February 9 & 10, 2024

Virginia Institute of Marine Science
Gloucester Point, Virginia
Blue Crab Bowl:
Winners 1998-2022

See our history of Blue Crab Bowl teams from Virginia competitions, 1998 through 2022.
Lists of participating teams for each year are posted on the Blue Crab Bowl website at http://web.vims.edu/adv/bcb/PDFnews.html.

1998 — 1st Annual
Central Shenandoah Valley Regional Governor’s School, Fishersville

1999 — 2nd Annual
Lord Botetourt High School, Daleville

2000 — 3rd Annual
Grafton High School, Yorktown

2001 — 4th Annual
Catholic High School, Virginia Beach

2002 — 5th Annual
Grafton High School, Yorktown

2003 — 6th Annual
Thomas Jefferson High School, Alexandria

2004 — 7th Annual
Thomas Jefferson High School, Alexandria

2005 — 8th Annual
Chesapeake Bay Governor’s School-Warsaw Campus

2006 — 9th Annual
Chesapeake Bay Governor’s School - Warsaw Campus

2007 — 10th Annual
Chesapeake Bay Governor’s School-Warsaw Campus

2008 — 11th Annual
Bishop Sullivan Catholic High School, Virginia Beach

2009 — 12th Annual
Bishop Sullivan Catholic High School, Virginia Beach

Continued on page 15
The Blue Crab Bowl is one of 24 regional competitions of the National Ocean Sciences Bowl (NOSB®). The first NOSB competition was launched in 1998 by the Consortium for Oceanographic Research and Education (CORE) to further its mission of supporting and expanding oceans sciences education during the International Year of the Ocean. In 2007, CORE merged with the Joint Oceanographic Institutions (JOI) to form a new organization, the Consortium for Ocean Leadership. In 2023, the NOSB found a new home within the Center for Ocean Leadership at the University Corporation for Atmospheric Research in Boulder, Colorado. Both ODU and VIMS are affiliate members of the Center for Ocean Leadership.

Virginia’s Blue Crab Bowl was among the original NOSB competitions. Designed to inspire and challenge high school students, the Bowl tests competitors’ knowledge of the marine sciences. Each match pits two teams of four students in an academic quiz-bowl format. Competitors use a buzzer system to respond to rapid-fire multiple choice and short answer questions read by a Moderator. Additionally, teams work collectively to produce written answers to complex analytical questions.

This year, sixteen teams from around the Commonwealth compete in round-robin divisions, then double elimination matches that narrow the field. The final tournament rounds establish 1st – 4th place winners.

Spectators are welcome in competition rooms, but may not:
 • enter or leave a room during a match;
 • take pictures, notes or audio recordings during competitions;
 • use cell phones, smart watches or texting devices in competition rooms;
 • communicate with contestants during matches, after breaks; or
 • talk in the halls outside competition rooms during matches.

Please respect the integrity of the competition and the considerable effort made by ALL teams and officials in preparing for this event.
Awards and Sponsors

All Student Competitors
- Blue Crab Bowl logo sweatshirts & logo lapel pins
- Blue Crab Bowl logo water bottle, cell phone wallet & logo knit beanie
- Assorted ODU OES Gear
  Center for Ocean Leadership, Virginia Institute of Marine Science,
  Dept. of Ocean & Earth Sciences, ODU

All Coaches
- Blue Crab Bowl logo sweatshirts
  Center for Ocean Leadership, Virginia Institute of Marine Science
- Blue Crab Bowl logo sun hat
  Dept. of Ocean & Earth Sciences, ODU
- 1-year membership, Mid-Atlantic Marine Education Association (MAMEA)
  Virginia Institute of Marine Science
- 2024 Sand Calendar
  Splendid Sands.com

New Coaches
- 1-year membership, Mid-Atlantic Marine Education Association
  Mid-Atlantic Marine Education Association (MAMEA)

1st, 2nd, 3rd, 4th Place Teams
- Custom design Crab Bowl Team Trophies
- Competitor’s Award – Custom Blue Crab Bowl Medallion
- Coach’s Award – Custom Blue Crab Bowl Mug & Research Photarium
  Virginia Institute of Marine Science

1st Place Team
- Research Cruise on the R/V Fay Slover
- Custom Blue Crab Bowl Champion Backpacks
  Old Dominion University Dept. of Ocean & Earth Sciences, Dr. Zimmermann

1st Place Coach
- Complementary registration for 2024 MAMEA Fall Conference
  Mid-Atlantic Marine Education Association

Additional support graciously provided by:
- Old Dominion University: College of Sciences; Department of Ocean and Earth Sciences; R/V Fay Slover
- Virginia Institute of Marine Science (VIMS), William & Mary
- VIMS Marine Advisory Program
- Virginia Sea Grant
- Hampton Inn Gloucester
Blue Crab Bowl 2024 - Event Schedule:

Friday, February 9, 2024: VIMS Campus & Hotel, Gloucester

Team lunch on your own - prior to arrival

1:00 – 1:45 p.m.  Team Check-In and Team Photos - VIMS Visitor’s Center – Watermen’s Hall
1:45 – 2:00 p.m.  BCB Coordinator Welcome & Announcements - Auditorium – Watermen’s Hall
2:00 – 2:20 p.m.  Welcome from VIMS Dean & Director Dr. Derek Aday, divide into tour groups, tour overview
2:20 – 2:30 p.m.  Teams transit to tour start points
2:30 – 2:50 p.m.  Tour Rotation 1: various labs on VIMS campus
2:50 – 3:00 p.m.  Transit to tour rotation 2
3:00 – 3:20 p.m.  Tour Rotation 2: various labs on VIMS campus
3:20 – 3:30 p.m.  Transit back to Watermen’s Hall Visitor’s Center
3:30 – 3:45 p.m.  Break: visit the VIMS giftshop and VIMS aquarium
3:45 – 5:00 p.m.  Marine Science Careers Panel Discussion and Q&A
5:00 – 6:00 p.m.  Dinner: Pizza, salad, drinks - VIMS Visitor’s Center – Watermen’s Hall
6:00 – 6:45 p.m.  Mock Bowl - Auditorium – Watermen’s Hall
6:45 – 7:00 p.m.  Dessert - VIMS Visitor’s Center – Watermen’s Hall
7:00 p.m.  Teams depart for hotel - Hampton Inn, Gloucester

Saturday, February 10, 2024: All events at VIMS Campus, Gloucester Pt.

6:15-7:00 a.m.  Team Breakfast, in shifts - Hampton Inn Gloucester, breakfast room
7:45-8:15 a.m.  Team Check-In - Crab Pot Central (Watermen’s Hall Visitor’s Center - VIMS)
8:30 a.m.  Competition Day Welcome and ALL HANDS Meeting
Mandatory for all competitors and coaches; Announcements, rules review
Auditorium – Watermen’s Hall
9:00 a.m.  Round robin competitions begin.
11:15 a.m.  Lunch: Teams – Watermen’s Hall Visitor’s Center
Volunteers – Davis Hall Atrium
12:00 p.m.  Double elimination rounds begin.
Match schedule and room assignments posted at Crab Pot Central, Watermen’s Hall
2:20 p.m.  Break & Snacks
2:35 p.m.  Championship Rounds begin. Played continuously, with announced breaks.
Auditorium – Watermen’s Hall
TBD  Awards Ceremony directly follows last competition round.
Mandatory team attendance, coaches receive packets & awards.
Auditorium – Watermen’s Hall
Approx. 5:00 p.m.  Following Awards Ceremony, Official photos taken of Winning Teams;
Students & Coaches complete event evaluation; Teams dismissed.
Teams & Coaches

Albemarle High School
Diana Webber
Eric Bricker

Broadwater Academy
Charles Carlson

Catholic High School - A
Carol Stapanowich

Catholic / Isle of Wight - B
Jennifer McMullen
Martha Bradley

Chesapeake Bay Governor's School, Bowling Green
Danielle Ross

Chesapeake Bay Governor's School, Glenns
Sara Chaves Beam

Chesapeake Bay Governor's School, Warsaw
James Beam
Lexi Duscher

Churchland High School
Cami Field
Carly Carmack

Grafton High School
Adrienne Richardson

Gov. School for Science & Tech
New Horizons
Deidre Yee

Isle of Wight Academy - A
Courtni Barnes-Smith

Liberty High School
Maegan Winkelmann

Norfolk Collegiate School
Frank Thomson
Christina Cooper

Seton School
Hank Konstanty
Ekaterina Makarova

Tidewater Academy
Cassy Peffley
Heather Peffley

Warwick High School
Chenoa Payne
Tori Allan

Officials & Staff

Moderators
Peter Bernhardt
Nicole Buckley
Celia Cackowski
Jana Eggleston
Emily Frett
Sarah Nuss
Marta Sanderson
Alexandra Schneider

Science Judges
Carol Hopper Brill
Rich Brill
David Burdige
Greg Cutter
Rachel Dixon
Fred Dobbs
Emily Rivest
Dick Zimmerman

Rules Judges
Derek Detweiler
Lisa Eddy
Ana Eggleston
Robert Eggleston
Victoria Hill
Erin Reilly
Kristen Sharpe
Patrick West

Time Keepers
Madison Andrilunas
Joe Caterine
Stephanie Letourneau
Daniel Perez
Felix Ranford
Quinn Roberts
Joe Tamborski
AJ Woodson

Score Keepers
Adriana Amrhein
Ekaterina Bulyagina
Izzy Chandler
Derek Jackson
Andrew Lindgren
Kaitlyn Kowaleski
Renee Sanders
Serina Wityngham

Room Runners
Nikole Beck
Jacque Carter
Katie Crider
Alyiah Downing
Isabel Dreyer
Jenny Dreyer
Avery Gibbs
Madison Griffin
Maria Guardado
Anamika Kona
Carter Lin
Nathan Maynard
George Sedberry
Taylor Thomas

Team Challenge Graders
Angelina Dichiera
Cecilia Lewis
Nicole Millette
Elizabeth Smith
Rich Whittecar

Team Concierge
Reece Aponte
Sara Blachman
Hannah Brown
Anna Caputo
Jen Gilmore
Anthony Guzzo
Olivia Hernandez
Shelley Katsuki
Alexa Labossiere
Star Lewis
Grace Molino
Dana Snyder
Lindsey Smith
Olivia Szot
Matthew Thayer
Mara Walters

Chief Rules Judge
Lisa Lawrence

Chief Score Keepers
Stephanie Salisbury
Erica Smith

Event Support
Anu Desai
Hilary Parmentier
Savara Shrivastava
Dave Ferree, VIMS
Cheryl Teagle, VIMS
VIMS & Marine Advisory
Program office & fiscal support
Dana Schilling, ODU
ODU/OES fiscal support

Media/Photography
Lathan Goumas
Rebecca Latourell
Emily Webster
Tiffany Whitfield

Special Guests
Adrienne Washington
Ethan Smith
Kathi Goodwin
Reid Kirkpatrick
Susanna Musick
Daniel Ogunyemi
Capt. Mark Murnane
Dr. D. Derek Aday –
VIMS Dean & Director
Dr. Rodger Harvey –
Interim Chair, ODU/OES
Dr. Dave Rudders – Director,
VIMS Marine Adv. Prog

BCB Regional Coordinators
Bill Dunn – ODU
Bethany Smith – VIMS
Competition Rules Overview

The Blue Crab Bowl follows the official rules of the National Ocean Sciences Bowl (www.nosb.org). The following overview should help spectators follow the competition, but not all rules are presented here.

Officials’ Roles
- **Moderator**: Asks the questions
- **Science Judge**: Rules on answer acceptability
- **Time Keeper**: Keeps the match clock
- **Score Keeper**: Tallies team scores
- **Rules Judge**: In charge of procedure
- **Team Challenge Judge**: Grades Team Challenge Questions (TCQs)

Players
For each match, a team is represented by 4 students: 1 captain and 3 players. The team’s alternate (5th) player may rotate in at the beginning or end of a match segment.

Types of Questions
There are two “buzzer question” segments per match. Individual players of either team buzz in to answer multiple choice toss-up questions. If the answer is not acceptable, the Moderator offers the question to the opposing team. When teams give acceptable answers to toss-ups, they are offered a multiple choice or short answer bonus question. Teams may consult on bonus questions, but only the team captain may give the answer. Two team challenge questions (written, analytical) are presented between buzzer segments.

Answers
Responses to multiple choice questions can be the letter (W, X, Y, Z) or the word answer, exactly as specified in the NOSB notebook. Anything else is unacceptable, including the preface “My answer is...” The first answer stated is the one that counts. Responses to short answer questions must contain key words and concepts identified in the expected answer; the preface “My answer is” is permissible.

When do players use the buzzer and answer questions?
The buzzer is used only for toss-ups questions. Players buzz in after the question and prospective answers are read.

If a player buzzes in before the Moderator has completely read the question, the Moderator recognizes the player and the player answers the question. If the answer is unacceptable, the team loses 4 points and the question is read to the opposing team. If the answer is acceptable, the team gets 4 points and the chance to answer a bonus question. If a player “blurts” an answer without being recognized, their team loses its turn.

Timing
- After toss-up question is read: 5 sec. to buzz in.
- From being recognized to answer: 3 sec.
- After bonus question read to answer: 20 sec.
- For TCQ: 2-5 min.

Points
- Toss-up question: 4 points
- Bonus question: 6 points
- Interrupt, recognized, but answer not acceptable: -4
- Blurt, unrecognized: 0 and team loses chance to answer
- TCQ: 0-20 (partial credit possible)

Challenges to Rules or Scientific Answers
Players (not coaches, alternates or audience members) may request a challenge to a question answer or rules enforcement by raising their hand & being recognized by the Moderator, but only before the Moderator begins reading the next question. The Time Keeper stops the clock, room officials confer and make a ruling. If the ruling is challenged a 2nd time, Head Judges make a ruling. No challenges are permitted on 2nd rulings or TCQs.
Round-Robin Matches: Rounds 1, 2 & 3; Matches 1-24
During the morning, in Round-Robin competitions, each team plays all others within its Division. Teams accumulate points based on number of wins, ties and losses (rather than raw scores).

1: Euphausiidae Division
T1 = Chesapeake Bay Gov's School - Warsaw
T2 = Seton School
T3 = Churchland High School
T4 = Catholic / IOW - B

2: Pteropoda Division
T5 = Chesapeake Bay Gov's School - Glenns
T6 = Gov's School for Science & Technology
T7 = Tidewater Academy
T8 = Grafton High School

3: Siphonophorae Division
T9 = Norfolk Collegiate School
T10 = Albemarle High School
T11 = Chesapeake Bay Gov's School – Bowling Green
T12 = Warwick High School

4: Copepoda Division
T13 = Broadwater Academy
T14 = Catholic HS - A
T15 = Isle of Wight - A
T16 = Liberty High School

Elimination Rounds: Rounds 4, 5, 6 & 7; Matches 25-43
The highest placing teams in each Division are assigned to the A Bracket, the remainder go in the B Bracket for the Elimination Rounds. B teams are eliminated after 1 loss, A teams after 2 losses. During the initial Elimination Rounds, Round 4 (Matches 25-32), A teams play other A teams, B teams play other B teams; four teams are eliminated. Starting with Round 5, remaining match winners play losers in three successive double-elimination series and eight more teams drop out. It is possible for a B team to stay in the running, just as it is possible for an A team to be eliminated – performance counts. Note: Teams eliminated in Round 4 will play a required Consolation Match during Round 5 – not for position, but for prizes.

Trophy Rounds: Rounds 8, 9, 10 & 11; Matches 44-47+
Four teams progress to the trophy rounds, competing for 4th through 1st place.

To check on the progress and position of your team Round 1-7, visit Crab Pot Central in the Watermen’s Hall Visitor’s Center. Trophy Rounds (Rounds 8-11) take place in the Auditorium.

**Key to Blue Crab Bowl Competition Rooms, VIMS Watermen’s Hall and Davis Hall**

<table>
<thead>
<tr>
<th>Room</th>
<th>Events</th>
</tr>
</thead>
<tbody>
<tr>
<td>Watermen’s Hall Auditorium</td>
<td>Teams AM meeting; Rounds 1-7, Trophy Rounds 8-11, Awards</td>
</tr>
<tr>
<td>Watermen’s Hall Classroom A/B</td>
<td>Competition Room, Rounds 1-7; Lunch seating</td>
</tr>
<tr>
<td>Watermen’s Hall Classroom C</td>
<td>Competition Room, Rounds 1-5, &amp; 7 Lunch seating, TCQ Grading Rounds 8-11</td>
</tr>
<tr>
<td>Watermen’s Hall, Hargis Library (entry on lower level)</td>
<td>Competition Room, Rounds 1-5</td>
</tr>
<tr>
<td>Watermen’s Hall Visitor’s Center Lobby</td>
<td>Crab Pot Central; team, supporter and VIP check-in; team lunch; scores posted; Chief Scorekeepers; BCB Coordinators</td>
</tr>
<tr>
<td>Davis Hall 101</td>
<td>Competition Room, Rounds 1-5</td>
</tr>
<tr>
<td>Davis Hall 102</td>
<td>Competition Room, Rounds 1-5</td>
</tr>
<tr>
<td>Davis Hall 201</td>
<td>Competition Room, Rounds 1-5</td>
</tr>
<tr>
<td>Davis Hall 202</td>
<td>Officials; TCQ Grading Rounds 1-7; Appeals Room; Head Rules Judge</td>
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<tr>
<td>Davis Hall 244</td>
<td>Competition Room, Rounds 1-5</td>
</tr>
<tr>
<td>Davis Hall Atrium</td>
<td>Officials: Check-in, AM Meeting, Meals Service</td>
</tr>
</tbody>
</table>
In order to assure quiet in the competition rooms, there can be no talking or loitering in the halls during matches. 

As a demonstration of good sportsmanship, all teams are expected to attend the entire BCB program, including the awards ceremony.
Legend:
A = A Bracket teams & B = B Bracket Teams
Note: Beginning Round 5, A teams may play B teams
G = game = match #
W = winner of match # & L = loser of match #
24: Competition Brackets in Rounds 4-11

Round 6

Round 10

Round 9

ROUND 11
Old Dominion University (ODU) is a competitive, Research 1 university that reviews applications on an individual basis. Each application is carefully read and reviewed by the Office of Admissions staff. While academic performance is a vital factor in the decision-making process, we also take into account athletic and student organization participation, as well as community service. ODU seeks well-rounded students who have a zest for higher education, like to take part in extra-curricular activities, and are interested in exploring career opportunities during their college experience.

The average freshman admitted to Old Dominion ranks in the top third of his or her high school graduating class. A typical candidate has a minimum of 16 high school academic units in English, math, science, foreign language and social studies, and actively participates in school and/or community-based clubs, organizations and athletics.

The Department of Ocean and Earth Sciences (OES), founded at Old Dominion University in 1969, has a mission to acquire and disseminate knowledge of the earth system, including the relationships among the biological, chemical, geological and physical components of our planet. The Department has expertise in ocean margin processes, coastal system processes and coupled quantitative models. OES offers Bachelor of Science and Master of Science degrees in Ocean and Earth Sciences and a Doctor of Philosophy in Oceanography. Within the BS, the department offers tracks in Environmental Science, Marine Science Technology, Earth Science Education, and others.

The Commonwealth Center for Coastal Physical Oceanography, designated as a Center for Excellence by the State Council of Higher Education for Virginia, broadens the OES Department’s ability to facilitate innovative research on the coastal ocean and to provide educational experiences for both students and the public at large.

Old Dominion University’s Regional Higher Education Centers provide accessible, high quality education in three locations within greater Hampton Roads Peninsula. They support high-demand and critical shortage professions with select graduate and undergraduate degree, certificate and continuing education programs offered in traditional, Distance Learning, and hybrid formats. The Virginia Beach Center’s location makes it convenient for students pursuing baccalaureate degrees, as well as for working adults pursuing professional degrees, certificates, and continuing education programs.

For more information, visit these web sites:
www.odu.edu
www.odu.edu/vabeach
www.odu.edu/oes
www.ccpo.odu.edu/
Chartered in 1940, the Virginia Institute of Marine Science (VIMS) is a graduate school of William & Mary. As one of the largest marine research and education centers in the United States, VIMS has a three-part mission to: conduct interdisciplinary research in coastal ocean and estuarine science; educate students and citizens; and provide advisory service to policy makers, industry, and the public.

The School of Marine Science (SMS) is the graduate education component of VIMS. Recognized worldwide for expertise in coastal marine science, VIMS’ faculty of over 50 includes representatives from numerous disciplines, including: biological, chemical, and physical oceanography; fisheries science; genetics; immunology; toxicology; wetlands science; aquatic disease; and computational modeling. The current student body of 85 is approximately half women, and includes students from around the world. The School’s purpose is to provide quality interdisciplinary education and research opportunities for students pursuing advanced degrees in marine science. Students participate in comprehensive coursework and interact closely with faculty involved in active research. VIMS currently confers Masters of Arts, Masters of Science and Doctoral degrees. In collaboration with the School of Arts & Sciences at William & Mary, VIMS offers an undergraduate Marine Science Minor.

The main campus in Gloucester Point includes sophisticated laboratories for advanced studies in several disciplines of marine science. A fisheries science building includes teaching and research labs, and a sample-processing facility. Aquaculture genetics and grow-out facilities are located on the main campus, as well as at a satellite center. VIMS maintains a field station on Virginia’s Eastern Shore which supports research and education with its laboratories, hatchery and other facilities. The Institute offers workshops and web-based resources for teachers, as well as public education opportunities including lecture series, open house and special events, public tours.

For more information, visit these websites:
http://www.wm.edu/
http://www.vims.edu/
Blue Crab Bowl: Winners 1998-2022, continued

2010 — 13th Annual
Bishop Sullivan Catholic High School, Virginia Beach

2011 — 14th Annual
Bishop Sullivan Catholic High School, Virginia Beach

2012 — 15th Annual
Bishop Sullivan Catholic High School, Virginia Beach

2013 — 16th Annual
Bishop Sullivan Catholic High School, Virginia Beach

2014 — 17th Annual
Bishop Sullivan Catholic High School, Virginia Beach

2015 — 18th Annual
Bishop Sullivan Catholic High School, Virginia Beach

2016 — 19th Annual
Bishop Sullivan Catholic High School, Virginia Beach

2017 — 20th Annual
Bishop Sullivan Catholic High School, Virginia Beach

2018 — 21st Annual
Seton School – Team A, Manassas

2019 — 22nd Annual
Norfolk Collegiate, Norfolk

2020 — 23rd Annual
Catholic High School, Virginia Beach

2021 — 24th Annual
Chesapeake Bay Governor’s School - Glenns Campus

2022 — 25th Annual
Chesapeake Bay Governor’s School – Glenns Campus
2024 Sponsors

NOSB is a program of the Center for Ocean Leadership at the University Corporation for Atmospheric Research