FORMAT

The critical care selective will expose the student to a broad experience in the care of critically ill patients. The clinical site will be a licensed critical care unit (e.g., a medical ICU, surgical ICU, cardiac care unit, neonatal ICU, pediatric ICU, or similar unit). Students will be able to identify preferences for sites from a list of approved critical care rotations and will be assigned to sites based on their preferences and pedagogical and organizational needs. It will be a 4-week rotation, and students will be expected to attend clinical duties full time (minimum 36 hours per week). There is no overnight call requirement, but students will be expected to take “short call” (meaning staying until a late hour, 10 pm or midnight or so), or cover a night shift (with no day responsibilities), at least once per week.

Students will be required to attend weekly 4-hour Thursday afternoon group learning sessions at the U of A Com – PHX main campus. There will also be a group session on the first day of the rotation at the school for an introduction to the rotation.

Students are also required to complete a Critical Care Procedure and Diagnosis Log during the rotation (see Selective Manual for details). Students will also log duty hours.

Access to a series of online learning modules will be provided to each student, and all modules are required to be completed by the end of the rotation. Certain modules will be designated to be completed by a certain date as preparation for the on campus didactic sessions (e.g., completion of the online shock module prior to the on campus teaching / simulation session on shock).

Finally, each student will be required to research and present a 15-20 minute presentation on a relevant critical care topic during the final didactic session of the rotation. In addition, during the final on campus session, students will be provided with history and physical information, laboratory data, and critical care flowsheet data for a mock patient, and will be expected to synthesize the data, organize it, and present it in a systems-based manner for a mock patient.

Details on all of the requirements for the rotation can be found in the Selective Manual.

GOALS

1. Provide students with a broad overview of the scope and practice of critical care medicine.
2. Strengthen students’ clinical skills in assessing and treating seriously and critically ill patients, building on skills learned in their third year clerkships.
3. Enhance students’ appreciation for the impact of serious illness on the psychological and emotional well-being of patients and their families.

**LEARNING OBJECTIVES**

Perform and document a complete history and physical exam on the critically ill patient; interpret laboratory and pertinent data; and provide an assessment and critical care treatment plan

Provide 24-hour patient summaries of critically ill patients at daily rounds, including previous and upcoming treatment plans

1. Identification of Problem(s)
2. History and pertinent finding on Physical Exam
3. Differential Diagnosis of each problem, including interrelationships
4. Identification of significant hemodynamic parameters
5. Identification of significant laboratory values
6. Formulation of management plan

Describe the management of ventilatory support measures in critically ill patients (including weaning)

Design hemodynamic management and therapy in the critically ill patient, including the application and appropriate use of invasive monitoring modalities

Provide examples of specific elements of neurocritical care and the management of traumatic brain injury, intracranial hemorrhage, and other intracranial pathology

Describe the initial management of critical infectious processes, with emphasis on the prevention and treatment of nosocomial infections

Identify strategies to diagnose and treat metabolic derangements in critically ill patients, including renal failure, electrolyte abnormalities, and acid-base abnormalities

Demonstrate sensitivity to the concerns of patients and their families surrounding critical illness, including quality of life and end of life issues

Demonstrate appreciation and respect for other professionals by appropriately responding to consultative and support services
SUGGESTED READINGS


ASSESSMENT METHODS

Students will receive formative assessment on their clinical performance during their second or third week of the rotation by the clinical site director at their assigned site. Students will receive ongoing formative assessment at each on campus learning session from the selective director.

Students’ summative assessments will be provided on the scale used in all other clinical rotations: honors, high pass, pass, incomplete, and fail. Students’ assessments will be calculated as follows:

- Clinical assessments 50%
- Participation in group learning 10%
- Successful completion of online learning modules 15%
- Completion of Critical Care Procedure and Diagnosis Log 10%
- Final presentation 10%
- Final mock patient presentation 5%

Clinical assessments will be based on site directors’ assessments based on input from faculty at the site where the student rotated.

For the non-clinical assessment (combining participation, online learning modules, procedure and diagnosis log, and final presentations), the following cutoffs will be used:

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>90-100%</td>
<td>Honors</td>
</tr>
<tr>
<td>80-90%</td>
<td>High Pass</td>
</tr>
<tr>
<td>70-80%</td>
<td>Pass</td>
</tr>
<tr>
<td>&lt;70%</td>
<td>Fail</td>
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</tbody>
</table>

Assessments of presentations and other work will be done by the selective director, incorporating feedback from small group facilitator faculty.
For the overall grade for the selective, the following table will be used:

<table>
<thead>
<tr>
<th>Clinical Grade</th>
<th>Non-clinical Grade</th>
<th>Final Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Honors</td>
<td>Honors</td>
<td>Honors</td>
</tr>
<tr>
<td>Honors</td>
<td>High Pass</td>
<td>Honors</td>
</tr>
<tr>
<td>High Pass</td>
<td>Honors</td>
<td>Honors</td>
</tr>
<tr>
<td>Honors</td>
<td>Pass</td>
<td>High Pass</td>
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<tr>
<td>High Pass</td>
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<td>High Pass</td>
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<tr>
<td>High Pass</td>
<td>Pass</td>
<td>High Pass</td>
</tr>
<tr>
<td>Pass</td>
<td>Honors</td>
<td>High Pass</td>
</tr>
<tr>
<td>Pass</td>
<td>High Pass</td>
<td>Pass</td>
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<tr>
<td>Pass</td>
<td>Pass</td>
<td>Pass</td>
</tr>
<tr>
<td>Fail</td>
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<td>Fail</td>
</tr>
<tr>
<td>(Any Grade)</td>
<td>Fail</td>
<td>Fail</td>
</tr>
<tr>
<td>Fail</td>
<td>Fail</td>
<td>Fail</td>
</tr>
</tbody>
</table>

Failure of the selective will require the selective to be repeated in its entirety.

**APPROVED SITE LIST**

CVICU – Phoenix Children’s Hospital
MICU – Banner Desert Medical Center
MICU – BUMC
MICU – Honor Health Scottsdale Shea
MICU – MIHS
MICU – VAMC
NICU – BUMC
NICU – MIHS
NICU – St. Joseph’s Hospital and Medical Center
PICU – Banner Cardon Children’s Medical Center
PICU – Phoenix Children’s Hospital
PICU – MIHS
SICU – BUMC
SICU – Chandler Regional Medical Center
SICU – MIHS