

HCS 3101 Medical Terminology
Prerequisite – Acceptance into RTT Program
Fall 2011

Textbooks

Quick and Easy Medical Terminology, Peggy Leonard 6th Edition
ISBN: 9781437708721, book and on-line course

Course Description

Medical terminology course covering simplified medical language, roots, prefixes and suffixes. Terminology for major body systems is also covered.

Course Objectives

1. Identify roots, suffixes and prefixes in medical terms.
2. Demonstrate correct usage of medical terminology.
3. Identify meaning of words using medical terminology knowledge.

Course Schedule (tentative and subject to change)

| | |
|--------------|---|
| August 23 | Orientation, Module 1 Simple Medical Language |
| August 30 | Module 2 Suffixes and Combining Forms Made Easy |
| | Module 3 Essential Prefixes and More Combining |
| September 7 | Module 4 Diagnostic Procedures and Therapeutic Intervention |
| September 13 | Module 5 The Body as a Whole |
| September 20 | Module 6 Musculoskeletal System |
| September 27 | Module 7 Circulatory System |
| October 4 | Module 8 Respiratory System |
| October 11 | Module 9 Digestive System |
| October 18 | Module 10 Urinary System |
| October 25 | Module 11 Reproductive System |
| November 1 | Module 12 Integumentary System |
| November 8 | Module 13 Nervous System and Psychological Disorders |
| November 15 | Module 14 Endocrine System |
| November 22 | Module 15 Course Review |

Course Policies

Attendance

Attendance is mandatory for all classes and laboratories.

Class Participation

Students are expected to participate in class discussions and laboratory assignments.

Exams

Students may not ask questions during examinations.

(excerpt from Student Guideline Manual)

“Students are expected to take all examinations on the scheduled date. The rescheduling of an examination may be allowed if circumstances warrant permission by the course instructor (e.g. documented illness, previously identified religious holiday, or death in the family), otherwise there will be no exceptions to this policy. If a student fails to take a scheduled examination without obtaining permission from the instructor of the course, the student will receive a “zero” on that scheduled examination. Examinations are generally “timed,” therefore, all examinations will begin on the scheduled date and at the scheduled time. An examinee who has been delayed may be admitted to the examination up to 15 minutes after the session has started. The examinee will be given no extra time to complete the examination. Examinees arriving after the 15 minute “grace period” will automatically receive a “zero” on the examinations. Under extenuating circumstances and with timely notification from the student, exceptions to this policy may be considered by the course instructor.”

Laboratory and Radiation Safety

Students are expected to follow the principle of ALARA at all times. Students are also expected to properly work equipment in the radiation oncology clinic under the supervision of a radiation therapist, medical physicist and/or medical dosimetrist. All equipment the student will use is actual treatment equipment and any problems with the equipment should be immediately reported to the proper individual.

Academic Dishonesty (excerpt from Student Guideline Manual)

“Any student who commits an act of scholastic dishonesty is subject to discipline. Scholastic dishonesty includes but is not limited to cheating, plagiarism, collusion, the submission for credit of any work or materials that are attributed in whole or in part to another person, taking an examination for another person, an act designed to give unfair advantage to a student or the attempt to commit such acts.”

Scholastic dishonesty will be handled in accordance with the procedures for handling student discipline found in Part I, Chapter VI, Section 3 of the Regents’ Rules and Regulations, and the SAHSS Scholastic Dishonesty Recommendations: A Guide for Faculty (January 2000).

Grading

| | | |
|-------|----------|---|
| Scale | 90 - 100 | A |
| | 80 - 89 | B |
| | 70 - 79 | C |
| | 65 - 69 | D |
| | Below 65 | F |

| | |
|----------|-----|
| Homework | 40% |
| Quizzes | 60% |

Late assignments will NOT be accepted. Late assignments can be scored but the student will receive a grade of zero.

RT 3302 Introduction to Radiation Therapy
Prerequisite – Acceptance into RTT Program
Fall 2011

Textbooks

Principles and Practices of Radiation Therapy
Charles Washington and Richard Leaver, 2nd edition
ISBN 10: 0-323-01748-7

Portal Design in Radiation Therapy
Anne Marie Vann, 2nd edition
ISBN13: 978-9-7809-6427-6

Supplemental Readings Additional Resources

Various Handouts, Internet sites – ASRT, ARRT

Introduction to Radiography and Patient Care
Arlene Adler and Richard Carlton, 4th edition
ISBN 13: 978-1-4160-3194-9

Course Description

This course provides an overview of the field of radiologic science with an emphasis on radiation therapy. An introduction to the medical, biological and technical aspects of radiation oncology will be presented as well as the history of radiation oncology. Students will learn the basic operation of a linear accelerator, how to use the hand pendant and table controls. Students will also familiarize themselves with the organization of a typical linac room. University and program guidelines will be discussed.

Course Objectives

1. Discuss the policies and procedures of the educational program.
2. Identify the role of other health science professionals who participate in patient care both in the hospital and radiation oncology setting.
3. Explain the purpose, functions and activities of international, national, state and local professional organizations.
4. Understand the patient's medical record.
5. Differentiate between the various divisions in a radiation oncology chart.
6. Demonstrate radiation oncology charting.
7. Define radiation oncology terminology.
8. Explain basic simulation procedures.
9. Explain the radiation oncology treatment approach including steps in treatment from consultation to follow up.
10. Define cancer management principles.
11. Demonstrate the use of the linac hand pendant, table controls and accessory mount.

12. Discuss career advancement opportunities in radiation therapy.
13. Explain the differences between accreditation, credentialing, certification, registration, licensure and regulations.

Course Schedule (tentative and subject to change)

| | |
|-----------------|--|
| August 23 | Orientation |
| August 25 | Policies and Procedures |
| August 30 | Intro to Radiologic Sciences, Professional Orgs, People |
| September 1 | History of Cancer and Radiation Therapy, Historical Equipment |
| September 6 | Holiday |
| September 8 | Linac Anatomy |
| September 13 | Equipment Lab |
| September 15 | Cancer Management and Oncologic Terminology |
| September 20 | Cancer Management and Oncologic Terminology |
| September 22 | Epid/Etiol, Review |
| September 27 | <i>No Class Additional Class September 30</i> |
| September 29 | Test |
| September 30 | Surgical and Medical Oncology |
| October 4 | Medical Oncology Con't |
| October 6 | Principles of Radiation Oncology |
| October 11 | Equipment Lab |
| October 13 | Immunotherapy, Hyperthermia, Alternative Tx's |
| October 18 | Test |
| October 20 | Simulation Procedures |
| October 25 | Treatment Procedures |
| October 27 | Treatment Procedures con't, Intro to Sim. – Contours, Immob. Devices, Basic Simulation |
| November 1, 3 | No Class |
| November 4 | Intro to Simulation, Con't |
| November 8 | Basic Simulation |
| November 10 | R&V, Charting |
| November 15 | Equipment Lab |
| November 17 | R&V, Charting |
| November 22 | QA |
| November 24 | QA |
| November 29 | Clinical Policy Review |
| December 1 | Equipment Lab |
| December 6 – 10 | Finals |

10/19/10 CHANGES IN ORANGE

Course Policies

Attendance

Attendance is mandatory for all classes and laboratories.

Class Participation

Students are expected to participate in class discussions and laboratory assignments.

Exams

Students may not ask questions during examinations.

(excerpt from Student Guideline Manual)

“Students are expected to take all examinations on the scheduled date. The rescheduling of an examination may be allowed if circumstances warrant permission by the course instructor (e.g. documented illness, previously identified religious holiday, or death in the family), otherwise there will be no exceptions to this policy. If a student fails to take a scheduled examination without obtaining permission from the instructor of the course, the student will receive a “zero” on that scheduled examination. Examinations are generally “timed,” therefore, all examinations will begin on the scheduled date and at the scheduled time. An examinee who has been delayed may be admitted to the examination up to 15 minutes after the session has started. The examinee will be given no extra time to complete the examination. Examinees arriving after the 15 minute “grace period” will automatically receive a “zero” on the examinations. Under extenuating circumstances and with timely notification from the student, exceptions to this policy may be considered by the course instructor.”

Laboratory and Radiation Safety

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Academic Dishonesty (excerpt from Student Guideline Manual)

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Grading

| | | | | |
|-------|-------|---|-----|---|
| Scale | 90 | - | 100 | A |
| | 80 | - | 89 | B |
| | 70 | - | 79 | C |
| | 65 | - | 69 | D |
| | Below | | 65 | F |

| | |
|----------|-----|
| Homework | 15% |
| Labs | 15% |
| Quizzes | 10% |
| Exams | 60% |

Late assignments will NOT be accepted. Late assignments can be scored but the student will receive a grade of zero.

RT 3421 Principles and Practices of Radiation Therapy I
Prerequisite – RT 3211 Pathology
Summer 2011

Textbooks

Principles and Practices of Radiation Therapy
Charles Washington and Richard Leaver, 2nd edition
ISBN 10: 0-323-01748-7

Portal Design in Radiation Therapy
Anne Marie Vann, 2nd edition
ISBN13: 978-9-7809-6427-6

Recommended Textbook

Technological Basis of Radiation Therapy, Clinical Applications
Seymour Levitt, Faiz Khan, Roger Postish, Carlos Perez, 3rd Edition
ISBN: 0-683-30123-3

Supplemental Readings

Various Handouts, Internet sites

Course Description

This course is designed to examine and evaluate the management of neoplastic disease using knowledge in the medical arts while promoting critical thinking and the basis of ethical decision making. The epidemiology, etiology, detection, diagnosis, patient condition, treatment and prognosis of neoplastic disease will be presented, discussed and evaluated in relationship to histology, anatomical site and patterns of spread. The radiation therapist's responsibility in the management of neoplastic disease will be examined and linked to the skills required to analyze complex issues and make informed decisions while appreciating the character of the profession. The areas covered in this two semester course: CNS, Ocular, H&N, Lung, Alimentary Tract, Major Digestive Glands, Urinary System, Reproductive System, Breast, Hematopoietic System, Lymphoreticular System, Bone, Soft Tissue, Skin and Endocrine. The following topics will also be presented, treatment options, simulation, treatment principles and practices, assessment, management, and pediatric issues.

Course Objectives

1. Discuss each of the factors taken into consideration prior to recommending that a patient be treated with radiation therapy.
2. Explain the relationship between various anatomic tumor sites and treatment modality selection.
3. Compare the treatment prescription with the treatment plan.
4. Compare portal images to simulation images.
5. Describe the role of the radiation therapist in treatment delivery.
6. Discuss epidemiologic and etiologic information pertinent to each neoplastic site.
7. Identify dose limiting structures and their tolerances.
8. Apply the parameters of treatment field design and arrangement used to treat neoplastic disease.
9. Examine the role of radiation therapy in palliative disease management.
10. Discuss the clinical presentation of each anatomic neoplastic site.
11. Implement the principle and practice of simulation to prepare a patient for treatment.

Course Schedule (tentative and subject to change)

| | |
|---------------|--|
| May 24 | Skin |
| May 26 | Skin |
| May 31 | Lung |
| June 2 | Lung |
| June 7 | No Class |
| June 9 | No Class |
| June 14 | Lung |
| June 16 | Para-neoplastic Syndromes, Oncologic Emergencies, Review |
| June 21 | Test |
| June 23 | CNS |
| June 28 | CNS |
| June 30 | CNS and Breast |
| July 5 | Breast |
| July 7 | Breast and Prostate |
| July 12 | Prostate |
| July 14 | Test |
| July 19 | Male Reproductive and GU |
| July 21 | Male Reproductive and GU |
| July 26 | Male Reproductive and GU |
| July 28 | Lymphoreticular |
| August 2 | Lymphoreticular |
| August 4 | Eye, Review |
| August 8 – 12 | Final Exams |

Please read all pertinent chapters in your textbooks (Washington, Pathology, Portal Design, Patient Care) BEFORE class!

Course Policies

Attendance

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Class Participation

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Exams

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| Quizzes | 15% |
| Presentations | 10% |
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