Activities for Reinforcement

**Instructors:** Activities can be distributed weekly for each chapter or presented as a full list for students to work on for extra credit during the semester. Links in questions below were confirmed valid (June, 2018), but should be checked for necessary updates before distributing to students.

# 1 Athletic Training as a Profession

1. Invite an AT to come to class and discuss the setting in which she works.
2. Invite several ATs who each work in a different setting to come to class and give a panel discussion.
3. Discuss which job opportunities in athletic training most interest you and why.
4. Go to [www.nata.org/sites/default/files/code\_of\_ethics.pdf](http://www.nata.org/sites/default/files/code_of_ethics.pdf) and read the NATA code of ethics. How does it guide the practice of an AT? In what ways does the code limit practice?

# 2 Administration and Professional Development

1. What are your strengths, and how could you maximize them?
2. Reflect on something you observed in the athletic training room this week. What do you think could have been done differently to improve the results?
3. Visit the Board of Certification website (<http://www.bocatc.org>) and review the materials that are available to the athletic trainer by clicking on the dropdown menu. Review the sections on maintaining certification and AT resources. Create a two-minute video that could be used to promote AT awareness.
4. Create a poster that identifies the most important personal characteristics a student assistant should possess.

# 3 Design and Development of the Athletic Training Facility

1. Visit a local athletic training room and evaluate the design based on the information provided in the chapter. Identify areas of strengths and discuss areas for improvements.
2. Review the policy and procedures manual at your facility or at a local facility and consider the information regarding the maintenance of the modalities. Is it consistent with what we learned? What is different? Why do you think it may differ from the basic information provided here?
3. Review the law for your state regarding the practice of athletic training. Find the section (if there is one) on student aid duties. Can you provide therapeutic modality treatment? Why is it important that you understand the limits of your state practice act even if you are not currently a licensed care provider?
4. Interview an athletic training professional in the area and discuss with him his thoughts on the design and layout of his facility. What does he like? What would he change if he could?
5. Visit the OSHA (<http://www.osha.gov>) website and read about disposing of biohazard waste products. Compare the recommendations to the policies at your facility. If you have no facility, discuss potential policy issues for high school athletic training programs.
6. Review the facility rules for your institution and identify two new rules you would add to make it a safer or cleaner place for health care services.

# 4 Documentation and Record Keeping

1. Contact a sales representative for one of the injury tracking systems and discuss the capabilities of the system.
2. Visit at least one other athletic training facility and speak to the athletic trainer about the record-keeping protocol for her patients.
3. Create a variety of injury report forms, treatment logs, and medical information forms.
4. Go online and take practice quizlets for using medical terminology.
5. Review the HIPAA and FERPA policies for your school and, if possible, for a physician’s office. How are they similar? How do they differ?

# 5 Fiscal Management

1. Make a list of equipment that would enrich your athletic training room and go online and find pricing for this item. Discuss what would be the best option for purchase.
2. Compare and contrast pricing on two types of 1.5 inch (3.8 cm) tape online and discuss which would be the best idea for purchase.
3. Review the following article and discuss your thoughts from a cost-benefit ratio. Olmsted, L. C., Vela, L. I., Denegar, C. R., & Hertel, J. (2004). Prophylactic ankle taping and bracing: A numbers-needed-to-treat and cost-benefit analysis. *Journal of Athletic Training* 39(1), 95-100.

# 6 The Preparticipation Physical Exam

1. Volunteer to help with preparticipation examinations.
2. Take blood pressure, temperature, pulse, and breathing rate on at least ten people and record your findings.
3. Investigate the normal blood pressures for an infant, a child, and an adult.
4. Determine in which sports it’s important to properly match athletes by their size. Why?

# 7 Introduction to Anatomy

1. Working with a partner, move each joint through its various positions and give the proper term for each movement.
2. Point to a body part and have your partner name it. Include muscle groups and bones.
3. Working with a partner, point to a body part and have the other person describe its location using medical terminology. For example, when you point to the forearm, your partner might state that the location is proximal to the wrist and distal to the elbow.
4. Using an anatomical chart, identify the major bones of the body.

# 8 Basics of Tissue Injuries

1. Gather pictures of various wounds.
2. Have a physician demonstrate closing wounds with stitches and butterflies.
3. Make a flow chart showing how tissue repair and healing occur.
4. Make a diagram showing how bone repair and healing occur.
5. Have a physician demonstrate the application of casting material.
6. Find a video that demonstrates a bone fracture, a sprain, and a strain. Describe the mechanism of injury and your initial actions for assisting with the immediate care in each situation.

# 9 Head Injuries

1. Have an AT demonstrate how to evaluate an athlete with a head injury.
2. Identify the sports offered by your school and list the types of head injuries that are common among athletes in each sport.
3. Have a coach bring a safety film on head injury prevention and show it to the class.
4. Make a list of reasons that athletes get head injuries.
5. Visit a head trauma or closed-brain injury center.

# 10 Facial Injuries

1. Have an AT demonstrate how to perform a facial injury evaluation.
2. Ask the school nurse to demonstrate a hearing test.
3. Ask the school nurse to give a vision test.
4. Invite a local dentist or dental hygienist to demonstrate proper brushing and flossing techniques.
5. Describe common eye injuries and how to care for them.
6. Invite an ophthalmologist to speak with the class.
7. Investigate various mouth guards and determine which would be best for various sports.
8. Investigate various types of eye protection and determine which would be best for various sports.
9. Determine the qualifications for a team dentist.

# 11 Throat and Thorax Injuries

1. Have an AT show the protective equipment that is available for various sports to prevent injuries of the throat and thorax.
2. Have an AT demonstrate how to evaluate throat and thorax injuries.
3. Use a stethoscope to listen to the heart and lungs.
4. Invite the local EMS to demonstrate CPR and electrical monitoring of the heart.

# 12 Abdominal Injuries

1. Have an AT demonstrate how to evaluate an athlete with a suspected abdominal injury.
2. Use a stethoscope to listen to the four abdominal quadrants.
3. If you could redesign the abdominal cavity, how could you provide more protection for solid organs?

# 13 Spinal Injuries

1. Check each other’s posture—who has lordosis, kyphosis, or forward head?
2. Have an AT demonstrate how to evaluate the lumbar and cervical spine.
3. Watch the NATA’s heads-up video that is designed to teach athletes how to prevent head-down contact:

[www.youtube.com/watch?v=05MQjZH\_n08](https://www.youtube.com/watch?v=05MQjZH_n08)

1. Create an educational handout for athletes in sports where head contact is likely; advise them on how to prevent potential spine injuries. Post these in the athletic training room or locker rooms.

# 14 Shoulder Injuries

1. Have an AT demonstrate how to assess a shoulder injury.
2. Interview several athletes who have had shoulder dislocations. Determine what position the arms were in when the injury occurred.
3. With a partner, name and point to each of the bones in the shoulder girdle.
4. With a partner, locate each joint in the shoulder girdle.
5. Examine the following website and view the various exercises that strengthen the rotator cuff:

<https://familydoctor.org/rotator-cuff-exercises/>

1. Visit the website of the American Academy of Orthopaedic Surgeons and examine the many exercises for the shoulder girdle:

<http://orthoinfo.aaos.org/topic.cfm?topic=A00067>

# 15 Elbow Injuries

1. Have an AT demonstrate an elbow evaluation.
2. Visit the website of the American Sports Medicine Institute (ASMI), read the position statement for adolescent baseball pitchers, and learn more about medial, lateral, and posterior elbow injuries in adolescents: [www.asmi.org/research.php?page=research&section=positionStatement](http://www.asmi.org/research.php?page=research&section=positionStatement)
3. Visit the WebMD website at [www.webmd.com/fitness-exercise/strengthening-exercises-for-tennis-elbow](http://www.webmd.com/fitness-exercise/strengthening-exercises-for-tennis-elbow) to review strengthening exercises for tennis elbow injuries. Discuss these exercises with your athletic trainer.

# 16 Wrist and Hand Injuries

1. Find an anatomy text and review the location of the various carpal bones. Create a mnemonic device to remember the carpal bones in their various rows.
2. Have an AT demonstrate how to perform a wrist and hand evaluation.
3. Visit the following website to explore pictures and detailed anatomy of the hand and wrist:

[www.sports-health.com/sports-injuries/hand-and-wrist-injuries/guide-wrist-anatomy](http://www.sports-health.com/sports-injuries/hand-and-wrist-injuries/guide-wrist-anatomy)

1. Watch several different sporting practices. Select three different sports and then reflect on the common injuries and mechanism of injuries for the wrist and hand for each.

# 17 Hip, Pelvis, and Thigh Injuries

1. Have an AT review injury assessment techniques for the hip, thigh, and pelvis.
2. Have an AT demonstrate common exercises used in hip rehabilitation.
3. Review one of the following websites containing information about hip injuries:

[www.innerbody.com/image/skel15.html](http://www.innerbody.com/image/skel15.html)

<https://uihc.org/health-library/hip-dysplasia>

# 18 Knee Injuries

1. Invite an AT to class to demonstrate how she evaluates a knee injury.
2. Invite an orthopedic surgeon to class to discuss, and perhaps show videos of, common knee surgeries:

[www.youtube.com/watch?v=nAj2\_pgTkEA](https://www.youtube.com/watch?v=nAj2_pgTkEA)

[www.youtube.com/watch?v=Xsq0sQp6DwU](https://www.youtube.com/watch?v=Xsq0sQp6DwU)

1. Visit the following site to review the anatomy of the knee:

[www.youtube.com/watch?v=\_q-Jxj5sT0g](https://www.youtube.com/watch?v=_q-Jxj5sT0g)

1. Review injury videos online and describe the potential injuries that would occur in those specific situations.

# 19 Foot, Ankle, and Lower-Leg Injuries

1. Volunteer to work in a local podiatrist’s office for an afternoon. What types of athletic injuries does the podiatrist regularly treat?
2. Spray the bottom of your foot with water and make an imprint on a paper towel. What type of plantar arch do you have? Is it the same as any of your classmates’ plantar arches?
3. Visit one of the following websites and review the anatomy of the foot, ankle, and lower leg:
   1. [www.youtube.com/watch?v=4hCS1O2LP\_c](https://www.youtube.com/watch?v=4hCS1O2LP_c)
   2. [www.youtube.com/watch?v=IsUugU4IVio](https://www.youtube.com/watch?v=IsUugU4IVio)
4. Go to the local mall or observe people as they enter a sporting event for your school. Evaluate their foot patterns by watching them walk. Do they pronate or supinate? Is anyone a “toe walker”? Are shoes significantly worn? Think about what might be causing various gait patterns.

# 20 Patient Assessment and Treatment Methods

1. Your instructor will create injury scenarios for you and a partner. Take turns pretending to have an injury covered in one of the previous chapters while your partner fills out a SOAP note and develops a therapeutic exercise program to get you back to participating in a sport.
2. With a partner, review each modality discussed in this chapter and think of the types of injuries for which the modality could be used by an AT.
3. Invite an AT to class to discuss the rehabilitation process.
4. Take a class field trip to a rehabilitation center.
5. Work with an AT to create a functional throwing progression for a pitcher.
6. Work with an AT to create a functional progression for a running back.
7. Visit [www.sportsinjuryclinic.net](http://www.sportsinjuryclinic.net) and select a link to learn more about treating specific injuries and using various therapeutic modalities.

# 21 Reconditioning Programs

1. Find alternative exercises that can be done for the upper quarter, lower quarter, and axial region.
2. Work with an AT or a strength and conditioning coach to design a strength and conditioning program for a soccer player.
3. Work with an AT or strength and conditioning coach to design a conditioning program for a football lineman.
4. Invite a strength and conditioning specialist to class to speak about training programs.
5. Search the Internet for reconditioning programs for two different sports (football and basketball). Compare the videos for similarities and differences in reconditioning. Consider why this is important.

# 22 Psychosocial Aspects of Athletic Training

1. Discuss with your head AT the various community agencies that an athlete could be referred to if she needed counseling.
2. Visit a suicide prevention hotline center.
3. Invite a sport psychologist to speak with the class.
4. Visit Active Insight, the online journal of sport psychology, at

[www.athleticinsight.com](http://www.athleticinsight.com) and find resources related to sport psychology.

1. Visit the website for the Association for Applied Sport Psychology at [www.aaasponline.org](http://www.aaasponline.org) and then discuss the association with your classmates.
2. Check out sport injury brochures, newsletters, and web searches to find psychological tips for helping an athlete return to full activity following an injury.

# 23 Planning for Emergencies

1. Create a one-page crisis plan for your main gym.
2. Create a map of all athletic facilities, marking the location of important safety items including AED, first aid kits, hand-pull fire stations, fire extinguishers, and severe weather shelters.
3. Make a list of the people on the athletic training team. Determine who will do each of the following: Give first aid, call the ambulance, get first aid supplies, manage the crowd, direct the ambulance, and call the parent or guardian.
4. Create a checklist of items that should be in the first aid kit. Include in the list the quantity of each item and the date the kit was last checked.

# 24 Primary and Secondary Procedures

1. Take a class in first aid and CPR and become certified.
2. Invite the local EMS to demonstrate CPR and electrical monitoring of the heart.
3. Find a website related to sport injuries and review the common steps of care for an injury.
4. Examine the following website and identify the types of splints that can be used by medical professionals: [www.medicalsplints.com](http://www.medicalsplints.com/)
5. List the vital signs and explain what each one can tell you about an injured athlete.
6. Make a list of items you could use to splint a fracture if regular splints were not available.
7. Practice measuring someone else’s blood pressure.
8. Make a list of various joints and their anterior–posterior range-of-motion.
9. Compare the range-of-motion of your classmates’ knee or elbow joints. Why do you think some people have more or less range-of-motion?
10. Invite local EMS personnel to show how an AED works.

# 25 Environmental Situations and Injuries

1. Design a policy for preventing heat-related injuries.
2. Design a policy for preventing cold-related injuries.
3. Using a computer, create a flowchart indicating an appropriate chain of command for lightning safety.
4. Find two websites that provide weather information and decide which would be most appropriate for use by a weather watcher at your school.
5. Visit the Schutt website and examine the HotHead system:

[www.schuttsports.com/aspx/Sport/ProductCatalog.aspx?id=953](http://www.schuttsports.com/aspx/Sport/ProductCatalog.aspx?id=953)

1. Read about the Schutt’s system in this document:

<https://sportstechie.net/concussions-helmet-tech-schutt-sports/>

1. Visit the Mayo Clinic website and watch the video on layering clothing for workouts in cold weather:

[www.mayoclinic.org/healthy-lifestyle/fitness/in-depth/fitness/art-20045626](http://www.mayoclinic.org/healthy-lifestyle/fitness/in-depth/fitness/art-20045626)

# 26 Stabilization and Transportation of Injured Athletes

1. Make a list of the types of splints and other equipment necessary for removing an athlete from a game.
2. With the supervision of an AT, practice removing an athlete in the ways discussed in this chapter.
3. Prepare a checklist of items that are necessary for removing game equipment. Look for the equipment before two home games. Is it where it is supposed to be?
4. Invite EMS personnel to your school to provide an in-service on how to stabilize and backboard an athlete.
5. Read about spine-boarding changes promoted by the NATA:

[www.nata.org/blog/nata-admin/new-protocol-changes-address-ems-transport-spine-injured-athletes](https://www.nata.org/blog/nata-admin/new-protocol-changes-address-ems-transport-spine-injured-athletes)

# 27 Protective Taping and Wrapping

1. Take a roll of tape home and practice tearing it.
2. Under the supervision of an AT, work with a partner and prepare the skin for taping. Practice the techniques included in this chapter.
3. Practice applying elastic wraps to your partner under the supervision of an AT.
4. Have an AT demonstrate alternative taping techniques and compare them with those in this text.
5. At the end of the year, have a tournament to identify the fastest and best tape job of an ankle.
6. Visit the following websites and find alternative ways of taping and wrapping the body areas discussed in this chapter:

[www.nismat.org/clinicians/athletic-training/taping-for-the-sprained-ankle](http://www.nismat.org/clinicians/athletic-training/taping-for-the-sprained-ankle)

[www.sportsinjuryclinic.net/treatments-therapies/sports-taping](http://www.sportsinjuryclinic.net/treatments-therapies/sports-taping)

1. With a partner, practice taping continuous heel locks.

# 28 Protective Equipment Used in Athletics

1. Assist the equipment manager in fitting football helmets and shoulder pads.
2. Have your AT bring in a variety of equipment for the class to inspect and practice fitting.
3. Work with a team dentist who is making fitted mouth guards.
4. Try on a full set of pads and equipment for a sport you do not play. What does it feel like? What limitations does the equipment impose?
5. Ask the AT to make a list of common injuries and design a new pad to prevent one of the injuries.

# 29 Basic Diagnostic Imaging and Testing

1. Go online and search for images of x-rays, DEXA, CT, MRI, PET, and ultrasound. Review the pictures and see if you can detect the diagnosis or area of concern. Compare and contrast uses of each test.
2. Search online for typical blood results from a CBC. Identify the ranges and norms for HDL, LDL, and triglycerides. What is their role in overall health of the individual?
3. Investigate the educational preparation it would take to be a radiologic technician compared to a radiologist. Why are they different?

# 30 Conditions and Illnesses

1. Make a list of common signs and symptoms discussed in this chapter and indicate the conditions with which they are associated.
2. Invite someone with asthma, diabetes, or another condition to talk to the class about living with the condition.
3. Practice taking someone’s blood pressure using a manual and electronic cuff and compare the results to the norms for someone of the same age. Describe how it might change with (2) different medical conditions from the chapter.
4. Ask the team physician and the athletic trainer what illnesses are most commonly seen in competitive athletics. How do they manage these illnesses?
5. Speak with the team physician, nurse, and athletic trainer about medical conditions common to athletes. Write a one-page report on one of the most common conditions and how it is managed. Present this to your classmates.

# 31 Communicable Diseases

1. Investigate how vaccinations work.
2. Make a list of the signs and symptoms of each communicable disease discussed in the chapter.
3. Make a list of the ways to prevent each contagious disease.
4. Practice proper hand washing in public places.
5. Develop a presentation about the importance of hand washing and, with the direction of your AT, present it to various groups, such as elementary classes or Boys and Girls Clubs.
6. Volunteer your time at a walk-in clinic. What communicable diseases are commonly seen at this clinic? Investigate whether the communicable disease rate changes depending on the type and location of the clinic or the economic status of the community.
7. Design a plan for cleaning the training room daily. What types of solutions and protective attire should be worn while cleaning?
8. Visit the CDC website and learn more about the forms of hepatitis:

[www.cdc.gov/hepatitis/](http://www.cdc.gov/hepatitis/)

1. Visit the website of the Ohio High School Athletic Association (OHSAA) to learn more about its policy for preventing the spread of communicable diseases:

<http://ohsaa.org/communicablediseases>

Review this information with the policies that exist at your school.

1. Visit KidsHealth.org to learn more about bronchitis:

<http://kidshealth.org/parent/infections/bacterial_viral/bronchiolitis.html>

1. Examine the position statement for controlling herpes gladiatorum from the NFHS Sports Medicine Advisory Committee:

[www.nsaahome.org/textfile/spmeds/Herpes.pdf](http://www.nsaahome.org/textfile/spmeds/Herpes.pdf)

1. Visit the website of the National Center for Complementary and Integrative Health and learn more about various skin conditions and alternative treatments:

<https://nccih.nih.gov/health/skin-condition>

# 32 Common Drugs Used in Athletics

1. List the types of helpful drugs and their common uses in athletics.
2. Visit a substance-abuse center and determine which drugs substance abusers were most likely to use when first starting to experiment with drugs.
3. Make a list of positive reasons why athletes choose not to use drugs.
4. Go online to review the NCAA list of banned substances:

<http://grfx.cstv.com/photos/schools/domi/genrel/auto_pdf/ncaa-banned-substance-list.pdf>

1. Visit the NCAA website and explore its drug-testing protocol:

[www.ncaapublications.com/productdownloads/DT11.pdf](http://www.ncaapublications.com/productdownloads/DT11.pdf)

1. Talk to your school administrator to determine if drug testing is performed at your institution.

# 33 Nutrition and Weight Control

1. Design a pregame meal for fictitious swim and ice hockey teams.
2. Keep track of what you eat for one week and determine if you have a specific food group from which you eat too much or too little. Make recommendations for improving your eating habits after talking with the AT and school dietitian.
3. Examine the American Heart Association website for more information about low-carbohydrate, high-protein diets:

[www.heart.org/en/healthy-living/healthy-eating](http://www.heart.org/en/healthy-living/healthy-eating)

1. Visit the following website hosted by the Mayo Clinic and summarize the information provided about herbal supplements:

[www.mayoclinic.com/health/herbal-supplements/SA00044](http://www.mayoclinic.com/health/herbal-supplements/SA00044)

1. Visit the website of the American Heart Association and learn more about trans fat:

[www.heart.org/en/healthy-living/healthy-eating](http://www.heart.org/en/healthy-living/healthy-eating)

1. Visit the USDA website for information related to food and nutrition (click on Food and Nutrition):

[www.usda.gov](http://www.usda.gov)

1. Check out the tips for vegetarian diets: [www.choosemyplate.gov/ten-tips-healthy-eating-for-vegetarians](http://www.choosemyplate.gov/ten-tips-healthy-eating-for-vegetarians)

# 34 Athletes With Disabilities and Disorders

1. Volunteer your time at physical examinations given at a school where students have disabilities.
2. Work at the local Paralympic or Special Olympics events.
3. Spend one week working with a student with visual or auditory disabilities.
4. Work at or attend a wheelchair basketball game or a marathon race that includes wheelchair racers.
5. Invite a prosthesis maker to your class and have him explain how to design an athletic prosthesis.
6. Watch the Paralympic Games and identify a prosthetic device used to accommodate an athlete.
7. Visit the website of the National Center for Early Defibrillation and learn more about sudden cardiac arrest:

[www.early-defib.org/03\_01\_01.html](http://www.early-defib.org/03_01_01.html)