

**Missouri Society of Radiologic Technology (MoSRT) Student Bowl Rules 2024**

**Eligibility**

1. One team, consisting of a maximum of three students, from each approved school of Radiologic Technology in Missouri (to include adjoining metropolitan areas), may enter the Student Bowl.
2. Each student and coach must be a member of the MoSRT and must register for the annual conference for the day(s) of competition.
3. Each program must send an application complete with Fifty (50) questions with answer and references as a part of the application process. Those questions shall give with the application and reference at least one of the approved texts. Please format the questions as short-answer or fill-in-the-blank. **The team coach** is responsible for the **accuracy** of these questions and answers. Each question must have the correct page number, textbook edition, and author.

**Questions obtained from review books… May not be used.**

1. Each of the following categories MUST be represented in the fifty (50) submitted questions:
   * **Patient Care** {Patient interactions and Management - **10 questions** required}
   * **Safety {**Radiation physics and Radiobiology and radiation protection - **15 questions** required}
   * **Image Production** {Image Acquisition and Technical Evaluation, Equipment Operation and Quality Assurance - **15 questions** required}
   * **Procedures** {head, spine, pelvis, thorax abdomen, extremity – **10 questions** required}

**\*\*NEW:**

* + **Student Bowl questions shall not be recorded or copied in any manner. This includes, but is not limited to writing, recording, or taking pictures of the questions.**
  + **Any program (team) or individual found copying questions will be asked to leave and their team will be disqualified.**
  + **Any program (team) or individual displaying inappropriate behavior or in possession of alcoholic beverages or the appearance of intoxication during the competition will be disqualified and will be asked to leave the competition.**
* ​ **Team members shall not wear smart watches or similar electronic devices during competition.**

1. Each team will be DESIGNATED, by the Student Bowl Chair or Co-chair the following: bring a copy of the textbook(s) referenced in the team's application on the night of the competition. Each team will be notified which book(s) to bring prior to the annual conference. Non-compliance may result in the disqualification of the team.
2. The application must list all team members (with one or two alternate team members if desired). The Student Bowl Chair will verify proof of membership. Any discrepancies or noncompliance may result in the disqualification of the team. Conference registration badges for participants must be worn the night of the competition.

**Officials**

The Student Bowl Chair & Co-chair will select the officials. The judges and timekeeper will be selected as follows:

Each school at the time of registration for the student bowl **MUST** select one program faculty member (i.e. program director, clinical instructor, etc.) to represent their school as a possible judge/timekeeper. If a program does not select a representative this may result in disqualification of the team from competition.

Up to 4 judges and 2 timekeepers will be selected, at random drawing by the MoSRT Board committee. The names of each school representatives will be announced at the conference by Student Bowl Chair & Co-Chair at the 1st, Business meeting on Thursday.

Student bowl teams will be selected by random drawing for Room Assignments prior to the conference by the MoSRT Board committee. The school teams will be announced at the conference by Student Bowl Chairman & Co-Chair at the 1st Business meeting on Thursday.

For any discrepancies between the judges for an answer given by a school team during the competition, the timekeeper will be used as the "tie-breaker".

Judges - Up to 2 judges per room will be selected. The judges, using references, as needed, will decide if answers from teams are always correct or incorrect. **The judges' decisions are final.**

Reference keeper(s) - Up to 1 reference keeper per room will be chosen. The reference keeper(s) is responsible for finding the correct reference books and keeping them in the room during the competition. He/she will confer with any team that misses a question and wishes clarification of why the response was incorrect. This clarification will take place after the round is over. There is **NO arguing.** The reference keeper(s) may also function as **a judge if needed.**

Moderator(s) - Up to 1 moderator per room will be chosen. The moderator(s) will read the rules before the competition begins, and they will ask questions and review answers. The moderator(s) should ask for help from the judges in deciding the correctness of an answer. All questions and answers will be shown on the projector screen.

Timekeeper(s) - Up to 1 timekeeper per room will be chosen. The timekeeper(s) will time the 15-second answering period for each question. The timekeeper(s) will also time the competition rounds. If needed, the timekeeper(s) will act as a "tie-breaker" for any judging discrepancies.

Scorekeeper (s) - the scorekeeper(s) will record the number of correct answers. Two scorekeepers will be assigned to each room for a total of 4 scorekeepers.

**Questions**

The MoSRT Student Bowl Committee will review all questions. Questions will be of short answer or fill-in-the-blank type.

The question, answer and reference notation will be on a numbered sheet in the judges, timekeepers books. The judges will have a numerical listing of the questions with answers.

The Student Bowl Committee will be responsible for the safekeeping of the questions before, during, and after the competition. They will be passed on to the next chair when appointed.

All questions will be **asked only once** during the competition. During competition the questions will be displayed via projector for the audience and teams.

**Abbreviations (standard ones)** may be used in the answer. **Units** must be included in the answer if applicable, i.e. mm, Sv, Gy, Kg, cm, ml, J, rem, etc...

**Spelling counts**.

**Use SI unit of measurement.**

**Competition**

Prior to the competition, the student bowl committee will select the submitted questions that will be displayed/projected randomly during the competition."

from the following categories: patient care, safety, image production, and procedures.

**Round one** will consist of a **45 -minute time limit.**

For the first round, teams will be divided among two rooms. The MoSRT Board will randomly select the teams to compete in each room. Room assignments will be announced at the first business session of the day on Thursday morning by the Student Bowl Chair & Co-chair. Team assignments will also be posted prior to the competition.

All teams will compete simultaneously during round one and each room will function similarly to the other.

The moderator will ask a question of the teams.

The teams will be given **15 seconds** to confer and to write the answer on the slate provided. Each team captain will then show the answer to the moderator and state the answer verbally.

Each team will receive one point for each correct answer. If an answer is incorrect, no point will be awarded.

The teams **MUST** turn up their slates when the moderator calls time. **The answer on the slate must contain complete information.** It will be up to the judges to determine whether the information is complete.

The two teams from Room 1 and Room 2 with the most points at the completion of round one will compete in the finals (round two). Only four teams will advance to Round 2. If there is a tie in Room 1 or Room 2, that room will play sudden "Roentgen Death" to determine which two teams will advance to round two."

\*\* In sudden "Roentgen Death", questions will continue to be asked. The team(s) that falter(s) first will be eliminated.

**Round two** (the four remaining teams competing in the finals) will be conducted in the same manner as round one.

Round two will consist of a **30-minute time limit.**

In case of a tie, sudden "Roentgen Death" will be played.

All program directors or their designated representatives of the schools and their teams will meet with Student Bowl Chair at a designated time prior to the start of the competition.

If the competition only has eight teams or fewer competing, there will be no division of teams. One room will be used for Round one.

**SAMPLES OF QUESTION FORMAT OF QUESTION SUBMISSION:**

**SAMPLE**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Q** | **School Name** | **Choose the category from the drop down menu** | **Type your question** | **Type your answer** | **Choose the reference book from the drop down menu** | **Edition and Page** |
| 1 | X-ray- U | Procedures | The midsagittal plane divides the body in what? | Equal right and left halves | Merrill's | 12th Ed., Pg. 35 |
| 2 | X-ray- U | Patient Care | What is the term for the inability to breathe while laying down? | Orthopnea | Patient care in Radiography | 7th Ed, Page 99 |

**2024 Allowed References**

(All sources must be from the most **recent editions**)

**Image Production (Equipment Operation and Maintenance, Image Production and Evaluation)**

* + - Radiologic Science for Technologists, Bushong 11th or 12th Editions
    - Principles of Radiographic Imaging: An Art and a Science, Carlton & Adler 6th Ed.
    - The Fundamentals of Imaging Physics & Radiobiology, Selman 8th or 9th Edition
    - Digital Radiography and PACS, Carter & Veale 2nd or 3rd Ed

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* + - Radiographic Imaging & Exposure, Fauber 4th or 5th Ed
    - Radiographic Exposure: Principles and Practice, Wallace and Davis 2nd Ed.
    - Radiography in the Digital Age, Quinn B. Carroll, 2nd or 3rd

**Procedures (Radiographic Procedures)**

* Textbook of Radiographic Positioning and Related Anatomy, Bontrager 9th or

10th Ed.

* Merrill's Atlas of Radiographic Positioning & Procedures, Ballinger 13th Ed. or 14th Ed.
* Comprehensive Radiographic Pathology, Eisenberg 5th or 6th Ed.
* Radiographic Pathology for Technologists, Kowalczyk & Mace 6th or 7th Ed.



* Radiographic Pathology, Linn-Watson, 2nd Ed.
* Structure and Function of the Body, Thibodeau & Patton 15th Ed.
* Anatomy & Physiology, Patton 9th or 10th Ed.
* Sectional Anatomy for Imaging Professionals, Kelley 3rd or 4th Ed.
* Computed Tomography for Technologists, Romans
* Radiographic Pathology for Technologists, Kowalczyk 7th Ed.

**Patient Care (Patient Care and Management)**

* Patient Care in Imaging Technology, Torres, Dutton et al 9th
* Patient Care in Radiography with an Introduction to Medical Imaging, Ehrlich & Daly 8th or 9th Ed.
* Introduction to Radiologic Sciences, Adler & Carlton 6th or 7th Ed.
* Patient Care in Radiography with an Introduction to Medical Imaging, Ehrlich & Coakes 9th or 10h Ed.
* Pharmacology & Drug Administration for Imaging Technology, Jensen 2nd Ed.
* The Language of Medicine, Chabner, 12th Ed.
* Ethic & Legal Issues in Imaging 2nd Ed.

**Safety (Radiation Protection)**

* Radiation Protection in Medical Radiography, Stankiewicz, Visconti, Ritenour, Sherer 8th or 9th Ed.
* Practical Radiation Protection and Applied Radiobiology, Dowd & Tilson 2nd Ed.
* Essentials of Radiation Biology & Protection, Forshier 2nd Ed
* Essentials of Radiographic Physics and Imaging, Johnston & Fauber 3rd Ed.
* Quality Management in Imaging Sciences 6th Ed.