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General Selective Information

Credit Hours: 4
Course Code: 846-847

Prerequisites: All students must successfully pass all 3rd year curricular elements in order to progress to the fourth year. Link to policy: [https://phoenixmed.arizona.edu/policy/credit-requirement-years-3-and-4-policy](https://phoenixmed.arizona.edu/policy/credit-requirement-years-3-and-4-policy)

Selective Length: 4 Weeks
Selective Website: [Critical Care](#)
Selective Resources: [SCCM Modules](#)

Selective Contacts

Selective Director Name: Robert Raschke, MD

Email: raschkebob@gmail.com
Office Location: HSEB B-578

Course Description

The Critical Care Selective utilizes a variety of well-supervised clinical settings exposing students to a broad array of patients as well as organized interactive learning experiences and directed readings allowing motivated students to establish a solid foundation of skills and knowledge for their future career choices.

Clinical Sites

Banner Cardon Children’s Medical Center
Banner - University Medicine Center Phoenix
Chandler Regional Medical Center
Dignity Health St. Joseph’s Hospital and Medical Center
HonorHealth John C. Lincoln Medical Center
HonorHealth Scottsdale Osborn Medical Center
Phoenix Children’s Hospital
Valleywise Health Medical Center (Formerly MIHS)
Veteran’s Administration Medical Center

*Ancillary sites for supplemental educational experiences may be assigned per selective

Students are responsible for their own transportation to and from, and parking fees at, clinical sites as indicated in the Clinical Site Placement and Transportation Policy.

**Professionalism Resource**

The Professional Resource Office (PRO) provides guidance, support and information to students on professionalism issues. The PRO supports students in the development of strong, positive professional practices with peers, faculty, patients and the broader community through effective communication and conflict management.

- Professionalism concerns may be reported directly to the Selective Director, the PRO liaisons or in the student evaluations of the selective, site, and faculty.
- The [Professionalism Conduct Comment Form](#) is an additional on-line mechanism for students to report any concerns, including those about supervision, and it exists across the four-year curriculum. This mechanism ensures confidentiality and is collected directly by the Professional Resource Office.

COM-P is committed to creating and maintaining an environment free of discrimination, harassment and retaliation that is unlawful or prohibited by university policy. Please see the Reporting Mistreatment or Harassment of Medical Students Policy, the Anti-Harassment and Nondiscrimination Policy and the Professionalism Policy for additional information. In addition, professional attributes are expected of all students. These attributes are within the Teacher Learner Compact Policy.

Beth Schermer and Rosemarie Christofolo are the liaisons for the Professional Resource Office. They can be reached by telephone, text or email.

Beth Schermer  
602-549-9847  
schermer@email.arizona.edu

Rosemarie Christofolo  
480-862-4963  
rchristofolo@email.arizona.edu

**Educational Program Objectives**

The Educational Program Objectives (EPO) comprise competencies and the measurable objectives by which attainment of each competency can be assessed. The full text of the University of Arizona, College of Medicine – Phoenix Educational Program Objectives can be accessed in the Educational Program Objectives Policy and require dissemination as noted in the Orientation to EPOs and Curricular Unit Objectives Policy.

In addition to EPO’s, the selective objectives are closely tied to student learning outcomes. COM-P measures these outcomes both quantitatively (via NBME shelf exams) and qualitatively (via behavioral competency assessments).
Selective Specific Learning Objectives

Each Critical Care Selective objective listed below has been mapped with relevant Competencies, i.e., Patient Care, Medical Knowledge, Clinical Appraisal and Quality Improvement, Interpersonal and Communication Skills, Professionalism and Societal Awareness and Responsiveness and is available within One45.

1. Work effectively in a team with physicians, nurses and other healthcare professionals to optimize survival and minimize patient suffering in the ICU.
2. Perform a complete pertinent history and physical exam on the critically ill patient, synthesizing clinical data to provide a reasonable assessment and treatment plan.
3. Present a service of critically ill patients effectively at rounds, interpreting clinical data in the context of the patient’s illness and demonstrating an understanding of the most important priorities for the patient’s survival.
4. Recognize a patient requiring emergent care and initiate appropriate evaluation and management.
5. Demonstrate ability to prevent common complications of critical care including iatrogenic infections, ventilator complications, adverse drug events, and delirium.
6. Use a basic knowledge of shock to guide resuscitation of a critically-ill patient. This includes knowledge of how clinical tests can assist in the classification of shock, determination of the adequacy of oxygen delivery and choice of resuscitative measures.
7. Treat a life-threatening infection using a time-sensitive sepsis bundle and appropriate source control measures.
8. Order simple mechanical ventilator settings appropriately including continuous positive airway pressure, volume control and pressure support. Know when to use low-tidal volume ventilation and know when the patient is ready for extubation.
9. Order drugs effectively and safely in the ICU taking into account the increased risk for adverse drug effects in critically-ill patients.
10. Be able to identify life-threatening hemorrhage, and be able to appropriately order a massive transfusion protocol, apply specialty-specific adjunctive care, and achieve source control of bleeding.
12. Demonstrate empathy for ICU patients by understanding their particular vulnerability and aspects of suffering inherent in their experience in the ICU.
13. Develop rapport with a patient’s family with consideration of their cultural and spiritual needs adequate to facilitate a difficult discussion such as required to determine code status or withdraw life support.
15. Critically appraise a journal article regarding the efficacy of an ICU therapy. Develop an appreciation of the level of evidence for common ICU practices to inform clinical decision-making.
16. Present a topic in Critical Care Medicine incorporating a patient case history and entailing an effective review and critical appraisal of the literature.

17. Identify the signs of burn-out in yourself or a colleague, and enlist appropriate assistance.

**Selective Requirements**

**Attendance Requirements**

All selective experiences are mandatory, and any absence must be recorded via the absence tracking system. To submit an absence request please use [Formsite](#). Excused absences will be remediated as deemed appropriate by the Selective Director and are not to exceed 0.5 days per week on average. Exceptions to this may be considered in consultation with the Selective Director and the Associate Dean for Student Affairs. Please see the:

- [Attendance and Absence Years 3 and 4 Policy](#)
- [Leave of Absence Policy](#)
- [Attendance Expectations and Absence Reporting Requirements Policy](#)

Students are required to work 20 shifts per 4-week rotation. A shift is defined as a normal workday on the clinical service on which a student is rotating with a minimum of 8 hours and a maximum of 24 hours (as long as [Duty Hours Policy](#) is followed). Orientation and the academic half-days on the first Thursday also count as a whole shift. On subsequent academic half-days, a shift would consist of morning clinical duties plus the afternoon academic half-day. It is the student’s responsibility to make up any clinical shifts they may miss (for instance, on account of interviews) and to notify the fourth year Program Coordinator immediately if their schedule will not allow them to complete the required minimum of 20 shifts. Remember that clinical duty hours, orientation and academic half-days are combined when determining overall duty hours, which cannot exceed an average of 80 hours per week. Contact the Critical Care Director immediately if compliance with this requirement is in jeopardy.

Orientation and Academic Half-Days: Attendance is mandatory unless the student has been approved by the Selective Director or Program Coordinator a minimum of 48 hours ahead of time. Absences from orientation or academic half-days must be made up. Call the Program Coordinator for make-up information.

- **Orientation:** First Thursday of rotation, 8:00 a.m.-12:00 p.m.
- **Academic Half-Day:** All Thursdays of the rotation, 1:00 p.m.-5:00 p.m.

Some sites require overnight call, but in-house call should not exceed 24 hours, plus four hours for hand-off of patient care.

**Suggested Reading**

Suggested:


Didactic/Interactive Learning/Simulations Sessions (Schedule)

**Week 1:**
1. Case-based Introduction to Critical Care Medicine (Goals of ICU care, vulnerability/suffering of the ICU patient and family, ICU complications, family communication, teamwork and burn-out).
2. Case-based Instruction: ICU Pharmacology (sedation drugs, vasopressors, life-threatening adverse drug events).
6. Hands-on Workshop: Mechanical Ventilation (how a ventilator works, terminology describing ventilator modes, evidence-base related to the selection of ventilator modes). This session utilizes the Draeger Evita® V500 online ventilator simulator.

**Week 2:**
1. Critical appraisal of literature in the ICU (understand the level of evidence for common ICU practices and use of the JAMA User’s Guides to the Medical Literature).
2. Simulation: On-call emergencies – (individual medical students will deal with a series of bedside emergencies).

**Week 3:**
1. Burn out and personal resilience - dealing with psychological stress in the ICU.
2. Case-based Instruction: Ethics (autonomy of the compromised patient, futility, surrogacy, the doctor’s right to non-maleficence, cultural values).
3. Simulation: Multi-system organ failure. Dealing with issues including delirium, shock and
progressive difficulties in mechanical ventilation occurring over the first several days of ICU admission.

4. Simulation: Family Care and Communication in the ICU (DNR discussion and withdrawal of support, cultural aspects of rapport and communication, spiritual care, ethical consideration of surrogate end-of-life decisions, futility, patient suffering, communication, compassion, empathy).

Week 4:

1. Clinical topic presentations by students.
2. Feedback on the rotation.

**Required Clinical Experience Logs (PX/DX)**

UA COM-P, in accordance with the [Core Clinical Skills Observation Policy](#), monitors and tracks the types of patients or clinical conditions that medical students must encounter, so as to remedy any identified gaps in patients, procedures or diagnoses across clinical sites. For this selective, medical students must encounter the below types of patients and clinical conditions and indicate the level of student responsibility.

*The standardized levels of student responsibility include the following:

1. Observe and Discuss: This may include observing another member of the team interview a patient, perform a procedure or physical exam, etc.; and discussion of the case, condition, or other relevant components.
2. Actively Participate in Care: This category includes Observing and Discussing, but also indicates more active responsibility for the patient, such as performing a physical exam and workup, entering progress notes or history and physicals (H&Ps), presenting the patient on rounds, scrubbing into a case, and/or counseling or discussing prevention with the patient.
3. Perform Procedure: This category includes Actively Participate in Care and is additionally defined as the student performing the procedure with supervision.

* To best prepare you for the NBME and your future career in medicine, the following scaffolding should provide the outline for the minimum understanding of each Dx and each Px. In the spirit of self-directed learning, your approach to mastery of each component is up to you.

**List for each Px:**

1. Explain the anatomy and pathophysiology related to the Px
2. Define relevant pharmacology to the Px
3. Summarize the informed consent process (including risks, benefits, indications and alternatives) for the Px
4. Compare associated imaging modalities for the Px
5. Analyze potential complications and prevention or management strategies for the Px
6. Understand post procedural care, patient education and anticipatory guidance for the Px
7. THEME: Reflect upon the assigned theme objective related to Px. See addendum for objectives.
List for each Dx:

1. Define the key epidemiological characteristics of Dx
2. List the risk factors for acquiring Dx
3. Describe the pathophysiology of Dx
4. Create a differential diagnosis algorithm for Dx
5. Develop and initiate an effective treatment plan for Dx
6. Obtain a relevant history and physical examination for Dx
7. THEME: Reflect upon the assigned theme objective related to each Dx. See addendum for objectives.

Please review the Faculty Supervision of Medical Students in Clinical Learning Situations Policy and the Faculty Supervision of Sensitive Physical Examination Policy. The procedures and clinical conditions will be recorded in the student’s “Procedure Logs” and reviewed with the site or Selective Director.

<table>
<thead>
<tr>
<th>Required Procedures</th>
<th>Clinical Setting</th>
<th>Level of Responsibility</th>
<th>Alternative Experience</th>
<th>Associated Theme</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABG Interpretation</td>
<td>Inpatient</td>
<td>Observe &amp; Discuss</td>
<td>ABG Interpretation</td>
<td>Evidence-Based Medicine</td>
</tr>
<tr>
<td>Arterial line placement</td>
<td>Inpatient</td>
<td>Observe &amp; Discuss</td>
<td>NEJM Videos in Clinical Medicine - Arterial Line Placement</td>
<td>Evidence-Based Medicine</td>
</tr>
<tr>
<td>Assessment of coagulopathy</td>
<td>Inpatient</td>
<td>Observe &amp; Discuss</td>
<td>Hemostasis</td>
<td>Evidence-Based Medicine</td>
</tr>
<tr>
<td>Central venous line placement</td>
<td>Inpatient</td>
<td>Observe &amp; Discuss</td>
<td>NEJM Videos in Clinical Medicine - Central Venous Access</td>
<td>Evidence-Based Medicine</td>
</tr>
<tr>
<td>Chest x-ray interpretation</td>
<td>Inpatient</td>
<td>Observe &amp; Discuss</td>
<td>Complete tutorial: Here</td>
<td>Evidence-Based Medicine</td>
</tr>
<tr>
<td>ECG interpretation</td>
<td>Inpatient</td>
<td>Observe &amp; Discuss</td>
<td>Complete tutorial: Here</td>
<td>Evidence-Based Medicine</td>
</tr>
<tr>
<td>Endotracheal intubation</td>
<td>Inpatient</td>
<td>Observe &amp; Discuss</td>
<td>NEJM Videos in Clinical Medicine - Endotracheal Intubation</td>
<td>Evidence-Based Medicine</td>
</tr>
<tr>
<td>Management of arrhythmias</td>
<td>Inpatient</td>
<td>Observe &amp; Discuss</td>
<td>Review &gt;5 videos on arrhythmias on Khan Academy: Here</td>
<td>Evidence-Based Medicine</td>
</tr>
<tr>
<td>Management of elevated intracranial pressure</td>
<td>Inpatient</td>
<td>Observe &amp; Discuss</td>
<td>Participate in the neurological ICU simulation.</td>
<td>Evidence-Based Medicine</td>
</tr>
<tr>
<td>Management of mechanical ventilation</td>
<td>Inpatient</td>
<td>Observe &amp; Discuss</td>
<td>Clinical cases in mechanical ventilation online: mechanical ventilation</td>
<td>Evidence-Based Medicine</td>
</tr>
<tr>
<td>Obtain informed consent</td>
<td>Inpatient</td>
<td>Observe &amp; Discuss</td>
<td>UpToDate: Informed Consent</td>
<td>Behavioral and Social Sciences</td>
</tr>
<tr>
<td>Thoracentesis/thoracostomy</td>
<td>Inpatient</td>
<td>Observe &amp; Discuss</td>
<td>NEJM Videos in Clinical Medicine- Thoracentesis</td>
<td>Evidence-Based Medicine</td>
</tr>
<tr>
<td>Transfusion of blood products</td>
<td>Inpatient</td>
<td>Observe &amp; Discuss</td>
<td>Participate in the transfusion simulation.</td>
<td>Evidence-Based Medicine</td>
</tr>
<tr>
<td>Required Diagnosis</td>
<td>Clinical Setting</td>
<td>Level of Responsibility</td>
<td>Alternative Experience</td>
<td>Associated Theme</td>
</tr>
<tr>
<td>-----------------------------------</td>
<td>------------------</td>
<td>------------------------</td>
<td>----------------------------------------------------------------------------------------</td>
<td>-----------------------------------</td>
</tr>
<tr>
<td>Acute kidney injury</td>
<td>Inpatient</td>
<td>Observe &amp; Discuss</td>
<td>Acute kidney injury</td>
<td>Evidence-Based Medicine</td>
</tr>
<tr>
<td>ARDS</td>
<td>Inpatient</td>
<td>Observe &amp; Discuss</td>
<td>Participate in the “multi-system organ failure” simulation</td>
<td>Evidence-Based Medicine</td>
</tr>
<tr>
<td>Delirium</td>
<td>Inpatient</td>
<td>Observe &amp; Discuss</td>
<td><a href="https://www.icudelirium.org/recent-updates/velit-blanditiis-sed">https://www.icudelirium.org/recent-updates/velit-blanditiis-sed</a></td>
<td>Evidence-Based Medicine</td>
</tr>
<tr>
<td>Electrolyte derangements</td>
<td>Inpatient</td>
<td>Observe &amp; Discuss</td>
<td>Review ILM by Dr. Brigham Willis (posted to course website).</td>
<td>Evidence-Based Medicine</td>
</tr>
<tr>
<td>End-of-life planning</td>
<td>Inpatient</td>
<td>Observe &amp; Discuss</td>
<td>Participate in the ethics discussion session.</td>
<td>Ethics</td>
</tr>
<tr>
<td>Ethical dilemmas in the ICU</td>
<td>Inpatient</td>
<td>Observe &amp; Discuss</td>
<td>Participate in the ethics discussion session.</td>
<td>Ethics</td>
</tr>
<tr>
<td>Good communication and professional rapport with a patient/family of a different cultural background</td>
<td>Inpatient</td>
<td>Observe &amp; Discuss</td>
<td>Participate in the family communication simulation.</td>
<td>Cultural Competency</td>
</tr>
<tr>
<td>Hypertensive emergency/urgency</td>
<td>Inpatient</td>
<td>Observe &amp; Discuss</td>
<td>Participate in the on-call emergencies simulation.</td>
<td>Evidence-based Medicine</td>
</tr>
<tr>
<td>Life-threatening hemorrhage</td>
<td>Inpatient</td>
<td>Observe &amp; Discuss</td>
<td>Participate in the life-threatening hemorrhage simulation.</td>
<td>Evidence-based Medicine</td>
</tr>
<tr>
<td>Nursing care of ICU patients</td>
<td>Inpatient</td>
<td>Observe &amp; Discuss</td>
<td>None needed - There is no reason the student should not be able to have a significant interaction with the nurses during the course of this rotation, during a nursing-day or another equivalent experience.</td>
<td>Interpersonal Education and Practice</td>
</tr>
<tr>
<td>Prevention of healthcare associated infection</td>
<td>Inpatient</td>
<td>Observe &amp; Discuss</td>
<td>Read: “Infections and antimicrobial resistance in the intensive care unit: Epidemiology and prevention” in Up-to-Date online</td>
<td>Public Health, Prevention and Health Promotion</td>
</tr>
<tr>
<td>Respiratory failure</td>
<td>Inpatient</td>
<td>Observe &amp; Discuss</td>
<td>Respiratory Failure (watch all parts of the video)</td>
<td>Evidence-Based Medicine</td>
</tr>
<tr>
<td>Sepsis</td>
<td>Inpatient</td>
<td>Observe &amp; Discuss</td>
<td>Participate in the septic shock simulation.</td>
<td>Evidence-Based Medicine</td>
</tr>
<tr>
<td>Shock</td>
<td>Inpatient</td>
<td>Observe &amp; Discuss</td>
<td>Participate in the case-based learning session on shock, and the simulation on septic shock.</td>
<td>Evidence-Based Medicine</td>
</tr>
</tbody>
</table>
Alternative Experiences

Students are expected to meet the required clinical experiences and procedures listed in the tables above. If the student does not encounter all the required clinical experiences as listed within the procedures and diagnoses tables, the student will remedy the gap by completing the alternative experience utilizing the process below:

1. The student is responsible for monitoring their PXDX log. If an alternative experience is needed for a procedure or diagnosis, the student must notify the Selective Director or designee a minimum of seven days prior to the end of the selective.
2. The Selective Director will assign an alternative experience/requirement to be completed.
3. Once the alternative experience/requirement is completed, it is logged in one45 by selecting the appropriate radio button under Setting and Patient Encounter.

Assessment and Evaluation Process

Formative Assessments

Throughout the selective, faculty (including Nurse Practitioners and Physician Assistants with faculty title), and residents engaged in student teaching and supervision will provide formative feedback in a variety of formats (e.g. review of progress notes, H&P, direct observation forms, informal verbal feedback and written narratives, PRIME+ form, NCAT, etc.) that may be communicated in writing or verbally. The purpose of this feedback is to identify strengths and opportunities for improvement.

Any significant deficiencies or concern should be communicated to the Selective and/or Site Director with written documentation that the feedback has been provided to the student. In the event that deficiencies or problematic issues are noted late in the selective, timely feedback will be given by an assessor to offer the student the opportunity to improve, and ideally should have occurred prior to assigning a score of <2.0 on an EPO. Selective Director maintains the ability to assign a summative level 1 for an egregious action even late in selective.

Summative Assessment

The University of Arizona - COM-P has internal deadlines for the summative assessment forms in order to make sure the LCME 6-week requirement is met. The end of rotation forms are to be completed by the faculty within two weeks of the rotation ending. This will allow for the Selective Directors to complete the final grades as close to the four-week mark as possible. All end-of-rotation assessment forms and the selective final grade form will be available to be viewed by students in One45 six (6) weeks after the end of the selective according to the Final Grades Reporting Timeline Policy in accordance with the LCME.

End of Rotation Assessment

Attending physicians, who have their faculty title, can complete an end of rotation assessment form.

Significant Interaction on Critical Care Selective is defined as having spent adequate time working together
for the faculty to feel they have enough information to submit a meaningful assessment. In the instance that only one end-of-rotation assessment is submitted, it will be a collaborative assessment from the preceptors who had significant interaction with the student. Where only a single faculty member has been assigned to work with a student, this faculty member will provide the assessment for the student. The selective end of rotation assessment form is distributed through One45. Please ensure to address whether resident feedback is used and how it is used.

**What to do if an assessor is not listed in One45**

Contact UA coordinator, (PBC-Evaluation@email.arizona.edu) and Selective Director.

**Conflict of Interest**

It should be noted that faculty at COM-P who are family members of the student, have a personal relationship with the student or are/have been health service providers of the student, may not be involved in the academic assessment or promotion of the medical student as described in the Conflict of Interest - Physician - Student Personal Relationship Policy and the Conflict of Interest - Physician-student Health Services Relationship Policy.

**Standardized Grading Process**

The final selective grade will be determined by the Selective Director using the composite score (comprised of clinical score, exam score, “other” score), and additional criteria for grading approved by the Curriculum Committee (explained further in the “calculating the final grade” section below). The final selective grade will be divided into five categories: Honors, High Pass, Pass, Incomplete, or Fail (H, HP, P, I, F). Details regarding grading in the selectives are included in the Grading and Progression for Clerkships Policy. Below is a listing of the components of the composite score:

1. **Clinical Score:**
   The clinical score is initially calculated through assessment of student performance within each individual Educational Program Objective (EPO). When more than one End of Rotation form is submitted for a student, the final EPO score is determined by averaging the scores on the end of rotation assessment for each EPO. The Selective Director will ensure that an adequate amount of information is available prior to calculating the final clinical score, which may include incorporating feedback from narrative formative feedback tools, preceptor feedback, and/or additional requested comments from faculty. Once grades are submitted, no further information will be sought nor will additional assessments be accepted.
   
   - 2.7 - 3.0 = Honors
   - 2.4 - 2.69 = High Pass
   - 2.0 - 2.39 = Pass
   - < 2.0 = Fail

2. **Non-Clinical Score (100 points):**
   The Selective Grading Calculator is posted in One45 for assistance calculating the Final grade.
Observable Learning Activities/Other Score

<table>
<thead>
<tr>
<th>Activity</th>
<th>Potential Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Small Group Sessions</strong>: If assessment is satisfactory (all responses are “yes” or “not applicable” on the Small Group Facilitator form) 4 points are earned for each of 13 sessions.</td>
<td>52 points</td>
</tr>
<tr>
<td><strong>On-line modules</strong> through Virtual Critical Care Rounds (21 Adult or 20 Pediatric modules)</td>
<td>23 points</td>
</tr>
<tr>
<td>100% completion: 15 points</td>
<td></td>
</tr>
<tr>
<td>80% - 99% completion: 0 points</td>
<td></td>
</tr>
<tr>
<td>&lt; 80% completion: 0 points</td>
<td></td>
</tr>
<tr>
<td><strong>Final Presentation</strong> (see grading rubric)</td>
<td>25 points</td>
</tr>
</tbody>
</table>

Final Presentation Grading Rubric

<table>
<thead>
<tr>
<th>Categories</th>
<th>Standard</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Content</td>
<td>Interesting topic covered in appropriate depth, evidence-based.</td>
<td>0-5</td>
</tr>
<tr>
<td>Organization</td>
<td>Structure and timing of talk is logical and easy to follow.</td>
<td>0-5</td>
</tr>
<tr>
<td>Patient case</td>
<td>Concise but including all pertinent features, clear that student understands the care the patient received.</td>
<td>0-5</td>
</tr>
<tr>
<td>Presentation</td>
<td>No technical glitches due to lack of preparation. Slides are simple and clear. Speaker interacts with audience and keeps them interested.</td>
<td>0-5</td>
</tr>
<tr>
<td>Questions</td>
<td>Mastery of topic and clinical case is apparent.</td>
<td>0-5</td>
</tr>
</tbody>
</table>

For the final non-clinical grade, a percentage will be calculated based on the student’s total points achieved, divided by the total possible (100). The following rubric will be used:

90 - 100% = Honors
80 - 89% = High Pass
70 - 79% = Pass
< 70% = Fail
Calculating the Final Grade

The Selective Grading Calculator is posted in One45 for assistance calculating the Final selective grade.

<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>High Pass</td>
</tr>
<tr>
<td>Honors</td>
<td>Pass</td>
<td>High Pass</td>
</tr>
<tr>
<td>High Pass</td>
<td>Honors</td>
<td>High Pass</td>
</tr>
<tr>
<td>High Pass</td>
<td>High Pass</td>
<td>High Pass</td>
</tr>
<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>
</tr>
<tr>
<td>Pass</td>
<td>Pass</td>
<td>Pass</td>
</tr>
<tr>
<td>Fail</td>
<td>(Any Grade)</td>
<td>Fail</td>
</tr>
<tr>
<td>(Any Grade)</td>
<td>Fail</td>
<td>Fail</td>
</tr>
</tbody>
</table>

The student fails the selective if any of the following occur:

1. The clinical score is <2.0, OR
2. Receive a final level 1 on two or more different EPOs*
3. Failure of the shelf exam as well as the retake, OR
4. Achievement of a score of less than 60 % from the “OTHER” / Required Activities, OR
5. Achievement of a total composite score of Fail

* For the purpose of assessment in the clinical years, an individual EPO rating of level 1.5 will not be considered a level 1 as defined in the Competency Assessment Policy.

The following requirements must be completed as part of the selective requirements.

1. Duty hour logging: Logging of required duty hours is due at the end of the rotation by Sunday at 11:59pm. See the Duty Hours Policy for specifics regarding duty hour limits, documentation of hours, and a FAQ section.
2. Required clinical encounter logging: Procedure/Diagnosis, or “PX/DX/TX” logging is due at the end of the rotation by Sunday at 11:59pm.

NOTE:

- A formative level 1 will be given if the duty hour or Px/Dx log requirement is not completed by Sunday at 11:59pm. The student will have 2 days to complete the duty hour or Px/Dx log requirement. All logs must be completed accurately with the date of the encounter within the date range of the selective.
- A summative Level 1 will be given for any failure to properly complete the duty hour or Px/Dx log requirement by Tuesday at 11:59pm. A grade of Incomplete will be given until
requirements are met. All logs must be completed accurately with the date of the encounter within the date range of the selective.

- The Level one will be on a single professionalism EPO related to accountability. Compliance with these deadlines will be determined by the Office of Assessment and Evaluation and reported to the Selective Director.

- A summative Level 1 will be taken into account as part of a comprehensive assessment and final grade. All summative, or “final”, Level 1 ratings are tracked by the Office of Assessment and Evaluation in collaboration with the Office of Student Affairs. Cumulative Level ratings are retained throughout the student’s enrollment. See Competency Assessment Policy.

3. Completion of assigned site, faculty and end of the selective evaluations (see the Assessment and Evaluation of Students, Faculty and Curriculum Policy).

4. Online SCCM Modules

5. Reflective writing assignment

6. Participation in all on-campus sessions, or completion of approved make-up activities.

7. Final Presentation

Additional Grading Criteria

1. To obtain a final grade of honors a student must achieve a clinical score of honors in addition to a composite score of honors.

2. To obtain a final grade of high pass a student must achieve a composite score that meets the cut off for high pass and at a minimum a clinical score of high pass.

3. Final determination of the student’s overall grade is at the discretion of the Selective Director.

A level 1, 1.5, 2, 2.5 or 3 is generated for each EPO based on the scale below as described in detail in the Competency Assessment Policy.

- Level 1 - Failure to meet even minimal expectations; the only grade that is appealable and the only grade that is tracked via advisor/ SA dean/ student progress committee
- Level 1.5 - Acquiring necessary skills/behaviors to meet expectations
- Level 2 - Meeting expectations
- Level 2.5 - Acquiring skills/behaviors to exceed expectations
- Level 3 - Exceeding expectations

A final summative level 1 can be generated for an EPO based on the following ways:

a) If two or more separate faculty raters assign a rating of level 1 on the same individual EPO on an End of Rotation form, this will result in a Level 1 regardless of the average score.

b) Assigned by Selective Director based on prolonged demonstration of performance not meeting expectations, a substantial incident, extreme behavior or other events that warrant the summative level 1 as determined by the Selective Director.
Feedback

Narrative Feedback

The Selective final grade form includes two separate areas which include narrative feedback. The first area includes formative comments from the End of Rotation forms, the second includes formalized summative comments which will be included in the Dean’s Letter (MSPE). The summative final comments are generally not a direct cut and paste but rather a sample summary determined by the Selective Director. The Selective Director has the right to include or not include comments based on their interpretation of which comments best summarize the student’s performance over the entirety of the selective. Students are not permitted to pick specific comments to be included or excluded in their narrative grade form. Students do not grade or summarize their own performance. Any concerns regarding narrative comments may be addressed to the Selective Director, Associate Dean Clinical and Competency Based Education or Associate Dean of Student Affairs. (See the Student Progress Policy for more information.)

Required Student Evaluation

Student evaluation of the selective, sites, and assigned didactics is required. The student must complete the evaluations online in the required time frame. All comments will be expected to model constructive feedback using the W3 model and must contain references and comments to specific behaviors and/or events (positive or negative).

If the student does not complete the required evaluations within one week after the end of the selective, the student will be assigned a formative level 1 for the EPO targeting giving and receiving constructive feedback and will be required to submit the missing evaluation data in narrative form within the second week after the selective.

Once the student has successfully submitted their evaluation in narrative form within the second week after the selective the student will have successfully demonstrated meeting expectations in Professionalism.

If the student has not successfully submitted their evaluation in narrative form within the second week after the selective the student will be considered as having not met expectations and a Summative Level 1 rating for the EPO targeting giving and receiving constructive feedback, will be automatically assigned. Office of Assessments and Evaluation will track this and report to Selective Director. For more information, see the Assessment and Evaluation of Students, Faculty and Curriculum Policy.

Helpful Tips and Additional Resources

Rural Health Professions Program

Students scheduled for rural rotations must complete required documents and attend a rural rotation orientation.
Housing expenses are supported by the Rural Health Professions Program (RHPP) and funded by Arizona Area Health Education Centers (AzAHEC). Students are responsible for damages and incidental charges. Housing options vary depending on rotation location. In most cases, it is pre-arranged by RHPP staff, in others, the preceptor or health center hosting the student provides housing (occasionally in the home of the faculty). Occasionally, students are asked to make their own arrangements. Keep in mind that housing options, at times, are limited and may require sharing common areas and bathrooms with other students. Individualized accommodation requests cannot be guaranteed, therefore flexibility and a resilient attitude regarding housing is key to having a great experience. Once housing has been secured, changes are generally not allowed less than six weeks prior to the rotation. In addition to housing, AzAHEC also funds one round trip to and from the rural site and a small stipend applied to the student’s bursar’s account.

Contact Information: Director, RHPP - Jonathan Cartsonis, MD
Email - jcartsonis@email.arizona.edu, Phone - 602-684-0598

Urgent/Emergent Health Care Services

For a list of emergency contact numbers please visit the College of Medicine’s website at the following link: http://phoenixmed.arizona.edu/security-emergency-numbers.

Students may also contact the Associate Dean of Student Affairs at 602-827-9997.

All sites are assessed for student safety. Details of this assessment are included in the Training Site Safety Policy.

Faculty shall not provide health services for students if they are directly involved in the assessment of the students; however, in the event of an emergency, faculty should perform services to stabilize a student until the appropriate transfer of care can occur. Please see the Conflict of Interest - Physician-Student Health Services Relationship Policy.

COM-P requires that all students have an updated immunization record. Please see the Immunization and Health Screening Policy for details regarding the contents of the record.

In the event of any exposure to blood/bodily fluids through needle stick, inhalation, mucus membrane or skin exposure, or percutaneously, students must follow the required procedures as indicated in the Student Exposure to Potentially Infectious Agents and/or Hazardous Materials Policy and details on the Student Occupational Exposure Procedure Card.

Expectations for Mobile Communication

The student must always be reachable during usual extended work hours and on-call hours, and if in clinical setting, the student should respond within 15 minutes. Most students opt to provide their mobile number for texts; however, the pager and/or voice capability of the cell phone must be functional and available i.e., on the student’s person for calls/pages daily. Not responding to calls or
pages will be viewed as a deficit in Interpersonal Skills and Communication, as well as Professionalism. For those students who opt to not provide cell phone numbers, can request a pager from the Director of Student Affairs at least three weeks prior to starting selectives. A pager will be assigned to the student and must be returned prior to their commencement from the College.

**Accessibility and Accommodations**

At the University of Arizona, we strive to make learning experiences as accessible as possible. If you anticipate or experience barriers based on disability or pregnancy, please contact the Disability Resource Center (520-621-3268, [https://drc.arizona.edu/](https://drc.arizona.edu/)) to establish reasonable accommodations.

**One45: Curriculum Management System**

One45 is the curricular management system used to manage evaluations and assessments, and to access learning materials and schedules. General information about the selectives rotations, such as syllabi, site information, links, etc. will be attached as handouts to each selectives “course” under Handouts and Links within one45. You can access One45 at the web address: [comphx.one45.com](http://comphx.one45.com)

For Faculty and Site Coordinators: If your role requires you to review selective rotation schedules, you can view these schedules, as organized by the Selectives Office, within One45. These schedules include rosters of students scheduled to rotate to your site for specific dates.

Assessments are collected via One45, and automatic emails are sent to assessing attendings with instructions and reminders to complete. A list of pending and completed assessments can be reviewed in One45, if applicable. Students will also use One45 to log observed procedures and diagnoses at clinical sites. Please note that students are able to use their smartphones to make log entries on-the-go, if allowed by site policy.

For Students: One45 will continue as your curricular selective management system and will still be used to complete evaluations and access learning materials. It will also house the schedule, objectives, and materials for your didactic sessions, similar to how your blocks were organized in the MS2 year.

**OASIS: Course Schedule**

The University of Arizona College of Medicine Phoenix uses a web-based scheduling system, Oasis. It maintains site information, student schedules, course catalog, and various other details that are pertinent to the clinical rotations. Oasis has detailed, up to the minute course information and allows students to request schedule changes. All students will use this resource for any scheduling purpose throughout their 3 and 4 year of clinical rotations.

**Student Use of University Sponsored Educational Material**

Statement of Copyrighted Materials: All lecture notes, lectures, study guides and other course materials (besides the required reading) disseminated by the instructor to the students, whether in class or online, are original materials and reflect the intellectual property of the instructor or author of those works. All
readings, study guides, lecture notes and handouts are intended for individual use by students. You may not distribute or reproduce these materials for commercial purposes without the express consent of the instructor. Students who sell or distribute these materials for any use other than their own are in violation of the Arizona Board of Regents Intellectual Property Policy (Available at Arizona Board of Regents Intellectual Property Policy). Violations of the instructors’ copyright may result in course sanctions and violate the Code of Academic Integrity.

Appendix

Selective Specific Requirements

Required Online Modules

Virtual Critical Care Rounds are provided through the Society for Critical Care Medicine (SCCM) website. Students are expected to complete all modules in either the VCCR Adult I or VCCR Pediatric II series based on the Critical Care rotation they are in. Each student will be provided with a login and password for both series. The ICU Orientation (found in the VCCR Adult series) should be completed prior to the rotation by all students.

Pediatric Modules:

1. Virtual Critical Care Rounds Pediatric II Pre-Test
2. Cardiovascular Medications
3. Arrhythmias
4. Shock: Assessment and Therapy
5. Sickle Cell Disease
6. Acute Liver Failure
7. Diabetic Ketoacidosis
8. Status Epilepticus in Pediatrics
9. Traumatic Brain Injury**
10. Acute Kidney Injury in Children
11. Pediatric Acute Respiratory Distress Syndrome
12. Acute Severe Asthma
13. Toxicology
14. Oncologic Emergencies in the Pediatric Intensive Care Unit
15. Virtual Critical Care Rounds Pediatric II Post-Test

Adult Modules:

1. Virtual Critical Care Rounds I Pre-Test
2. Advanced Cardiovascular Life Support (ACLS) and the Rapid Response Team (RRT)
3. Airway Assessment and Management
4. Antibiotics in the ICU
5. Arrhythmias
6. Basic Mechanical Ventilation #1 **
7. Burns Management
8. Critical Care Aspects of Hepatic Failure  
9. Critical Care for Older Adults  
10. Electrolytes  
11. Healthcare-associated Infectious Diseases  
12. ICU Orientation**  
13. Medical Errors  
14. Organ Donation  
15. Palliative Care in the ICU**  
16. Pharmacology and Pharmacokinetics**  
17. Shock  
18. Transfusion Medicine in the ICU**  
19. Trauma Script  
20. Virtual Critical Care Rounds I Post-Test  

Adult Modules: Complete all 20 plus the double starred (**) module Peds TBI.  
Pediatric Modules: Complete all 15 plus the 5 double starred (**) modules in Adult.

Reflective Writing Assignment

Students will complete a reflective writing assignment related to their experiences on the rotation. The reflections should address an ethical, emotional or cultural difficulty that the student encountered. These will serve to inform the ethics and burn-out discussions and allow students to thoughtfully reflect on their experiences. A single page is sufficient. Submit by e-mail the program coordinator prior to Tuesday of the third week of the rotation. Please also print them out or bring an e-copy to the session.

Final Presentation

Each student will research and present a 20-30-minute PowerPoint presentation on a relevant critical care topic during the final academic session of the rotation. The presentation should be focused, well organized and utilize optimal presentation skills. Content should include a case discussion, pertinent physiology and evidence-based practice. See Presentation Grading Rubric for more details. Be ready to answer questions about your topic after the talk.

Nursing Day

Students should take responsibility to schedule themselves to spend one day of clinical rotation at their rotation site shadowing an ICU nurse. The purpose of this experience is to better understand the patient’s experience from an interdisciplinary standpoint and to build collaboration in bedside patient care.
Addendum

The Curriculum Committee has approved curriculum adaptations in response to the COVID-19 pandemic to ensure student’s safety. Curriculum adaptations may include modifications to course expectations, requirements, assessment methods and the expectations for evaluations. For a full listing of curriculum adaptations for AY 2020-2021, please see the following document: Curricular Adaptations.