DMS 202: Sonographic Interpretation and Techniques II

Syllabus

Lecture Hours/Credits: 2/2

Catalog Description

Prerequisite: DMS 201 – Sonographic Interpretation and Techniques I

The major portion of this course is devoted to presentations by students of ultrasound applications that they have used in the clinical setting. Students must demonstrate scans that they performed, explaining the findings that were identified. The critique of scans will be used to strengthen student scanning skills and analysis.

Textbook and Course Materials

It is the responsibility of the student to confirm with the bookstore and/or their instructor the textbook, handbook, and any other materials required for their specific course and section.

Click here to see current textbook prices at rcgc.bncollege.com.

Evaluation Assessment

Grading Distribution

Grading to be determined by individual instructors.

Individual instructors may include the following assessment(s):

- Exams
- Quizzes
- Terms Identification
- Essays
- Presentations
- Group Discussions
- Attendance and Participation

Grading

The grading scale for each course and section will be determined by the instructor and distributed the first day of class.
Rowan College at Gloucester County Core Competencies

(Based on the NJCCC General Education Foundation - August 15, 2007; Revised 2011; Adopted 2014)

This comprehensive list reflects the core competencies that are essential for all RCGC graduates; however, each program varies regarding competencies required for a specific degree. Critical thinking is embedded in all courses, while teamwork and personal skills are embedded in many courses.

1. Written and Oral Communication: Students will communicate effectively in both speech and writing.
2. Quantitative Knowledge and Skills: Students will use appropriate mathematical and statistical concepts and operations to interpret data and to solve problems.
3. Scientific Knowledge and Reasoning: Students will use the scientific method of inquiry, through the acquisition of scientific knowledge.
4. Technological Competency: Students will use computer systems or other appropriate forms of technology to achieve educational and personal goals.
5. Society and Human Behavior: Students will use social science theories and concepts to analyze human behavior and social and political institutions and to act as responsible citizens.
6. Humanistic Perspective: Students will analyze works in the fields of art, history, music, or theater; literature; philosophy and/or religious studies; and/or will gain competence in the use of a foreign language.
7. Historical Perspective: Students will understand historical events and movements in World, Western, non-Western or American societies and assess their subsequent significance.
8. Global and Cultural Awareness: Students will understand the importance of a global perspective and culturally diverse peoples.
9. Ethical Reasoning and Action: Students will understand ethical issues and situations.
10. Information Literacy: Students will address an information need by locating, evaluating, and effectively using information.

DMS 202 Core Competencies

This course focuses on two of RCGC’s Core Competencies:

- Written and Oral Communication
- Scientific Knowledge and Reasoning
### Student Learning Outcomes: Sonographic Interpretation and Techniques II

<table>
<thead>
<tr>
<th>Successful completion of DMS 202 will help students:</th>
<th>RCGC Core Competencies</th>
<th>Evaluation / Assessment (Additional means of evaluation may be included by individual instructors)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Be able to interpret and analyze diagnostic sonograms.</td>
<td>Scientific Knowledge and Reasoning Written and Oral Communication</td>
<td>Discussion Case Studies Presentations</td>
</tr>
<tr>
<td>Foster effective communication. Cultivate clear and concise oral and written communication skills</td>
<td>Written and Oral Communication</td>
<td>Discussion Case Studies Presentations Research Project</td>
</tr>
</tbody>
</table>

### Topical Outline

1. Discern if scans meet basic scan protocols
2. Discern normal vs. abnormal cross-sectional anatomy
3. Analyze and discuss artifacts and scanning errors
4. Given sonograms of the female pelvis, label anatomical structures, including uterus, bladder, rectum, ovaries, muscles, bones, ligaments bladder, rectum, ovaries, muscles, and vagina
5. List criteria utilized to identify the uterus in gynecological ultrasound images
6. Describe the appearance of normal ovaries in gynecological ultrasound images
7. Describe equipment adjustments necessary to obtain optimum gynecology scans in patients with differing body habitus
8. Explain four reasons why a full urinary bladder is necessary for trans abdominal gynecological scanning
9. Correctly orient sonograms to the specifications and educational guidelines set up by the Society of Diagnostic Medical Sonographers and the A.M.A.
10. List at least 5 indications for obstetric ultrasound exams
11. List important questions to ask the patient before beginning exam
12. Describe biologic effects of ultrasonography
13. Describe First trimester sonography protocol
14. Describe Second and Third trimester sonography protocol
15. Delineate the differences between trans-abdominal and transvaginal scanning
16. Demonstrate an understanding of gestational age assessment in the First, Second and Third trimesters
17. Describe anatomy specific to performing a fetal ultrasound examination
18. Define the aorta and vena cava
19. Define and describe at least four main branches of the aorta and their origin
20. Discern at least 3 types of aortic aneurysms
21. Distinguish between the normal and abnormal sonographic appearance of the vascular anatomy
22. Select the correct equipment settings appropriate to individual body habitus with regards to The abdomen
23. Illustrate the surface and internal anatomy of the liver and adjacent structures
24. Distinguish between the normal and abnormal appearance of the liver
25. Describe the sonographic appearance of:
   a. hepatitis.
   b. cirrhosis.
   c. fatty disease
26. Given sonograms of the abdomen, correctly identify the liver, spleen, gallbladder, kidneys, pancreas, aorta, IVC, stomach and bowel
27. Correctly orient the sonographic anatomy in accordance with the Society of Diagnostic Medical Sonographers and the A.M.A.
28. Follow and be aware of HIPPA Regulation regarding patient information

Resources

Academic Support Center: The Academic Support Center (ACS), located in Room 603 above the College Store, offers FREE tutoring, student success workshops, structured study groups, and academic coaching for RCGC students seeking assistance in most subjects. The phone number is 856-681-6250. For more information about all the services provided, please visit the Academic Support Center’s webpage: rgc.edu/asc.

Affirmative Action Statement

The Board of Trustees is committed to providing an educational and workplace environment free from unlawful harassment and discrimination. All forms of employment and educational discrimination and harassment based upon race, creed, color, national origin, age, ancestry, nationality, marital or domestic partner or civil union status, sex, pregnancy, gender identity or expression, disability, liability for military service, affectional, or sexual orientation, atypical cellular or blood trait, genetic information (including refusal to submit to genetic testing) are prohibited and will not be tolerated.

For questions concerning discrimination contact Almarie J. Jones, Executive Director, Diversity and Equity, Affirmative Action/Title IX Officer at 856-415-2154 or ajones@rggc.edu. For disability issues, contact Dennis M. Cook, Director, Department of Special Services, ADAAA/504 Officer at 856-415-2265 or dcook@rggc.edu.

Department of Special Services

The Department of Special Services, located in the Instructional Center, room 425A, welcomes students of all abilities. The staff members in Special Services are committed to providing support services and ensuring equal access to eligible students with documented disabilities as
outlined by the Americans with Disabilities Act (ADA) and the Americans with Disabilities Act with Amendments Act (ADAAA).

To maximize the potential of eligible students who self-identify, the Special Services staff provides an array of support services which may include extra time for tests and quizzes, testing in a separate location, advisement, interpreters, scribes, tutors, assistive technology (such as magnification devices and audio amplification), touch screen computers, audio books and notetaking assistance.

As students embark on their academic journey, they are encouraged to meet with staff members to identify, develop and implement support services that are in accord with their individual academic needs. Students are also encouraged to make use of other college support services that are available to all RCGC students currently enrolled in credited academic courses, such as tutoring services and the college library, which offer online information research and other materials needed to complement their studies.

Students registered with the Department of Special Services and who plan to earn an associate degree, further their education and transfer to a four-year institution, or enter the workforce, are encouraged to choose a corresponding program of study (college major) as soon as possible. The Special Services staff assists enrolled students with additional support that focuses on advancing students through their selected programs of study towards a goal of graduating.

Students who request academic support from the Department of Special Services can be assured that confidentiality will always be maintained. Accommodations are provided to address the special needs of individuals with disabilities under Section 504 of the 1973 Rehabilitation Act and the Americans with Disabilities Act (ADA) of 1990 together with the ADA Amendments Act of 2008 (ADAAA). Under these acts, the office advocates a user-friendly campus for accessibility and a learning-friendly campus for academic success. For more information or to schedule an appointment to meet Special Services staff, please call 856-415-2265 or click here for RCGC.edu/SpecialServices.

To Register with Special Services

Students must follow these steps:

- Complete and submit the Student Profile form. Click here for the Student Profile Form.
- Submit documentation detailing the student’s disability. Support services will not be granted without documentation specifying the student’s disability. Documentation should include the following information:
  - Diagnosis with written evaluation of current disability;
  - Date the student was diagnosed;
  - Tests used to reach diagnosis;
  - Credentials of the medical professional conducting evaluation
  - How the disability affects daily activities and/or academic performance.
- By clicking on the following links, students can download the Special Education Records Release Form and/or Medical Release Form to present to their medical care professional.
• Contact the Special Services office to schedule a meeting with a staff member.
  o Students should schedule a meeting after submitting the Student Profile Form, proper documentation and completing the College’s placement test. (Click on Special Accommodations for Placement Testing to determine whether student should arrange his/her placement test through the Special Services office or the general Testing Center.
  o During the meeting, the student and staff member will discuss his or her disability and determine eligible accommodations.

Accommodations

Students who qualify for accommodations are encouraged to register with the Department of Special Services at RCGC before they begin their academic career at Rowan College. This allows students to take advantage of any special accommodations and auxiliary aids that they might need and be eligible to receive.

• Special accommodations include but are not limited to extended time on tests, private test rooms to complete tests with the assistance of a reader or scribe, as well as a distraction-free test room.
• Auxiliary aids include but are not limited to note takers, tape recorders, large display calculators, interactive calculators, desktop magnifiers, large-screen computer monitors, touch-screen computer monitors, touch-screen laptop computers and JAWS® software. More information about adaptive technology can be found on the technology link. Students are responsible for identifying which accommodations and auxiliary aids they require for academic support.

Confidentiality

Students who register with the Department of Special Services are assured that their information is kept confidential.

In addition, the student’s transcript will not indicate that he or she is registered with the Department of Special Services. The student's specific special need is not disclosed to the student's instructors. However, accommodation letters are sent to each of the student’s professors if the student needs testing accommodations or accommodations in the classroom. It is the student's choice whether or not to disclose the specifics of his or her special need.