SURGICAL TECHNOLOGY PROGRAM

COURSE SYLLABUS

PHARMACOLOGY

Fall 2003
1. Course Number:

2. Course Title: Surgical Pharmacology

3. This course is designed to provide the student with learning opportunities which will enable him/her to apply scientific principles of the biologic science to pharmacology. Emphasis is placed on the relationship of drugs to the surgical patient.


5. Primary Purpose: To provide the student with the rationale for the use of specific drugs and their effects and major side effects on the surgical patient, how they may alter or influence surgical intervention and personal actions when dealing with pharmaceuticals.

6. Requirement for: Certificate of Proficiency

7. Course Prerequisites: Admission to (name of school) and admission to the Surgical Technology Program.

8. Relationship of Course to District Objectives: To maintain an effective program, which will provide the student with resources to develop skills necessary to achieve their educational goals and to offer a certificate that provides the student with a marketable career in the health care field at the completion of their study.

9. Course Co requisites:

10. Projected Enrollment: 18 Fall Semester

11. This course will meet on Tuesday and Thursday mornings from 8:00-9:00 A.m.

12. Anticipated frequency of course offering: Fall semester only
Learning Objectives

Upon completion of this course the student will be able to:

1. Correctly convert from one mathematical system to another.
2. List the different systems of measurement used in medication.
3. Identify symbols and abbreviations used in drug therapy.
4. List the sources of drugs.
5. List the routes of drug administration.
6. State individual and community (local, state, federal) responsibilities of implementation of drug control and drug abuse prevention.
7. List specific rights of patient’s in regard to drug administration and his/her role in protecting these rights.
8. Define and identify common “side effects” of drugs and describe appropriate intervention when desired effects are not achieved.
9. Differentiate between a drug’s trade name and generic name.
10. List the purposes of drug therapy.
11. Identify the variables influencing drug action and dosage.
12. Identify and describe actions of coagulant and anticoagulant drugs on the surgical patient.

Course Outline:

August 19  Introduction
            Chapter 1-Mathematics review
August 21  Chapter 1-Mathematics review
August 26  Chapter 1-Mathematics review
August 28  Chapter 1 exam-mathematics
            Chapter 2-Basic pharmacology
September 2 Chapter 2-Basic pharmacology
September 4  Chapter 2 exam-Basic pharmacology
Chapter 3 and 4-Drug regulation and Drug administration

September 9  Chapter 3 and 4 exam, Drug regulation and administration
Review for unit exam

September 11  Unit 1 exam-Introduction
Chapter 7-Diuretics

September 16  Chapter 7-Diuretics

September 18  Chapter 7 exam-Diuretics
Chapter 6-Diagnostics

September 23  Chapter 6 exam, diagnostics
Chapter 9- Hormones

September 25  Chapter 9- Hormones

September 30  Chapter 9 exam-Hormones
Chapter 10-Drugs affecting coagulation

October 2  Chapter 10-Drugs affecting coagulation

October 7  Chapter 10-Drugs affecting coagulation

October 9  Chapter 10 exam-Drugs affecting coagulation
Chapter 8-Gastric drugs

October 14  Chapter 8 exam-gastric drugs
Review

October 16  Chapter 11-Ophthalmic drugs

October 21  Chapter 11-Ophthalmic drugs

October 23  Chapter 11 exam-ophthalmic drugs
Chapter 5-Antibiotics

October 28  Chapter 5-Antibiotics

October 30  Chapter 5 exam-Antibiotics
Cardiac drugs

November 4  Cardiac drugs
November 6  Cardiac drugs
November 11  Chapter exam-Cardiac drugs
             Review
November 13  Review for unit exam
November 18  Unit 2 exam-Application
November 25  Chapter 12-Preoperative drugs
November 27  Thanksgiving holiday-no school
December 2  Chapter 13 Intraoperative drugs
             Possible guest speaker from anesthesia
December 4  Chapter 13-exam-Intraoperative drugs
             Chapter 14- Blood, fluids and complications
December 9  Chapter 15-Complications
             Review for final
December 12  Review for final
December 16  Final exam

The above schedule may change to accommodate student learning needs

Classroom handouts with specific objectives, readings and other assignments may accompany each lesson.

Teaching Methods

1. Lecture
2. Discussion
3. Textbooks
4. Handouts
5. Group projects
6. Audio-visual
7. Computer programs
Rubric

<table>
<thead>
<tr>
<th>Task</th>
<th>Total Points Possible</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chapter exams (100 pts each)</td>
<td>1300</td>
</tr>
<tr>
<td>Unit exams (200 pts each)</td>
<td>400</td>
</tr>
<tr>
<td>Final exam</td>
<td>400</td>
</tr>
<tr>
<td>Participation aprx. 100</td>
<td></td>
</tr>
<tr>
<td>Homework aprx. 400</td>
<td></td>
</tr>
<tr>
<td>Research paper aprx. 100</td>
<td></td>
</tr>
<tr>
<td>Total aprx. 2700</td>
<td></td>
</tr>
</tbody>
</table>

Exams

Chapter exams will be for material in that chapter. Unit exams will cover the material in that unit. The final will be comprehensive from the beginning of the semester.

Make-up exams Must be taken within three (3) days of the date you return to school or zero points will be awarded.

Test results will be returned to the student within one week from the day the test is given. Review of test will be given during class time or on an individual basis.

Attendance

Students are expected to follow the policies set forth in the Surgical Technology Handbook. Students can receive one bonus point each day if they are in attendance for the entire class.

Participation

Active participation through group projects and daily discussion will be utilized. The amount of points awarded will vary with each given task.

Homework

All homework should be turned in on time (at the beginning of class). Points will be deducted for each day that it is late.
- 1 day late= 5% deduction
- 2 day late= 8% deduction
- 3 days late=10% deduction
- 4 or more days late=50% deduction

Research paper

See attached rubric
Text, Reference, Supplementary Materials


Additional reference materials are available in the school library.

Office Hours-instructor:

(name of instructor and contact information)
## Rubric for Pharmacology Research Paper

<table>
<thead>
<tr>
<th>Task</th>
<th>Points possible</th>
<th>your points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Topic approved by instructor</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Should be related to: Alchemy History Specific drugs Native American remedies Folk medicines</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proper grammar</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>(1 pt. Deduction for each mistake)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proper medical terminology</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>(1 pt. Deduction for each mistake)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Use of at least 3 primary resources</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>Reference list in A.P.A. style</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>Informative</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>Proper length of paper</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>Typed, 12-font, double spaced, 3-4 pages</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100</strong></td>
<td></td>
</tr>
</tbody>
</table>

### Timeline:
- **November 13**: Deadline to approve topic with instructor.
- **December 4**: Final paper due.