Dear Colleague:

Thank you for your interest in developing an elective course with the University of Arizona - College of Medicine Phoenix Campus (UACOM-P). We are excited to continue expanding our elective opportunities for our growing number of students. We welcome new educational experiences, as well as enthusiastic faculty who will contribute to the depth and variety of the educational experience of our students during their 4th year of medical school. Included with this letter are a number of resources that will facilitate the creation and formatting of your elective experience.

**Faculty Appointment:** Our accreditation requires that all elective medical directors have faculty status with the university. Please contact Karen Archibald at 602-827-2402 or by email at kma@email.arizona.edu.

**Process for creating a new Elective Course:**

- Review all the materials.
- Complete the New Elective Template using the attached “Instructions for New Elective Template”.
- Send your curriculum vitae and the completed form to Diana Nelson dianapnelson@email.arizona.edu.

**Approval Process**

- Your elective course(s) are processed by the Electives Sub-Committee and the Educational Policy Committee for review/approval. If there are any questions, you will be contacted for recommended changes to the course description.
- If no agreement is in place between the University of Arizona and your facility, a Site Preceptor Agreement will be sent to initiate this process.
- You will be notified once your course has been approved. The course will then be listed in our course catalog and available for student enrollment.

**Elective Scheduling and Site Coordinator Communications:** Elective scheduling is multi-faceted, requiring effective communication for it to be a success. To eliminate confusion the site coordinators are asked to communicate with the UA College of Medicine-Phoenix Elective Program Coordinator Karen Archibald (w: 602-827-2402 / Fax: 602-680-5483 (Attn: Karen) / EM: kma@email.arizona.edu) regarding scheduling and scheduling changes for Phoenix students. Students are also asked to channel their communication in this way until they have been notified by their elective coordinator that they have been accepted into the rotation. By streamlining the channels of communication we hope to improve and manage the detailed process.

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Thank you again for working on your elective and if you have any questions please contact a member of the Electives Program Team.

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Definition of 4th Year Electives
Fourth year medical students complete 8 electives. The standard length is 4 weeks. Of these 8 electives, 3 electives (referred to as selectives) must be completed in the following categories: Surgical Subspecialty, Critical Care or Emergency Medicine and a Sub-Internship in a core discipline. The sub-internship is generally the student’s anticipated career choice and is similar to a PGY-1 residency. The remaining 5 electives may be taken in a variety of different disciplines. Students may also elect to do a research or independent study elective.

Definitions of General Elective Types
Clinical Electives
Clinical electives are a required component of the fourth year medical school curriculum. Electives can be taken in any discipline offered. Clinical (s)electives involve direct patient care or activities that actively impact patient care.

Non-Clinical Elective
Non-clinical electives do not have direct impact on patient care; however, these electives are medical in nature and may include learning experiences from education, teaching, and/or research. In general, faculty contact, supervision, and the organized workload of the non-clinical elective should provide for 45 hours of work for each credit hour.

Research Elective
Research electives are a type of non-clinical elective. They are intended to involve the student in a significant role in the performance of a rigorous research initiative. All research elective proposals must include a detailed “syllabus” or “mini-prospectus” that includes a detailed description of the project, the student’s role in the project, the mentor, the mentoring plan, specific time commitment and involvement, and the work product expected at the end of the rotation. Students intending to work on such rotations must receive prior approval of the rotation and content from the Elective Director and the Scholarly Project director (even for rotations not related to the student’s primary Scholarly Project). Students are expected to determine the specific institutional requirements for their project (e.g., IRB application, lab safety courses, CITI training, etc.) and make sure they are fulfilled prior to beginning the rotation. Students must submit an Elective Preference form for each research rotation and work with contracting to assure that a contract covering research rotations at the site of interest is in place. Finally, students may take no more than 6 credit hours of research time.

Reading Elective
Reading electives are another type of non-clinical elective. They are intended to be supervised, intensive reading-based investigations of a particular topic, with a substantial literature review and production of a detailed report. Reading electives must also provide a detailed syllabus and plan for student mentoring, with specific guidelines on length of the required report, and schedule of meetings for discussions and guidance. Similar to research electives, students may take no more than 6 credit hours of reading elective time.

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Core Sub-Internship Selective

Core sub-internships, or sub-I’s, are fourth year clinical rotations taken in one of six core clinical disciplines: internal medicine, general surgery, pediatrics, obstetrics/gynecology, emergency medicine and family medicine. It serves as an experience which helps prepare students for residency by allowing them to function with increased responsibility compared to third year clerkship rotations. The sub-I rotation should function like a traditional intern or PGY-1 would function.

Students are required to take at least one 4-week sub-internship during their fourth year in a core discipline to meet graduation requirements. This rotation must be taken with a UA faculty preceptor. Any exception must be approved by the Associate Dean for Student Affairs. The following are general criteria by which a rotation will qualify as a core sub-I. These criteria serve as distinguishing characteristics as compared to a third year clerkship rotation or a general fourth year elective rotation.

- Core discipline (IM, general surgery, pediatrics, OB/GYN, emergency medicine or FCM)
- Level of responsibility similar to an intern (PGY-1)
- Responsible for an increased patient load
- Typically caring for patients of higher acuity
- Ability to manage patients at a higher level (time management, increased independence [within supervision], complexity)
- Must involve on-call or after hours experience, initial patient assessments and management plans
- Generally should be an inpatient patient care rotation.
- If primarily ambulatory experience, should include some ED, urgent care and/or ICU coverage (similar to typical PGY-1 schedule)

Although core sub-internship goals and objectives will be specialty specific, these will serve as general guidelines to designate a rotation as a valid sub-I. These rotations must be four weeks in length.

Of note, students may, and likely will, take sub-internship level electives in non-core disciplines during their fourth year, but these rotations will not count toward the core sub-I requirement.
Emergency Medicine Selective

A fourth year Emergency Medicine rotation should be a four-week emergency department based experience. The bulk of the course should occur in the emergency department. Students may spend up to 20% of the time in the intensive care unit following patients who they initially saw in the emergency department and admitted to the hospital. The purpose of this experience outside of the emergency department is to allow students the opportunity to learn how care provided in the emergency department affects inpatient treatment.

The student should have the opportunity to evaluate the patient primarily depending on the patient's condition. The student should also have the opportunity to evaluate a wide range of patients. The rotation will not be observation based, and a student should spend at least 120 hours involved in direct patient care.

An Emergency Medicine attending physician should be present in the emergency department at all times. Although the student may manage cases with emergency medicine residents, attending supervision should always be available.

Specific goals of the clerkship should include:
- Performing a complaint-directed history and physical examination.
- Developing a case-specific differential diagnosis using a worst diagnosis first differential.
- Presenting cases in a clear and concise fashion.
- Other Emergency Medicine based experiences, such as an EMS ride along, are permitted.
Critical Care Selective

A critical care elective should expose the student to a broad experience in the care of critically ill patients. It should occur in a licensed critical care unit (e.g., a medical ICU, surgical ICU, cardiac care unit, neonatal ICU, pediatric ICU, or similar unit), should be full-time, and should involve “on-call”, overnight, or after-hours experiences. It is a 4 week rotation.

The rotation should incorporate a majority of the following 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

- Demonstrate understanding of the management of ventilatory support measures in critically ill patients (including weaning)

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

- Demonstrate understanding of neurocritical care and the management of traumatic brain injury, intracranial hemorrhage, and other intracranial pathology

- Demonstrate ability to manage critical infectious processes, with emphasis on the prevention and treatment of...
• Demonstrate ability 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

Surgical Sub-Specialty Selective

The Surgery Sub-Specialty is a four-week experience encompassing both patient care (ward, clinic or ambulatory setting) as well as an operative/procedural based experience. The expectation of the Preceptor Surgical Staff is to mentor and teach the students, and be available and present at all times to ensure proper training of the students.

The purpose of surgical sub-specialty training is to gain further knowledge and experience in the “global” field of surgery, first obtained during students’ third year. Surgical sub-specialty training will allow the students to learn the nuances and specifics of various surgical fields not initially encountered in the third year. This training is invaluable to those who want to enter surgical training, as well as others who may work in related fields of medicine.

General Objectives:
• Learn the principles of pre-operative, intra-operative and post-operative care through direct patient care involvement
• Observe correlations between clinical presentation of surgical disease and findings at surgery through direct involvement in the operating room
• Improve technical skills as well as overall efficiency in the care of patients through direct responsibility (when applicable)
• Improve skills with other care providers by working within the team framework

The Surgical Sub-Specialty rotation MUST have direct patient care interaction, including the responsibility of the student being an active participant in all aspects of the surgical process. Not only would this necessitate the student being involved in surgical procedures/operations as appropriate, but the rotation must also involve patient care work-ups (history/physical exam), pre-operative assessment and work-up (surgical consent and orders), as well as post-operative evaluation (both in-patient and out-patient dependent on the clinical scenario). This would ensure the student experiences the totality of surgical care, and that the rotation would not be observation based.

Specific goals of the Surgical Sub-Specialty rotation should include but would not be limited to:

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• Performing a complaint-directed history and physical examination including interpretation of laboratory and radiological data
• Developing a case-specific differential diagnosis using a worst diagnosis first differential
• Developing an operative plan to include medical pre-operative work-up, consent, and options for operative therapy in conjunction with the Surgery Staff
• Presenting cases and operative plans in a clear and concise fashion
• Presence and participation in procedures and operations
• Taking call, if required, within the parameters set forth per the University of Arizona, College of Medicine - Phoenix.

Students will be evaluated by the surgical faculty based upon clinical performance as set forth by the University of Arizona, College of Medicine – Phoenix. There will not be a common examination at the end of the rotation, although services may individually require oral examinations, written examinations, and/or formal presentations, at their discretion.

NEW ELECTIVE TEMPLATE

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<thead>
<tr>
<th>DEPT – (TITLE)</th>
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<tbody>
<tr>
<td>Location and Address</td>
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<tr>
<td>Course Director(s)</td>
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<tr>
<td>Contact Person, E-Mail, Phone Number</td>
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<tr>
<td>Week Length</td>
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<td>Does the supervising course director have a UA Faculty Appointment?**</td>
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<tr>
<td>Patient Care or Non-Patient Care</td>
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</tbody>
</table>
| Course Type (Select as many as apply) | ____ General Elective  
| | ____ Sub-internship  
| | ____ Emergency Medicine  
| | ____ Critical Care  
| | ____ Surgical Subspecialty |
| Maximum Enrollment (per time block) |
| Prerequisites (UA requires completion of all 3rd year clerkships prior to the start of the 4th year) |
| Course Goals (2-3) |
| Measurable Course Objectives: (Minimum of 3-5; please be specific) |
| Format |
| Recommended Readings |
| Assessment Methods |

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Additional sites where students may rotate during this elective (e.g. surgicenters, hospitals, clinics)

First Day Requirements (hours, where to go, who to see, what to wear, what to bring)

The information submitted by those who will teach electives is important as it is the only source of information committee members, students, faculty, and administration will see to determine its overall intent and quality. If the submitted content is inadequate or non-descriptive, re-writing the description will be necessary and will delay the process.

Please refer to the “Instructions for New Elective Templates” for assistance and completion of this form. Send completed form to Diana Nelson at dianapnelson@email.arizona.edu or call 602-827-6123 if you have questions.

All elective directors are required to obtain a faculty appointment through the University of Arizona College of Medicine-Phoenix. For further information, please contact Karen Archibald at kma@email.arizona.edu or 602-827-2402.

Instructions for New Elective Template

DEPT and Title – Choose the appropriate department and title for your course. Try to be as specific as possible. For example, a general, outpatient ophthalmology course should be titled “General Outpatient Adult Ophthalmology”, instead of simply “Ophthalmology”. Available departments (DEPT) are:

ANSP (Anesthesia)  NEUP (Neurology)  PSYP (Psychiatry)
EMDP (Emergency Medicine)  OBGP (OB/GYN)  PTHP (Pathology)
FCMP (Family Medicine)  OHPH (Ophthalmology)  RADP (Radiology)
MEDP (Interdepartmental)  ORHP (Orthopedics)  RONP (Radiation Oncology)
MIDP (Medicine)  PEDP (Pediatrics)  SRGP (Surgery)

Location and Address – State the actual primary site for the rotation. For example, a rotation based at a hospital but that involves students travelling to off-site locations would list the hospital (e.g., St. Joseph’s Hospital, or Banner Desert Hospital). A private practice should list the practice name.

Course Director – the curricular and medical director for the course, usually the physician involved with overseeing content and conduct of the course. Director is also responsible for assessments of students.

Contact – the primary contact (including their phone number and email address) desired for scheduling of students; usually the coordinator of medical education at the site for the course.

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**Week Length** – Pre-set to 4 weeks.

**UA Faculty Appointment?** – All elective directors must apply for faculty status if they do not currently hold a UA faculty appointment.

**Patient Care or Non-Patient Care** – based on course description.

**Course Type** – Fourth Year Only - Should be categorized as “General Elective”, “Sub-internship”, “Emergency Medicine”, “Critical Care” or “Surgical Subspecialty”. Please check as many as apply.

**Maximum Enrollment** – The maximum number of students a site has the capacity to take for any one block/rotation. See block dates for 2014-2015 below.

**Prerequisites** – Fourth year students must complete all third year electives prior to starting their fourth year, so there is no need to list specific clerkships prerequisites. Please indicate if a specific fourth year rotation must be completed prior to the start of your rotation (e.g., a student must complete a general anesthesia elective prior to a pediatric anesthesia rotation). Also please include additional requirements the student will be responsible for completing before being considered for an elective (URL links, application processes, etc).

**Course Goals** – Create 2-3 overall general goals for the course.

**Course Objectives** – Objectives must be measurable, defined and specific for students during the rotation. Minimum of 3-5. See the separate document titled “Writing Measurable Learning Objectives” for additional assistance. These can be used for assessing the student.

**Format** – A specific description of the type of clinical and didactic experience the student will receive. This should state what involvement they will have on which specific care teams, what conferences they will go to, presentations required, etc. An elective is acceptable when it’s overall time range is a 40 hour a week experience. The format must describe the *Who, What, When, and Where* of the rotations overall set-up. This includes seminar or conference opportunities as well as expectations of the student, assignments, required texts and where to get them.

**Recommended Readings** – Please list journal articles or textbooks that will augment the student experience in this rotation. Indicate whether these are available in your office or whether our library should obtain them.

**Assessment Methods** – The student assessment is a major component of an elective and must include a brief description of *who will be assessing, how the assessment will occur* and *when the assessment will take place* within the rotation. Their performance will be discussed with them at the completion of the rotation by the direct supervisor using the “U of A Final Report of the Faculty Assessment of Student Performance Form”, which needs to be returned within 14 days to Kelly Lynch, assistant registrar at klynch1@email.arizona.edu. The assessment should be based on the core competencies: 1.) Patient Care, 2.) Medical Knowledge, 3.) Practiced Based Learning and Improvement, 4.) Interpersonal and Communication Skills, 5.) Professionalism, and 6.) Systems-Based Practice and Population Health.
**First Day Requirements** – Students will need to know what time to report, what to wear, as well as any institutional requirements such as applications, badges, or other requirements that will allow the student to start and complete their rotation.

### 2014-2015 Academic Calendar/Electives

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<th>Block #</th>
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INTERSESSION-STUDENTS ON CAMPUS