greater level of exam consistency and standardization, to afford the opportunity for CSE to mature beyond its current “procedural” limitations, and to allow candidates multiple opportunities to take CSE prior to graduation.

The NCCTO will be located in Charlotte, North Carolina, which is one of 50 of the largest U.S. Metropolitan Statistical Areas near large airports but not within close proximity of any optometry schools (this latter, consistent with NBEO policy). Charlotte performed well in a multi-faceted analysis of pertinent factors as they relate to qualifications for the NCCTO host city (see www.optometry.org/articles/nccto_analysis.pdf). Charlotte ranked among the 5 MOST CENTRAL sizeable cities in the United States, relative to the total optometric student population. Optometry students are largely situated within the eastern half of the U.S. Geographically, 16 schools/colleges (including the institutions in the U.S., Canada, and Puerto Rico) are located east of the U.S. midline while only 6 exist west of this line. Beyond the centrality issue, other parameters included in the testing facility placement study were motel costs within the cities under consideration; traffic congestion and costs as they relate to public roadway transportation; the violent crime rate; and the cost, convenience, and consumer satisfaction involved with air travel to and from the potential testing site cities. Charlotte’s statistics performed well in the study. Of significant note, the Charlotte Douglas International Airport offers 632 daily, reasonably priced, far-flung flights; scores near the top of the customer satisfaction chart; and is a short ride (15-20 minutes) on minimally congested roadways from the uptown Charlotte area in which the NCCTO will be located.

The final MULTIPLE-SITE FORMAT CSE will be administered in April 2011. The new SINGLE-SITE FORMAT Clinical Skills Examination in Charlotte, NC will begin in August 2011. The NCCTO initially will have the capacity to assess 16 Candidates per day, throughout the year. This will permit greater flexibility in the evaluation of skills that the leaders of some optometry institutions have long felt are most appropriately tested right after the end of the second year of optometric education, while others have supported a CSE administered as late as the end of the fourth year. Students may take their CSEs as early within their fourth year as they are clinically comfortable.
One-site CSE administration at the NCCTO will afford Candidates a uniform, consistent CSE experience. The “home field advantage,” in which some Candidates test at their home clinics while others are assigned to non-home clinics, will no longer exist. Once testing shifts to the new NCCTO, identical examination rooms will always be in the exact same configuration for all Candidates. NBEO will provide all Candidates the opportunity to preview the facility, rooms, as well as the CSE process, through online video capabilities. Candidates will be able to familiarize themselves with NBEO equipment on-site during orientation, prior to their examinations.

Thus far, overall optometry student reaction to the reformatted Part III CSE has been positive. Many students are in favor of taking Part III early in their fourth year to “get the CSE out of the way.” In addition, if a student fails the CSE and has tested relatively early in the CSE assessment cycle, there will be sufficient time to repeat the exam prior to graduation, thus avoiding a delay in licensure.

Currently, a search is underway to identify the NBEO/NCCTO’s new quarters, personnel recruitment has begun, and examination room/testing assessment equipment is being researched. Future developments will be noted on the NBEO website and in upcoming issues of **TestPoints™**. We presently are accepting applications for our new Director of Clinical Skills Testing (to apply, click on: https://adminstaff.ats.hrsmart.com/cgi-bin/a/highlightjob.cgi?jobid=61800).

### Injection Skills Assessment to be Added to CSE in August 2011

The NBEO recently completed a 3-year Injection Skills Pilot Program as a prelude to incorporating Injection Skills into the Part III Clinical Skills Examination (CSE). Over the course of 3 years, the pilot program was administered at each of the 17 CSE sites, offering the National Board the opportunity to perfect the testing procedure. The pilot sessions assisted the NBEO in making critical decisions regarding which injection techniques to include, the style of simulated arm to use, which items to include in the skill assessment, and the appropriate weighting for each item.

In the Spring of 2011, Injection Skills will be offered at 3-6 CSE testing sites as an optional, additional skill. This provides candidates an opportunity to obtain a score on Injection Skills, which may be required for licensure by some state optometry boards in the near future. The testing sites offering Injection Skills in Spring 2011 will be determined prior to the opening of CSE registration and will be posted on the NBEO website. The National Board will base its determination of the sites on responses to a survey of the state optometry boards about their anticipated use of the Injection Skills score over the next 5 years.

Injection Skills will be fully incorporated into CSE when testing begins at the NCCTO in August 2011. Thus, candidates in the graduating class of 2012 will be tested on Injection Skills as a routine part of the CSE assessment.

### March 2010 Part I ABS Exam Piracy Scheme Update

The March 2010 Part I Applied Basic Science (ABS) examination piracy scheme investigation continues as the penalty phase has begun. The NBEO has proceeded thoroughly and deliberately through the unfortunate circumstances created by a faculty member at a well-respected optometry college following a scheme in which all third-year students were encouraged to participate in two forms of what the NBEO defines as improper behavior.

The first assertion of malfeasance involved the deliberate **EXPOSURE** of these optometry students to previously pirated, copyrighted, NBEO Part I ABS examination items via the school’s internal website for students. In addition, there was a wealth of clear evidence of exposure, by private email circulation among the school’s third-year students, of other documents containing pirated items from recent exams.

The second allegation of wrongdoing involved an exam item **PIRACY SCHEME** involving these same third-year students. Through the investigation, the NBEO has obtained evidence verifying the EXPOSURE allegation and also has confirmed participation in the PIRACY SCHEME by specific candidates. Two distinct National Board reactions have evolved as the NBEO has examined the evidence discovered.

The EXPOSURE issue resulted in a blanket cancellation of **ALL** candidates’ Part I ABS scores at the involved college. The NBEO confirmed that there had been widespread pre-examination exposure by these candidates to a large number of confidential and copyrighted items from prior ABS exams, some items of which were reused on the March 2010 ABS exam. This limited reuse of items is a common practice within the testing community because
psychometric analysis between new and old exams requires the use of a certain percentage of previously used items for equating purposes. Further, due to the high costs involved in the development of exam items, it is necessary to maintain prior items in a database and to select items from that pool for use in subsequent exam administrations.

The National Board has determined that item exposure was so widespread among this group of candidates that the validity and integrity of the exam as a whole at this school were compromised. Obviously, these scores could not be relied upon by state boards for licensing purposes. It was deemed necessary to cancel all of this candidate population’s March 2010 Part I ABS scores.

As for the PIRACY SCHEME issue, in order to maintain the integrity and validity of NBEO exams, it is critical that prior NBEO items remain strictly confidential. They must not be appropriated for compilation into any NBEO exam study guides. NBEO items are strictly off limits for copying, reproduction, distribution, or other use. This prohibition is derived from at least two sources: copyright law protection and express written agreement entered into by each exam candidate on the NBEO website registration page and on each exam booklet. Specific to the March 2010 ABS exam as well as to all other NBEO exams, candidates were prohibited from any reproduction or distribution of NBEO examination items in whole or in part. This prohibition clearly disallows, among other things, memorizing items and then typing them or writing them on paper, and then emailing or handing the memorized items to another individual; e.g., a piracy scheme organizer. As has been amply documented through email records obtained during the investigation, the purpose of this item collection was to share the compiled items with future takers of the exam from this particular school. This could provide an advantage not shared by all candidates taking the exam.

The Board of Directors of the National Board wishes to clarify, and sincerely hopes that every optometric stakeholder understands, that the NBEO reacted to the piracy schemes in the only manner acceptable to state boards of optometry. These boards collectively supply the primary justification for the NBEO’s existence, which is ultimately to protect the public’s safety and health by ensuring that licensed optometrists are duly qualified to hold a license and practice optometry. It is essential to the public interest that the NBEO investigates and attempts to eliminate any form of pirating or cheating that is brought to its attention.

When the National Board learned of the widespread exposure of prior exam items, the NBEO was left with no option but to cancel the untrustworthy scores. When the faculty member chose to encourage the pirating scheme in 2010, and some students chose to participate in it, and the NBEO became aware of the scheme, the National Board was obligated to investigate and hold the culpable individuals responsible for their actions.

The National Board’s response to the cheating has been painstakingly careful and deliberate. The NBEO acknowledges and understands that the necessarily thorough and conscientious process for investigating and responding to the exposure/pirating scenario has unnerved and greatly inconvenienced the affected students. It has been a difficult and unpleasant investigation for the National Board to conduct. The March 2010 Part I Piracy Scheme has afforded a frustrating, expensive learning experience for all concerned.

All NBEO examination material is copyrighted and protected by law from copyright infringement. The NBEO prohibits all Examination Candidates from memorizing and archiving ANY NBEO item items or answer options.

Other than the sample items posted on the NBEO website, the National Board does not authorize and strongly discourages the use of any study guide, available from any source, that claims to include “National Board questions and answers” or provides any similar description of the included items. It is requested that all Candidates who encounter study materials that purportedly contain NBEO items (other than the sample items available on the NBEO website) immediately contact the NBEO to report this study information that either is falsely advertised (does not contain NBEO items), or does contain illicitly obtained NBEO items, and therefore, is illegally produced.
Notes for Our CSE Examiners

The National Board would like to thank all the Examiners who participated in this year’s Spring and Summer CSE Administrations and we look forward to working with them again in 2011. The NBEO cannot stress enough how greatly we appreciate our many Examiners’ years, and even decades, of loyal service and hard work. The Part III CSE has served the profession extremely well, largely as the result of our Examiners’ unflagging efforts and participation.

**Site Preference forms for the Spring 2011 exams will be available when the annual invitations go out later this year (usually around mid-December).** In addition, the Examiner webpage will be updated with more 2011 CSE information as it becomes available.

Announcements recently went out to our CSE Examiners to share with them that the Spring 2011 CSE events will be the final multiple-site format administrations of this exam. The new single-site format Clinical Skills Examination in Charlotte, NC will begin in August 2011. We highly value our Examiners’ enthusiastic, insightful input and will continue to solicit their contributions through the formation of advisory groups designed primarily to capture Examiner comments, suggestions, experience, and ongoing leadership as we develop and implement our new format. As this new CSE structure evolves, Examiners will be notified of available volunteer opportunities and positions. The National Board sincerely hopes to maintain its excellent partnerships with its indispensable Examiners.

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**2011 CSE Examiner Dates**

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<thead>
<tr>
<th>Part III-CSE WEEKEND 1</th>
<th>April 1-3</th>
<th>Boston</th>
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<tr>
<td></td>
<td>April 2-3</td>
<td>Chicago, Columbus, Fullerton, Memphis</td>
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<tr>
<td>Part III-CSE WEEKEND 2</td>
<td>April 15-17</td>
<td>Portland</td>
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<td>April 16-17</td>
<td>Berkeley, Birmingham, Philadelphia, San Juan, Tahlequah</td>
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<tr>
<td>Part III-CSE WEEKEND 3</td>
<td>April 30-May 1</td>
<td>Big Rapids, Bloomington, Houston, Ft. Lauderdale, New York, St. Louis</td>
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If you are interested in applying to become an NBEO Examiner, please click on the following link for more information: [http://www.optometry.org/clinical_examiner.cfm](http://www.optometry.org/clinical_examiner.cfm). To serve in other volunteer capacities, please contact us at info@optometry.org.
A Change in NBEO Testing Policy
Regarding Test Booklets and Answer Sheets

In the past, if an examination’s time limit expired before a candidate completed transferring answers marked in the test booklet to the answer sheet, the NBEO would consider scoring the test booklet responses. The Candidate was required to file an appeal within 10 days of the examination, sign a release form, and pay a fee to cover the administrative work involved in this process. This included an NBEO staff member’s time and effort to finish the hand-transfer of answers from test booklet to answer sheet, as well as special attention needed during scoring.

The Board of Directors recently decided to alter this policy by PROHIBITING the scoring of test booklet responses in order to maintain the standardization of written NBEO exams. All candidates are provided with the same amount of time to read, consider, and respond to all items on the examination. This time allotment is intended to include the process of marking answer sheets. Candidates who fail to complete answer sheets within the exam’s established time frame in effect gain additional time in which to ponder and select item responses. The NBEO website now offers a reminder to candidates sitting for examinations to record all answers directly and clearly onto their answer sheets as they progress through their exams.

NBEO Image Depository

The NBEO is soliciting digital ocular images for use in our PAM and ACMO examinations. We would appreciate receiving your high-quality images of normal or interesting eye cases. Since PAM targets entry-level expertise, images of normal eyes, corneas, retinas, lenses, conjunctivias, and patients wearing spectacles or contact lenses are always needed. Images of common eye disorders also are used in the PAM exam, while images of more unusual, more sophisticated ocular disease/trauma cases are useful for the ACMO exam. In all cases, we particularly need paired images OD, OS.

If your great, digital, ocular photos are doing nothing more than taking up space in your hard drive, consider assisting the NBEO in exam development. Simply email your images in .JPG format to info@optometry.org. We will send you acknowledgement of your donation along with a request that you sign and return to us a statement giving us permission to use your image in a test booklet. Please note that any photos selected for inclusion in our image depository can no longer be used in other capacities, such as for continuing education courses or publications, as they become the property of the NBEO. Upon submission of 10 images that are used in active exam cases, you will receive a Certificate of Appreciation for serving as an NBEO Image Provider.

Along with your images, if possible, we also would appreciate receiving from you any case details that may augment the use of your photos. Though these case demographics are NOT REQUIRED with image submission, they may be emailed to us in the same email as your images. No special format or preparation is needed for case detail submission. We welcome submission of the most basic case information or an extensive case description, or the image(s) only.

In addition, NBEO is always seeking assistance from item writers and case authors. If this type of service to the optometric profession appeals to you, please email the NBEO at info@optometry.org and we will contact you to determine the manner in which you wish to contribute to NBEO exam development.

NBEO Stresses the Need for Professional Conduct during Exams

The NBEO respectfully requests that all candidates take their exams in a professional, ethical manner. Over the years, the National Board has routinely conducted statistical analyses comparing each candidate’s set of answers to all other test takers’ responses, across all sessions of any specific written exam. Since the March 2010 Part I ABS Examination, sophisticated, state-of-the-art scoring analysis has been conducted by a leading data forensics service. This comprehensive analysis develops a probability model for the entire exam and then compares candidate response sets that are unusually similar to the response sets of one or more adjacent candidates. If the similarities in the response patterns are extremely unlikely based on the probability model, a candidate’s score is flagged.
Should the results of this routine analysis raise questions regarding the validity of a candidate’s score, further investigation may lead to the suspicion that the candidate did not work independently on one or more segments of that particular examination. This candidate’s score may be tentatively labeled as untrustworthy, which can result in a staff-level decision to withhold the exam score. A letter describing NBEO concerns and a copy of the statistical evaluation are sent to the candidate suspected of cheating, who then may file a Judicial Committee appeal. If the Judicial Committee upholds the staff decision, the candidate’s score for that specific exam is permanently cancelled. In addition, an exam bar may be placed against any candidate found to have cheated, which defines a time interval during which that candidate is not permitted to retake that exam.

In summary, the NBEO expects from all of its candidates an honest, ethical approach to sitting for all NBEO examinations.

### Additional Information

**NBEO Board of Directors**

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<thead>
<tr>
<th>Position</th>
<th>Name</th>
<th>Location</th>
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<tbody>
<tr>
<td>President</td>
<td>Christina M. Sorenson, O.D.</td>
<td>Scottsdale, Arizona</td>
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<tr>
<td>Member</td>
<td>Alan J. King, O.D.</td>
<td>Dickinson, North Dakota</td>
</tr>
<tr>
<td>Vice-President</td>
<td>Larry J. Davis, O.D.</td>
<td>Saint Charles, Missouri</td>
</tr>
<tr>
<td>Public Member</td>
<td>Dennis D. Long, Ph.D., A.C.S.W.</td>
<td>Waxhaw, North Carolina</td>
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<tr>
<td>Secretary-Treasurer</td>
<td>Nancy Peterson-Klein, O.D.</td>
<td>Mecosta, Michigan</td>
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<tr>
<td>Member</td>
<td>William B. Rafferty, O.D.</td>
<td>Winston-Salem, North Carolina</td>
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<tr>
<td>Member</td>
<td>Janet L. Carter, O.D.</td>
<td>Las Vegas, Nevada</td>
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<tr>
<td>Member</td>
<td>Melvin D. Shipp, O.D., M.P.H., Dr.P.H.</td>
<td>Columbus, Ohio</td>
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**NBEO Executive Director**

Jack E. Terry, O.D., Ph.D.

**Next NBEO Exam**

**Part II PAM Exam**
(with embedded TMOD)

2 Sessions, 350 Items
November 30, 2010

<table>
<thead>
<tr>
<th>Exam</th>
<th>Exam Date</th>
<th>Registration Deadline</th>
<th>Extended Registration Deadline</th>
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<td>Part I (ABS)</td>
<td>March 15-16</td>
<td>January 10</td>
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<td>Part II (PAM/TMOD)</td>
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<td>Part III (CSE):</td>
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<td>Weekend 1</td>
<td>April 1-3</td>
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<td>Weekend 2</td>
<td>April 16-17</td>
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<td>Weekend 3</td>
<td>April 30-May 1</td>
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**National Board of Examiners in Optometry**

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