














**Baylor College of Medicine  
Department of Orthopedic Surgery**



**Orthopedic Selective Rotation  
For Medical Students**

**Course Overview Document**

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## ➤ Introduction and Overview

- The selective rotation in Orthopedic Surgery is designed to provide medical students with an exposure to the field of Orthopedic Surgery through lectures and clinical experiences over the course of two weeks.
- Course Prerequisites: None

## ➤ Clinical Sites

- Students will be assigned to one of four clinical sites for the two week rotation:
  - Ben Taub [General](#) Hospital
  - Michael E. DeBakey Veterans Affairs Medical Center
  - Texas Children's Hospital
  - Baylor St. Luke's Medical Center
- These four settings provide equivalent patient experiences in Orthopedic Surgery along with access to the residents and clinical faculty at each of the sites.

## ➤ Contact Information

- BTGH, VAMC, and TCH has a site preceptor who is responsible for the student and a site coordinator that provides assistance.
- At the Baylor St. Luke's Medical Center site, the student will be assigned to a single clinical faculty instead of being on a service with a site preceptor.
- **Ben Taub Hospital (BTGH)**
  - Preceptor: Christopher H. Perkins, M.D.
    - E-mail: [Christopher.Perkins@bcm.edu](mailto:Christopher.Perkins@bcm.edu)
  - Coordinator: Karol Olquin
    - E-mail: [Karol.Olquin@bcm.edu](mailto:Karol.Olquin@bcm.edu),
    - Office Number: 713-873-3363
- **Michael E. DeBakey Veterans Affairs Medical Center (VAMC)**
  - Preceptor: David Green, M.D.
    - E-mail: [David.Green1a5937@va.gov](mailto:David.Green1a5937@va.gov)
  - Coordinator: Mark Murphy
    - E-mail: [Mark.Murphy6@va.gov](mailto:Mark.Murphy6@va.gov)
    - Office Number: 713-795-7508
- **Texas Children's Hospital (TCH)**
  - Preceptor: Scott Rosenfeld, M.D.
    - E-mail: [sxrosenf@texaschildrenshospital.org](mailto:sxrosenf@texaschildrenshospital.org)
  - Coordinator: Asya Purnel
    - E-mail: [arpurnel@texaschildrenshospital.org](mailto:arpurnel@texaschildrenshospital.org),
    - Office Number: 832-822-3560
- **Baylor St. Luke's Medical Center (BSLMC)**
  - Preceptor: private practice faculty member
    - Individual faculty contact listed on orientation E-mail

- Coordinator: Lane Carpio
  - E-mail: [carpio@bcm.edu](mailto:carpio@bcm.edu)
  - Office Number: 713-986-5664
- **Selective Course Faculty**
  - Christopher Perkins, M.D. (BTGH – Site Director / Course Director)
  - David Green, M.D. (VAMC – Site Director)
  - Scott Rosenfeld, M.D. (TCH – Site Director)
  - Melvyn Harrington, M.D. (BSLMC / McNair / VAMC)
  - Geoffrey Kaung, M.D. (BSLMC / McNair / BTGH)
  - ~~Jason Ahuero, M.D. (BSLMC / McNair)~~
  - William Granberry, M.D. (BSLMC / McNair)
  - Theodore Shybut, M.D. (BSLMC / McNair)
  - Mo Halawi, M.D. (BSLMC / McNair)
  - Chia Wu, M.D. (BSLMC / McNair)
  - Bruce Moseley, M.D. (BSLMC / McNair)
  - [William Phillips, M.D. \(TCH\)](#)
  - [Jackie Hill, M.D. \(TCH\)](#)
  - [Nicole Montgomery, M.D. \(TCH\)](#)

### ➤ **Baylor College of Medicine Learner – Teacher Compact**

- [Learners pursuing a professional career at Baylor assume responsibility to develop in-depth knowledge, acquire and apply special skills, and demonstrate professionalism. Teachers guide and educate learners, and model appropriate attitudes, interpersonal skills and professional behaviors. Core educational staff support both learners and teachers. This Compact serves both as a pledge and a reminder to teachers, learners, and educational staff that moral, ethical and professional behavior by all BCM personnel is essential to the basic principles of this institution.](#)
- **DUTY**
  - [All participants in the education mission have a duty to sustain a learning environment conducive to maintaining the knowledge, attitudes, and skills necessary for providing contemporary standards of professional behavior.](#)
- **INTEGRITY**
  - [All education participants/parties will behave in a manner that reflects individual and institutional commitment to intellectual and moral excellence.](#)
- **RESPECT**
  - [Fundamental to the ethic of professions is respect for every individual. Mutual respect between learners, as newer members of the profession, and their teachers, as experienced professionals, is essential for nurturing that ethic. In addition to individual respect, all educational parties must respect and follow established professional policies.](#)

○ **As a Teacher, I pledge to:**

- Maintain currency in my professional knowledge and skills
- Ensure excellence of the educational curriculum
- Be a Model of professionalism in all of my interactions with faculty, learners, patients, colleagues, and staff
- Respect all faculty, learners, patients, colleagues, and staff as individuals, without regard to gender, age, race, national origin, religion, or sexual orientation; and oppose observed disrespect or bias
- Nurture learner commitment to achieve personal, family, and professional balance
- Recognize and acknowledge expressions of professional attitudes and behaviors as well as the achievement of quantifiable academic excellence
- Respond vigorously to unprofessional behavior and indications of abuse or exploitation of faculty, learners, patients, colleagues, or staff
- Create a safe environment in which faculty, learners, and staff can communicate any concern about breaches of this compact
- Accept responsibility for instilling these attributes in learners and faculty for whom I have responsibility

○ **As a learner, I pledge to:**

- Acquire the knowledge, skills, attitudes, and behaviors necessary to fulfill all established educational objectives
- Embody the professional virtues of integrity, empathy, altruism, compassion, respect, honesty, courage, and trustworthiness
- Respect as individuals, without regard to gender, race, national origin, religion, or sexual orientation, all patients, peers, faculty and staff
- Uphold the highest professional standards and conduct myself accordingly in all interactions with patients, peers, faculty and staff
- Assist my fellow learners in meeting their professional obligations, while fulfilling my own obligations as a professional
- Help create a safe environment in which faculty, learners, and staff can communicate any concern about breaches of this compact

➤ **Course Educational Program Objectives**

- The educational objectives of the selective rotation in Orthopedic Surgery are aligned with the Core Competency Graduation Goals for Baylor College of Medicine.
- Students are expected to achieve these objectives by the end of the two week selective rotation in addition to reviewing the online lecture content provided and completing the quiz.
- The course overview document provided in the orientation E-mail and is available through the Blackboard application.

<u>BCM CCGG</u>	<u>Related Selective Course Objective</u>	<u>Mode of Teaching (Perform / Observe)</u>	<u>Mode of Assessment (Formative / Summative)</u>
<u>2.1</u> <u>2.2</u> <u>2.3</u>	<u>Develop a basic understanding of orthopedic conditions and treatments radiograph interpretation, and applicable orthopedic procedures</u>	<u>Clinical Perform</u>	<u>Formative</u>
<u>3.3</u> <u>3.5</u>	<u>Perform a basic history and physical exam for a patient with an orthopedic condition and present to a resident or faculty member</u>	<u>Clinical Perform</u>	<u>Formative</u>
<u>4.2</u> <u>4.3</u>	<u>Demonstrate the ability to communicate on an orthopedic team or with a faculty mentor regarding patient care and with other persons involved with patient care</u>	<u>Clinical Observe</u>	<u>Formative</u>

- ~~○ Appendix I outlines the specific educational objectives mapped to the BCM Core Competency Graduation Goals for the students and faculty to review.~~
- ~~○ Appendix II contains the specific BCM Core Competency Graduation Goals for the students and faculty to review.~~

## ➤ Baylor College of Medicine Core Competency Graduation Goals (CCGGs)

### 1. Professionalism

Each student graduating from BCM will:

- 1.1. Apply ethical decision making that upholds patient and public trust
- 1.2. Employ honesty, integrity, and respect in all interactions
- 1.3. Demonstrate a commitment to advocate for the needs and well-being of patients, colleagues, and self
- 1.4. Demonstrate caring, compassion, and empathy
- 1.5. Demonstrate awareness of one's own biases and sensitivity to diverse patients and colleagues
- 1.6. Identify and fulfill responsibilities and obligations as a learner and a colleague
- 1.7. Recognize and avoid conflicts of interest
- 1.8. Adhere to patient confidentiality rules and regulations

### 2. Medical knowledge

Each student graduating from BCM will:

- 2.1. Demonstrate knowledge of established and evolving biomedical, clinical, epidemiological, and social-behavioral sciences, as well as the application of this knowledge to diagnose, manage, and prevent disease
- 2.2. Utilize the principles of public health, epidemiology, and biostatistics in identifying and reducing the incidence, prevalence, and severity of disease to improve health

2.3. Interpret diagnostic tests as they relate to common clinical, laboratory, and radiologic findings in the spectrum of health and disease

### **3. Patient care**

**Each student graduating from BCM will:**

3.1. Demonstrate the ability to engage in an inter-professional team in a manner that optimizes safe, effective patient and population-centered care

3.2. Develop and implement patient evaluation and management plans appropriate to all levels of patient acuity

3.3. Develop a prioritized problem list and differential diagnosis using patient's biopsychosocial history, medical records, physical exam findings, and diagnostic studies

3.4. Obtain consent for and perform basic technical procedures competently

3.5. Perform comprehensive and focused biopsychosocial exams in a variety of patient care settings and recognize when each is indicated

3.6. Assess health risks using gender- and age-appropriate criteria and recommend potential preventive and therapeutic interventions

3.7. Select and interpret diagnostic tests accurately

3.8. Interpret physical findings accurately

3.9. Utilize critical thinking to provide appropriate evidence or support for clinical decisions and management of diseases

3.10. Provide timely and accurate documentation of all assessment, plans, interventions, and orders, including prescriptions and transfers-of care between providers or setting

### **4. Interpersonal and communication skills**

**Each student graduating from BCM will:**

4.1. Demonstrate patient-centered interview skills in order to create and sustain a supportive and therapeutic relationship with patients and families

4.2. Demonstrate the ability to communicate effectively, efficiently, and accurately as a member or leader of a health care team

4.3. Demonstrate the ability to effectively communicate and collaborate with colleagues, other health care professionals, or health related agencies

4.4. Apply verbal and written medical communication skills to basic and advanced medical scenarios

### **5. Practice-based learning and improvement**

**Each student graduating from BCM will:**

5.1. Identify personal strengths and deficiencies in one's knowledge, skills, and attitudes to integrate feedback and set personal improvement goals

5.2. Use and manage technology to access medical information resources to expand personal knowledge and make effective decisions

5.3. Apply principles and practices of evidence-based medicine (EBM) in making decisions about prevention, diagnosis, and treatment of disease

### **6. Systems-based practice**

**Each student graduating from BCM will:**

- [6.1. Analyze the roles insurance plans and health care providers play in the health care system and how they affect providers' and patients' behavior](#)
- [6.2. Provide appropriate referral of patients, including ensuring continuity of care throughout transitions between providers or settings, and following up on patient progress and outcomes](#)
- [6.3. Examine the role of quality improvement and clinical pathways in optimizing health systems](#)
- [6.4. Demonstrate the rationale for reporting and addressing events that could affect patient safety](#)

**7. Leadership**

**Building upon the foundation in other domains, each student graduating from BCM will be able to:**

- [7.1. Demonstrate the ability to work effectively as a member of an inter-professional health care team](#)
- [7.2. Demonstrate the ability to give and receive behaviorally-specific feedback](#)
- [7.3. Utilize skills that enhance the learning environment and team functioning](#)

functioning

➤ **You said, We did**

- [We value student feedback. Students should feel free to discuss problems and provide suggestions for improvement throughout the selective rotation. The following are examples of how we used student feedback to implement changes in the course:](#)

<u>Evaluation Year</u>	<u>YOU SAID:</u>	<u>WE DID:</u>
<a href="#">2017</a>	<a href="#">The selective and elective course director were not effective in their roles</a>	<a href="#">Improved the course orientation and dissemination of information. Instituted a face-to-face orientation with the course director</a>
<a href="#">2017</a>	<a href="#">Duty hours violation rate of 10%</a>	<a href="#">Better defined the required overnight call and specifically discussed duty hours in the course overview document. Will also discuss in the face-to-face course orientation with the course director.</a>
<a href="#">2017</a>	<a href="#">Issues with course information such as accessing lectures / quiz, site notification, badge access, location of BTH ortho office</a>	<a href="#">Improved the course orientation and dissemination of information. Instituted a face-to-face orientation with the course director</a>
<a href="#">2017</a>	<a href="#">Feedback from faculty could be improved</a>	<a href="#">Improved the faculty education in regards to student feedback and assessment. Selective and elective medical student rotations are discussed at each Residency Review Committee Meeting.</a>
<a href="#">2017</a>	<a href="#">Negative comments in student evaluations with two faculty members</a>	<a href="#">One faculty member is no longer with BCM and the other faculty member was given specific feedback in regards to performance.</a>



<a href="#">2017</a>	<a href="#">Teaching sessions and performance measures could be improved</a>	<a href="#">Will consider revising lectures after one full year of data is obtained with the electronic blackboard format. Faculty education will be performed in regards to the evaluation process including performance measures.</a>
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## ➤ **Student Roles, Responsibilities, and Activities**

### ○ **Before the Rotation Begins**

- The student will be contacted by E-mail by the course coordinator to provide assignments and instructions.
- The student is responsible for obtaining the necessary identification badges and computer access prior to the first day of the rotation.

### ○ **Roles and Responsibilities**

- The student will participate in all educational and clinical activities while on the rotation.
- The student will be expected to function as part of the health care team or as an assistant if paired with a single clinical faculty.
- The student is expected to behave in a professional manner in all settings in concordance with the guidelines of the College of Medicine.

### ○ **Lectures and Quiz**

- Students will have four lectures in trauma, spine, joints, and sports that will be available to be viewed online through the Blackboard application.
- Quiz will be administered at upon the completion of the four online lectures and the student must achieve a minimum score of 80% to consider this requirement complete.
- An incomplete grade will be assigned until the student views the lectures and completes the quiz.
- 7:00am to 8:00 am is protected academic time Monday through Friday for reviewing or attending lectures.

### ○ **Call Requirement**

- Each student is required to take one overnight call during their rotation at Ben Taub General Hospital that begins at 6pm following the completion of their work for the day.
- The student will arrive at the second floor orthopedic office located between the green and purple elevators and page the bone beeper upon arrival if the junior resident is not in the office.
- The student must have the resident sign their attestation form at the completion of their call shift.

- There are two call rooms for the orthopedic service in addition to a hotel system for a third call room to accommodate all overnight residents and the student at BTGH.
- Students are responsible for Morning Report and transition of care activities after a full overnight call and are required to go home immediately afterwards.
- The student is not to exceed their duty hour regulations as defined by the college of medicine. The student will report potential violations to the site preceptor immediately and adjustments to the schedule will be made to prevent possible violations.

○ **Clinical Experiences**

- Each student will be expected see the following possible orthopedic conditions during the rotation:
  - Bone Pain
  - Joint Pain
  - Spine Condition

Patient Type / Clinical Condition	Procedure / Skills	Clinical Setting(s)	Level of Student Responsibility	Minimum # Required	Alternative Methods Used for Remedying Clinical Encounter Gaps	Alternative Methods were Used by 25% or More Students Y/N	Change for 2017? Y/N
Bone / joint pain or spinal condition	History and physical exam	Ambulatory	Perform	1	Read <a href="#">Access Surgery</a> chapter on Orthopedics	No	No
Edit:							
Any orthopedic patient	Interpretation of a bone radiograph	Ambulatory	Perform	1	Meet the selective director and be provided a musculoskeletal radiograph to read or review Teach Me Anatomy video on pelvic xrays: <a href="https://www.youtube.com/watch?v=MIXzSOBIHsY">https://www.youtube.com/watch?v=MIXzSOBIHsY</a>	No	No
Edit:							
Any orthopedic patient	Application of a splint or cast	Ambulatory	Assist	1	Meet at BTGH Ortho Office and will apply a splint or cast or review NEJM video on splinting: <a href="https://www.youtube.com/watch?v=O_bsrtXVpTA">https://www.youtube.com/watch?v=O_bsrtXVpTA</a>	No	No

Edit:							
Any orthopedic patient	Surgical procedure performed on a bone / joint / spine	Inpatient	Observe	1	Review Medstar Health video on total hip replacement: <a href="https://www.youtube.com/watch?v=ntwAUA4HuwY">https://www.youtube.com/watch?v=ntwAUA4HuwY</a>	No	No
Edit:							

- Each student is also expected to assist or observe in clinical experiences:
  - History and physical exam
  - Interpretation of a bone radiograph
  - Application of a splint or cast
  - Surgical procedure on a bone, joint, or spine

### ➤ Course Schedule

- The selective course will be two weeks in duration, beginning on a Monday and ending on a Friday. The students have no clinical requirements on the weekends during this time
- The student is expected to be at all academic and clinical activities from Monday through Friday from 6:00am until 6:00pm with weekends off and adhere to the BCM medical student duty hours policy. A link to the policy is provided below: [https://intranet.bcm.edu/index.cfm?fuseaction=Policies.Display\\_Policy&PolicyNumber=28.1.04](https://intranet.bcm.edu/index.cfm?fuseaction=Policies.Display_Policy&PolicyNumber=28.1.04)
- The student are invited to attend any resident lectures, labs, or departmental academic activities while on the rotation.
- The specific schedule of clinical activities at each site will be delineated to the student on the first day of the rotation.
- The students are excused to fulfill any BCM required activities while on the selective rotation.
- There will be no selective students scheduled in the months of January, February, and July. All other months will have 6 students every 2 weeks for a total of 12 students per month.
- All add/drop requests will be handled by the registrar office.
- [The student will meet with the selective course director at BTGH at 5:30am at on the first Monday of the rotation to provide a face-to-face orientation of the rotation.](#) The student will not be allowed to begin the course if they fail to attend this meeting which may result in rescheduling of the course at a later date.

## ➤ Feedback and Evaluation

- Each student will meet with their rotation preceptor in the beginning of the rotation to review the rotation structure, goals, and objectives.
- Formative feedback will be provided to the student from faculty and residents throughout the rotation.
- The student will meet with the site director or clinical faculty at the end of the rotation to discuss their performance on the rotation.
- [The student is encouraged to solicit feedback from the preceptor throughout the rotation in addition to the end of the rotation.](#)
- Student performance evaluations will be sent to the site preceptor or clinical faculty through E\*Value and will be completed within a week of the completion of the rotation by the site preceptor and will include feedback from other faculty members and residents the student worked with while on the rotation.
- [The student will be able to also evaluate the course, director, coordinators, clinical faculty, and residents in a confidential fashion through the E-Value system at the end of the rotation.](#)
- [The student should complete their clinical passport including all appropriate signatures by the end of the rotation.](#)

## ➤ Policies and Procedures

- **Overview**
  - Policies affecting Baylor College of Medicine students in undergraduate medical education may be found on the following BCM intranet sites:
    - <https://intranet.bcm.edu/index.cfm?fuseaction=Policies.Policies&area=28https://intranet.bcm.edu/index.cfm?fuseaction=Policies.Policies&area=23https://intranet.bcm.edu/index.cfm?fuseaction=Policies.Policies&area=26>
  - Additional information may be found in the student handbook:
    - <https://www.bcm.edu/education/schools/medical-school/md-program/student-handbook>
  - Brief descriptions of relevant policies and procedures are provided below; however, please refer to the full policies and procedures for additional information. Please copy and paste the links into your browser for optimal use. While every effort is made to keep the links up to date, please inform the course director if you are unable to locate the policies due to a broken link or other technical problem.
- **Add/drop Policy**
  - <https://media.bcm.edu/documents/2017/a1/add-drop-policy-06-13-2017.pdf>
- **Academic Workload in the Foundational Sciences Curriculum (Policy 28.1.09):**
  - [https://intranet.bcm.edu/index.cfm?fuseaction=Policies.Display\\_Policy&Policy\\_Number=28.1.09](https://intranet.bcm.edu/index.cfm?fuseaction=Policies.Display_Policy&Policy_Number=28.1.09)

- This policy establishes procedures to balance the academic workload, which includes scheduled foundational curriculum responsibilities, classroom learning in multiple formats, independent learning, and time for attention to personal health and well-being.
  - Scheduled learning activities are limited to a maximum of 25 hours per week averaged out over the term.
- **Attendance / Participation and Absences:**
  - <https://www.bcm.edu/education/schools/medical-school/md-program/student-handbook/academic-program/attendance-and-absences>
  - The student will contact the clinical site preceptor or coordinator by phone in the event of an absence.
  - The student will be allowed one excused absence per two week rotation with additional absences will resulting in an incomplete grade and require making up the missed time or entire rotation
  - Any unexcused absences can also negatively affect the students professionalism grade and could result in failure of the course
- **Alternative Educational Site Request Procedure (Policy 28.1.10):**
  - [https://intranet.bcm.edu/index.cfm?fuseaction=Policies.Display\\_Policy&Policy\\_Number=28.1.10](https://intranet.bcm.edu/index.cfm?fuseaction=Policies.Display_Policy&Policy_Number=28.1.10)
  - Clinical Course Directors are responsible for assigning medical students to Educational Sites during clinical rotations, and for approving or denying each student request for an alternative Educational Site assignment based on the rationale and circumstances.
- **Blood Borne Pathogens (Standard Precautions Policy 26.3.06):**
  - [https://www.bcm.edu/education/schools/medical-school/md-program/student-handbook/health-wellnesshttps://intranet.bcm.edu/index.cfm?fuseaction=Policies.Display\\_Policy&Policy\\_Number=26.3.06](https://www.bcm.edu/education/schools/medical-school/md-program/student-handbook/health-wellnesshttps://intranet.bcm.edu/index.cfm?fuseaction=Policies.Display_Policy&Policy_Number=26.3.06)
  - Students are expected to provide the appropriate level of care to all patients while following standard precautions to prevent the spread of infectious diseases due to exposure to human blood or bodily fluid.
  - In the event of an exposure: students should immediately inform their supervisor and should notify the BCM Occupational Health Program (“OHP”) at (713) 798-7880. Please see guidelines and embedded links for additional information.
- **Clinical Supervision of Medical Students (Policy 28.1.08):**
  - [https://intranet.bcm.edu/index.cfm?fuseaction=Policies.Display\\_Policy&Policy\\_Number=28.1.08](https://intranet.bcm.edu/index.cfm?fuseaction=Policies.Display_Policy&Policy_Number=28.1.08)
  - The policy ensures that the level of responsibility delegated to a medical student is commensurate with their level of training, and that activities supervised by Health Professionals are within their scope of practice.

- The level of responsibility delegated to a medical student by a supervising Health Professional must be appropriate to the medical student's level of training, competence, and demonstrated ability.
- Students should only perform clinical tasks for which they have received adequate training.
- Students must inform the supervising Health Professional or Clinical Course Director of concerns about levels of supervision.
- **Code of Conduct:**
  - <https://media.bcm.edu/documents/2015/94/bcm-code-of-conduct-final-june-2015.pdf>
  - The BCM Code of Conduct is our comprehensive framework for ethical and professional standards.
  - It is designed to ensure that all members of the BCM Community understand the expectations to conduct ourselves in an ethical and professional manner while complying with all laws, regulations, rules and policies to the fullest degree.
  - Dress Code
    - The student should review the dress code for the specific site with the site preceptor on the first day of the rotation.
    - The student will wear professional attire with BCM white coat for grand rounds and while on rotation at BSLMC and TCH
- **Compact Between Teachers, Learners and Educational Staff:**
  - <https://www.bcm.edu/education/academic-faculty-affairs/academic-policies/compact>
  - Compact between Teachers, Learners, and Educational Staff Learners pursuing a professional career at Baylor College of Medicine assume responsibility to develop in-depth knowledge, acquire and apply special skills, and demonstrate professionalism.
  - Teachers guide and educate learners, and model appropriate attitudes, interpersonal skills and professional behaviors. Core educational staff support both learners and teachers.
  - This Compact serves both as a pledge and a reminder to teachers, learners, and educational staff that moral, ethical and professional behavior by all Baylor personnel is essential to the basic principles of this institution.
  - Guiding Principles of the Educational Compact
    - Duty: All participants in the education mission have a duty to sustain a learning environment conducive to maintaining the knowledge, attitudes, and skills necessary for providing contemporary standards of professional behavior.
    - Integrity: All education participants/parties will behave in a manner that reflects individual and institutional commitment to intellectual and moral excellence.

- Respect: Fundamental to the ethic of professions is respect for every individual. Mutual respect between learners, as newer members of the profession, and their teachers, as experienced professionals, is essential for nurturing that ethic. In addition to individual respect, all educational parties must respect and follow established professional policies.
- **Course Repeat Policy:**
  - [https://intranet.bcm.edu/index.cfm?fuseaction=Policies.Display\\_Policy&Policy\\_Number=23.1.09](https://intranet.bcm.edu/index.cfm?fuseaction=Policies.Display_Policy&Policy_Number=23.1.09)
- **Direct Observation Policy (Policy 28.1.03):**
  - [https://intranet.bcm.edu/index.cfm?fuseaction=Policies.Display\\_Policy&Policy\\_Number=28.1.03](https://intranet.bcm.edu/index.cfm?fuseaction=Policies.Display_Policy&Policy_Number=28.1.03)
  - BCM physician faculty participating in core clerkships must conduct direct observations of medical students during clinical encounters with patients for the purpose of performing student assessments and providing feedback.
  - Students are encouraged to solicit additional feedback on direct observations from residents and fellows (beyond the requirements for direct observation by physician faculty).
  - For clinical courses, please refer to other sections of the Course Overview Document for course-specific instructions related to direct observation requirements and logging.
- **Duty Hours Policy (Policy 28.1.04):**
  - [https://intranet.bcm.edu/index.cfm?fuseaction=Policies.Display\\_Policy&Policy\\_Number=28.1.04](https://intranet.bcm.edu/index.cfm?fuseaction=Policies.Display_Policy&Policy_Number=28.1.04)
  - This policy outlines the procedures regarding the amount of time medical students spend in required activities, including the total number of hours medical students are required to spend in clinical and educational activities during clerkships.
  - Compliance of this policy is mandatory for all BCM faculty members who teach, facilitate, and / or precept medical students in the clinical setting.
  - Duty hours, including all in-house call activities, must be limited to an average of 80 hours per week over a four-week period.
  - Duty periods may be scheduled to a maximum of 24 hours of continuous duty in the hospital.
  - An additional four hours may be spent to ensure appropriate, effective and safe transition of care. Minimum time off between scheduled duties is 10 hours.
  - Students must also receive a minimum of either 24 hours off per seven-day work period, or four days off per 28-day work period.
  - Please contact the Course Director immediately with any concerns related to duty hour violations or other scheduling questions.

- 10 hours is not required off between the normal day clinical activities and the required overnight call. The overnight call and daytime clinical activities are not considered shifts.
- Students are mandated to go home at 6pm from their daytime clinical activities and do not arrive before 6am.
- Students are mandated to go home after the handoff process is complete following their required overnight call.
- Any reported duty hour violation will be investigated by sending out an E-mail to the students on the rotation soliciting feedback on the violation so that it can be addressed and any necessary changes can be made.
- **Educator Conflicts of Interest Policy (Policy 23.2.04)**
  - [https://intranet.bcm.edu/index.cfm?fuseaction=Policies.Display\\_Policy&Policy\\_Number=23.2.04](https://intranet.bcm.edu/index.cfm?fuseaction=Policies.Display_Policy&Policy_Number=23.2.04)
  - This policy establishes and describes the specific types of educator conflicts of interest and how they are avoided.
  - This policy is designed to keep the learning environment free from real or perceived personal, financial, or other biases that could arise from participating in the assessment, interview, or promotion of any current or prospective student with whom the educator has an existing personal relationship or significant connection.
  - This policy outlines how educators must avoid providing healthcare services to any learner that the educator must also teach, assess, or advise as a part of a BCM educational program.
  - Learners are expected to report an actual or perceived Conflict of Interest that may impact the teacher-learner paradigm.
  - Reports should be directed as follows:
    - Clerkships: report to the Clerkship Director
    - Courses: report to the Course Director
    - Other Issues: Associate Dean of Student Affairs or designee
- **Examinations Guidelines:**
  - <https://www.bcm.edu/education/schools/medical-school/md-program/student-handbook/academic-program/curriculum/examinations-and-grades>
- **Grade Submission Policy (28.1.01):**
  - [https://intranet.bcm.edu/index.cfm?fuseaction=Policies.Display\\_Policy&Policy\\_Number=28.1.01](https://intranet.bcm.edu/index.cfm?fuseaction=Policies.Display_Policy&Policy_Number=28.1.01)
  - BCM Course Directors in the School of Medicine shall submit final grades to the Office of the Registrar within four weeks of the end of a course.
- **Grading Guidelines:**
  - <https://www.bcm.edu/education/schools/medical-school/md-program/student-handbook/academic-program/curriculum/examinations-and-grades>.
  - Grading rubrics and graded components are determined by the individual course and course directors.



- See other section(s) of the Course Overview Document for course-specific grading information.
- **Grade Verification and Grade Appeal Guidelines:**
  - <https://www.bcm.edu/education/schools/medical-school/md-program/student-handbook/academic-program/curriculum/examinations-and-grades>.
  - See also Student Appeals and Grievances Policy (23.1.08).
  - Grade Verification
    - If students have questions about a final course grade, exam grade, or the grading process, BCM strongly encourages them to first verify the grade before pursuing a formal Appeal.
    - Grade verification is an informal process during which the affected student meets with the course and/or clerkship directors to review the grade and discuss any lingering questions.
    - After grade verification, the student may choose to proceed with a formal grade appeal. However, appeals must have merit in order to proceed.
    - Appeals must satisfy criteria described below to trigger reconsideration of the grade, and appeals based on mere disagreement are not valid.
  - Grade Appeal Application
    - Consistent with relevant provisions of school handbooks, students may pursue grade appeals under only the following circumstances:
      - Mistreatment. To prevail on this basis, the grade appeal must allege, and investigatory findings must demonstrate, that the grade was awarded based on factors other than academic or clinical performance, as outlined in the syllabus, or based on Mistreatment, such as discrimination.
      - Deviation from Established Criteria or Guidelines. To prevail on this basis, the grade appeal must allege, and investigatory findings must demonstrate, that the grade awarded was not calculated according to prior established guidelines set forth by the faculty and distributed to students.
      - Calculation Error. To prevail on this basis, the grade appeal must allege, and investigatory findings must demonstrate, that the grade awarded was calculated using false or erroneous information.
- **Institutional Policy on Infectious Disease: (Infection Control and Prevention Plan Policy 26.3.19)**

- [https://intranet.bcm.edu/index.cfm?fuseaction=Policies.Display\\_Policy&policy\\_number=26.3.19](https://intranet.bcm.edu/index.cfm?fuseaction=Policies.Display_Policy&policy_number=26.3.19).
- See also information on Student Health in the student handbook:
- <https://www.bcm.edu/education/schools/medical-school/md-program/student-handbook/health-wellnessLearner>
- **Mistreatment Policy (23.2.02):**
  - [https://intranet.bcm.edu/index.cfm?fuseaction=Policies.Display\\_Policy&Policy\\_Number=23.2.02](https://intranet.bcm.edu/index.cfm?fuseaction=Policies.Display_Policy&Policy_Number=23.2.02)
  - In accordance with relevant BCM accreditation standards, BCM promotes a culture of respect between teacher and learner and works to ensure that the learning environment is free from conduct by faculty, staff, supervising residents, or others that could be reasonably interpreted by Learners as Mistreatment or other misconduct prohibited by BCM policies.
  - Mistreatment refers to behavior that demonstrates disrespect for a Learner and that creates a condition, circumstance, or environment that unreasonably interferes with the learning process.
  - Options for Reporting Learner Mistreatment:
    - Informal Reporting Mechanisms:
      - Office of the Ombudsman.
        - <https://www.bcm.edu/about-us/ombudsb>.
      - Any School Official (Learner’s choice)
    - Formal Reporting Mechanisms:
      - Course Evaluation
      - Integrity Hotline.
        - As described in the Student Appeals & Grievances Policy (23.1.08), Learners may report alleged violations of this Policy through the Integrity Hotline, either by calling the toll-free Hotline number (855-764-7292) or by accessing the Integrity Hotline website ([www.bcm.ethicspoint.com](http://www.bcm.ethicspoint.com)).
        - This reporting mechanism allows Learners the option to pursue complaints and maintain anonymity during the investigation
- **Midterm Feedback Policy (Policy 28.1.02):**
  - [https://intranet.bcm.edu/index.cfm?fuseaction=Policies.Display\\_Policy&Policy\\_Number=28.1.02](https://intranet.bcm.edu/index.cfm?fuseaction=Policies.Display_Policy&Policy_Number=28.1.02)
  - All BCM Course Directors are responsible for ensuring that faculty members who teach, facilitate, or precept medical students provide verbal or written midterm feedback, including an overall evaluation of a student’s progress towards completion of course requirements, in order to allow the student sufficient time for remediation.
  - Foundational Sciences:

- Foundational science Course Directors provide mid-course feedback using a variety of formative examinations, sample questions with delayed release of answers, on-line examinations, homework assignments and laboratory practicums that occur early enough in each term that the student can take actions to remedy deficiencies.
  - The mid-course assessment method is documented in the course overview document which is created for every pre-clinical course by the course director and reviewed and approved by the Associate Dean of Undergraduate Medical Education.
- Clinical Courses
  - Student Midterm Feedback Forms are reviewed by the mid-point of each clinical course by Course Directors and leaders to confirm that they are completed.
  - Faculty members should identify deficiencies in clinical performance and/or completion of course objectives and work with the student to prepare an action plan to resolve any issues.
  - During the midterm feedback evaluation, if any component of the Student Midterm Feedback Form has not been completed, the course director works to address and rectify any deficiencies.
  - At the end of each course, the Curriculum Office surveys students on whether they have received formal feedback.
  - Please refer to other sections of the Course Overview Document for course-specific instructions related to mid-term feedback requirements and documentation.
- **Narrative Assessment Policy (Policy 28.1.11):**
  - [https://intranet.bcm.edu/index.cfm?fuseaction=Policies.Display\\_Policy&Policy\\_Number=28.1.11](https://intranet.bcm.edu/index.cfm?fuseaction=Policies.Display_Policy&Policy_Number=28.1.11)
  - This policy outlines how the School of Medicine Deans and Course / Clerkship Directors work to ensure that when teacher-student interaction permits, a narrative assessment of a student's performance, including their non-cognitive achievement is provided.
  - This assessment is in the form of narrative descriptions of medical student performance, including references to non-cognitive achievement, as a component of the overall assessment in the respective course and/or clerkship.
- **Patient Safety:**
  - Information for Reporting Patient Safety Incidents at BCM Affiliated Institutions:
  - <https://media.bcm.edu/documents/2016/e5/guide-to-reporting-patient-safety-incidents-7.20.2016.pdf>
- **Policy Regarding Harassment, Discrimination and Retaliation (02.2.25):**

- [https://intranet.bcm.edu/index.cfm?fuseaction=Policies.Display\\_Policy&Policy\\_Number=02.2.25](https://intranet.bcm.edu/index.cfm?fuseaction=Policies.Display_Policy&Policy_Number=02.2.25)
- **Religious Holiday and Activity Absence Policy:**
  - <https://www.bcm.edu/education/schools/medical-school/md-program/student-handbook/academic-program/attendance-and-absences/religious-holiday-and-activity-absence-policy>
- **Respectful & Professional Learning Environment Policy: Standards for Student Conduct and College Oversight (Policy 23.2.01):**
  - [https://intranet.bcm.edu/index.cfm?fuseaction=Policies.Display\\_Policy&Policy\\_Number=23.2.01](https://intranet.bcm.edu/index.cfm?fuseaction=Policies.Display_Policy&Policy_Number=23.2.01)
  - The Baylor College of Medicine (BCM) is committed to the values of integrity, respect, teamwork, innovation, and excellence, and requires all BCM Learners to practice these values consistently during the completion of requirements for educational progression and performance of scholarly and professional duties.
  - Creating and sustaining an environment reflective of BCM values is the responsibility of every individual at BCM.
  - This policy outlines the expectations of academic honesty and integrity; professionalism issues relating to alcohol and substance abuse; expectations for proper management of social media and internet use along with use of BCM resources; options for reporting lapses in professionalism against learners.
  - Reporting Breaches in Professional Behavior:
    - Learners may report alleged violations of this policy through the Integrity Hotline either by calling the toll-free Hotline number (855-764-7292) or by accessing the Integrity Hotline website ([www.bcm.ethicspoint.com](http://www.bcm.ethicspoint.com)).
- **Sexual Misconduct and Other Prohibited Conduct Policy (02.2.26):**
  - [https://intranet.bcm.edu/index.cfm?fuseaction=Policies.Display\\_Policy&Policy\\_Number=02.2.26](https://intranet.bcm.edu/index.cfm?fuseaction=Policies.Display_Policy&Policy_Number=02.2.26)
  - See also relevant sections of the student handbook:
  - <https://www.bcm.edu/education/academic-faculty-affairs/academic-policies/title-ix-and-gender-discrimination/education/sexual-harassment>
  - Sexual Harassment is unwelcomed verbal or physical conduct of a sexual nature that is sufficiently severe, pervasive or persistent that it interferes with, denies or limits a person's ability to participate in or benefit from the College's academic environment, educational programs and/or activities, and is based on power differentials or quid pro quo, results in the creation of a hostile environment, or retaliation.
  - Examples of sexual harassment include but are not limited to: an attempt to coerce an unwilling person into a sexual relationship or experience; repeated subjection to egregious, unwelcomed sexual attention; punishment in response to a refusal to comply with a sexual request; a conditioned benefit in response to submission to sexual advances or

requests; acts of sexual violence; domestic violence; dating violence; stalking.

- This policy outlines: several types of prohibited conduct, privacy protection for reporters, complainants, and respondents and options for reporting prohibited conduct to the college.
- **Student Appeals and Grievances Policy (23.1.08):**
  - [https://intranet.bcm.edu/index.cfm?fuseaction=Policies.Display\\_Policy&Policy\\_Number=23.1.08](https://intranet.bcm.edu/index.cfm?fuseaction=Policies.Display_Policy&Policy_Number=23.1.08)
  - When possible, students are encouraged to seek resolution of Informal Grievances through direct communication with the individual involved
  - This may be facilitated by the BCM Ombudsman.
  - Formal Grievances are reported through:
    - The Integrity Hotline: (855) 764-7292
    - Ethics Point  
<https://secure.ethicspoint.com/domain/media/en/gui/35125/index.html>
  - Grade Appeal Procedure: Students must file an Appeal through the Integrity Hotline within 10 calendar days of the grade's posting in the student portal.
  - Adverse Academic Action Appeal Procedure: A student must Appeal an adverse academic action in writing through the Integrity Hotline within 10 calendar days of the issuance of the notice of action by the Student Promotions Committee or Program Director.

## ➤ Course Grading

- **Lecture Attendance**
  - The student must have viewed all four lectures through the Blackboard Application to receive their final grade. Failure to do so will result in an incomplete grade on the rotation.
- **Quiz**
  - The student must have taken the quiz and achieved a minimum score of 80% to receive their final grade.
- **Clinical Performance**
  - The final grade of the student is fully derived from their clinical performance on the rotation.
  - The student will be evaluated using the standard evaluation form for clinical rotations through the E\*Value application.
  - The evaluation at BTGH, VAMC, and TCH is a cumulative evaluation that is completed by the site preceptor. The evaluation at BSLMC is directly from the individual faculty member to which the student is assigned.
  - The evaluation form also accounts for the student's professionalism and clinical performance and provides constructive feedback.

- The clinical performance consists of 10 items, each on a 9 point scale which are averaged and multiplied by 10 to give a final number.
- The clinical performance grade will be assessed using the following scale:
  - Honors 82~~0~~ – 90
  - High Pass 70 – ~~81~~79
  - Pass 40 – 69
  - Marginal Pass 30 – 39
  - Fail 10 – 29
- **Final Grade**
  - The student will receive a final grade based upon their clinical performance and completion of the requirements of the course.
  - Absences or lapses in professionalism may result in a lesser final grade given to the student or course failure.
  - The student may verify or dispute their final grade based upon the policy delineated in the Grade Verification section.
  - The student may refer to the policy on course failure in the instance that a failing grade is received.
  - If an incomplete grade is given, the student will be required to complete the missing requirement before a grade can be given.
  - No clinical evaluations will be considered or factored into your grade once final grades are rendered.
  - Grades will be administered in accordance with the BCM policies.
- **Course Failure**
  - If a student fails the orthopedic selective rotation, they will be required to repeat the course at a later date.
  - The student may file an appeal or grievance in accordance with the policies listed above.
  - The student can only receive the maximum of a pass grade for the repeated rotation.

## ➤ **Recommended Resources**

- **Ben Taub General Hospital**
  - Handbook of Fractures
  - Netter Concise Orthopedic Anatomy
  - Wheelless Orthopedics ([www.wheelessonline.com](http://www.wheelessonline.com))
  - Orthobullets ([www.orthobullets.com](http://www.orthobullets.com))
- **Michael E. DeBakey Veterans Affairs Medical Center**
  - Wheelless Orthopedics ([www.wheelessonline.com](http://www.wheelessonline.com))
  - Orthobullets ([www.orthobullets.com](http://www.orthobullets.com))
- **Texas Children’s Hospital**

- Staheli’s Pediatric Orthopedics
- Wheelless Orthopedics ([www.wheelessonline.com](http://www.wheelessonline.com))
- Orthobullets ([www.orthobullets.com](http://www.orthobullets.com))
- **Baylor St. Luke’s Medical Center**
  - Dependent upon subspecialty of clinical faculty assigned
  - Wheelless Orthopedics ([www.wheelessonline.com](http://www.wheelessonline.com))
  - Orthobullets ([www.orthobullets.com](http://www.orthobullets.com))

**APPENDIX I**  
**BAYLOR COLLEGE OF MEDICINE**  
**DEPARTMENT OF ORTHOPEDIC SURGERY**  
**PROGRAM OBJECTIVES FOR THE SELECTIVE ROTATION**

<b>BCM CCGG</b>	<b>Related Selective Course Objective</b>	<b>Mode of Teaching (Perform / Observe)</b>	<b>Mode of Assessment (Formative / Summative)</b>
2.1 2.2 2.3	Develop a basic understanding of orthopedic conditions and treatments, radiograph interpretation, and applicable orthopedic procedures	Clinical Perform	Formative

3.3 3.5	Perform a basic history and physical exam for a patient with an orthopedic condition and present to a resident or faculty member	Clinical Perform	Formative
4.2 4.3	Demonstrate the ability to communicate on an orthopedic team or with a faculty mentor regarding patient care and with other persons involved with patient care	Clinical Observe	Formative

**APPENDIX II**  
**BAYLOR COLLEGE OF MEDICINE**  
**CORE COMPETENCY GRADUATION GOALS**

**PROFESSIONALISM**

**Each student graduating from BCM will:**

- 1.1. Behave in an ethical manner that upholds patient and public trust:
- Respects bodily integrity of patients and protects patient privacy.
  - Identifies self as a learner.
  - Maintains confidentiality of patient medical information.
  - Sets appropriate boundaries in interpersonal relationships.



1.2. Exhibit honesty and integrity in all interactions:

- Accurately attributes sources in written and oral presentations.
- Accurately represents clinical actions and findings.
- Accountable for the proper care and use of institutional and personal property of others.
- Admits mistakes and errors.

1.3. Advocate for the needs and well-being of patients, learners, and others with whom one serves:

- Altruistically champions patient rights in a manner appropriate to the level of training.
- Respectful and helpful to staff in the learning environment.
- Respectful and supportive of needs of other learners.
- Identifies when patients' needs supersede the student's needs.

1.4. Demonstrate caring, compassion, empathy, and respect:

- Communicates in a polite tone and manner in all exchanges and encounters.
- Sensitive to the emotional needs of others.

1.5. Demonstrate awareness of one's own perspectives and biases:

- Takes action to identify conscious and non-conscious bias that may impact interactions with patients and others.
- Interested and attentive to perspectives and cultural beliefs of others.

1.6. Display self-awareness of performance and dedication to excellence by continual improvement of knowledge, skills, and attitudes:

- Identifies status of competency achievement.
- Plans with assistance (as needed) and implements course of improvement.

1.7. Recognize and take actions to correct deficiencies in one's own behavior, knowledge, and skill:

- Self-assess progress and requests feedback.
- Acknowledges, reflects upon, and takes action in response to feedback for improvement.

1.8. Function well within a team:

- Fulfills assigned roles and requests assistance and/or education when needed.
- Volunteers and equitably contributes to the work of the team.
- Self-regulates behavior to positively impact the team dynamic.

1.9. Fulfill responsibilities and obligations as a learner and colleague:

- Completes all written, oral, and assessment requirements in a timely manner.
- Polite and attentive during lectures and other learning activities.
- Completes all administrative requirements (i.e. scheduling, immunizations, evaluations) in a timely manner.
- Punctually attends all required educational sessions.

1.10. Recognize and avoid conflicts of interest:

- Complies with BCM conflict of interest policy for interactions with industry.

1.11. Attend to balance in commitments to self and others:

- Recognizes signs of impairment in self and others and seeks appropriate action.
- Strives to develop personal habits that promote social, physical, and mental health and well-being.

## **MEDICAL KNOWLEDGE**

**Each student graduating from BCM will know the:**

2.1. Basic sciences pertaining to health and the development and course of disease:

- Examples of pre-clerkship objectives:
  - List the nutritional needs for growth and development from neonates to elderly.
  - Describe the normal structure and function of the body and its organ systems.
  - Describe the molecular, biochemical, and cellular mechanisms for homeostasis and chronic disease.

2.2. Interaction of the mind and body in both healthy and diseased states across the life span:

- Examples of pre-clerkship objectives:
  - List the biological, cognitive, and emotional correlates of stress.
  - Describe the relationship of mental health and physical health.
  - Describe healthy lifestyles that prevent disease and promote health at different stages of life.
- Examples of post-clerkship objectives:
  - Describe the long-term cognitive, emotional, and behavioral consequences of common chronic illnesses.
  - Explain mind-body determinates of vulnerability to disease at different stages of life.
  - Describe the interaction of spirituality and health, illness, and medical care.
  - Describe the distinction between correlates of stress and diagnosable mental disorders.

2.3. Pathophysiology, presenting signs and symptoms, and current diagnostic and treatment strategies, both traditional and nontraditional, for common diseases and health-related conditions across the life span:

- Examples of pre-clerkship objectives:
  - Differentiate between acute and chronic illness.
  - Define the concept of illness and disease. List the various causes (genetics, developmental, metabolic, toxic, microbiologic, autoimmune, neoplastic, degenerative, traumatic, and functional) of diseases and the ways in which they operate on the body (pathogenesis).
  - Describe and understand the scientific method in establishing the causation of disease and efficacy of traditional and nontraditional therapies.
  - Describe allopathic and integrative treatment strategies for common illnesses.
- Examples of post-clerkship objectives:
  - List the work up for common illnesses.
  - Describe typical and atypical presentations of common disease.

2.4. Developmental changes and seminal events across the life span which affect health, disease, and therapeutics:

- Examples of pre-clerkship objectives:
  - Describe the cognitive, emotional, and physical challenges across the continuum of lifecycle stages.
  - Describe major individual and family lifecycle events which effect health and disease.
- Examples of post-clerkship objectives:
  - None

2.5. Epidemiology and biopsychosocial determinants of common diseases for promoting health and preventing disease:

- Examples of pre-clerkship objectives:
  - Differentiate primary, secondary, and tertiary prevention.

- Describe the concept of "at risk" populations. Describe the epidemiology of common diseases across the lifespan, genders, and population subgroups. Describe principles of population-based medicine.

- Examples of post-clerkship objectives:

- List the most common causes of death for age groups across the lifecycle.
- Describe the influence of environmental agents on human health.
- Outline preventive strategies across stages in the lifecycle.
- Describe and list risk factors for preventable diseases.
- Describe how preventive recommendations are altered by risk stratification.
- Describe the role of periodic preventive health assessment and routine preventive services.

## 2.6. Indicators of medical emergencies and steps of initial evaluation and care:

- Examples of pre-clerkship objectives:

- Describe common medical urgencies.
- List the steps of basic life support (BLS).
- Describe the basic steps of first aid.

- Examples of post-clerkship objectives:

- Describe the algorithms of advanced cardiac life support (ACLS).

## 2.7. Strengths, weaknesses, and underlying scientific principles of common laboratory tests and diagnostic procedures:

- Examples of pre-clerkship objectives:

- Describe the process for establishing normal values for laboratory tests.
- Describe the impact of measurement error on test interpretation.
- Describe the impact of prevalence and pretest probability on predictive value of positive and negative tests.
- Describe the impact of negative and positive likelihood ratios on the probability of disease.
- Describe the role of the "gold standard" in assessing the utility of diagnostic tests.
- Describe the trade-off between sensitivity and specificity when setting cut-offs for abnormal test results.

- Examples of post-clerkship objectives

- None

## 2.8. Principles of evidence-based practice:

- Examples of pre-clerkship objectives

- None

- Examples of post-clerkship objectives

- List the US Preventive Services Task Force Guidelines for lifecycle age groups.
- Differentiate preventive recommendations based on expert opinions from recommendations based on evidence-based studies.
- Describe the physician's responsibility to choose effective diagnostic and therapeutic modalities based on the best evidence and the patient's priorities.

## 2.9. Principles and process of informed consent, advanced directives, durable power of attorney:

- Examples of pre-clerkship objectives:

- Describe elements of informed consent, advanced directives and durable power of attorney.

- Examples of post-clerkship objectives:

- Describe the process for obtaining informed consent, advanced directives and durable power of attorney.

## 2.10. Principles and conceptual models of behavior change:

- Examples of pre-clerkship objectives:

- None
- Examples of post-clerkship objectives:
  - None

## **PATIENT CARE**

### **Each student graduating from BCM will be able to:**

#### **3.1. Perform comprehensive and focused biomedical, behavioral and social histories and physical exams:**

- Examples of pre-clerkship objectives:
  - Demonstrate elements of the patient-physician relations that encourage patient trust.
  - Demonstrate the ability to effectively elicit and record family information.
  - Describe and demonstrate a structured approach to performing a comprehensive physical examination.
  - Describe how to maintain patient comfort, modesty, and privacy for pelvic, breast, scrotal, and rectal exams, outlining methods of doctor-patient interaction and appropriate means of maintaining patient privacy.
  - Demonstrate a patient-centered interview.
  - Demonstrate the correct use of medical terminology for the history and physical examination.
- Examples of post-clerkship objectives
  - Demonstrate cultural awareness by developing rapport and learning the patient's perspective through active listening skills.
  - Demonstrate an accurate and comprehensive history, including risk factors, patient's perspective and stage of readiness for change.
  - Conduct a sexual history in a nonjudgmental manner, with empathy and without shame or embarrassment.
  - Demonstrate each of the three basic functions of the interview: a) gathering data, b) building rapport and responding to patient's emotions, c) education, negotiation, and motivation.
  - Demonstrate systematic examination of infants and children.

#### **3.2. Recognize when a focused versus a comprehensive history and physical is indicated:**

- Examples of pre-clerkship objectives:
  - None
- Examples of post-clerkship objectives:
  - Describe how problem-solving strategies guide the focused history and physical examination.
  - Demonstrate a systematic method for focusing the history and physical examination.
  - Describe circumstances in which a comprehensive examination is indicated, and circumstances in which a focused examination is indicated.

#### **3.3. Assess health risks using age-appropriate criteria, identify high-risk individuals, and recommend potential preventive and therapeutic interventions:**

- Examples of pre-clerkship objectives:
  - List the risk factors for the leading causes of death and how patients can alter modifiable risk factors.
  - Describe the epidemiology of common diseases across the lifespan, gender, and population subgroups.
- Examples of post-clerkship objectives:
  - Describe the rationale for the "screening examination" and list reason why specific maneuvers are included.
  - Describe the importance of the periodic health examination and utilization of the preventive services.

- Describe the role of behavioral change as a cornerstone of health promotion, including primary prevention for health related behaviors, such as diet, exercises, smoking, sexual activity, stress management, and violent behaviors.

#### 3.4. Accurately interpret physical findings:

- Examples of pre-clerkship objectives:
  - None
- Examples of post-clerkship objectives:
  - Describe normal versus abnormal examination findings, and correlate with pathophysiology, in each of the following systems or areas: a) HEENT, b) neck, c) cardiovascular, e) pulmonary, f) abdominal, g) pelvic, h) scrotal, i) recta.

#### 3.5. Independently formulate a relevant problem list and differential diagnosis using patient's biomedical, behavioral, and social history; medical records; collateral information; physical exam findings; and ancillary studies:

- Examples of pre-clerkship objectives:
  - None
- Examples of post-clerkship objectives:
  - Generate and pursue multiple hypotheses in the interview and physical examination, linking the development of clinical reasoning with pathophysiology.
  - Develop a thorough by concise problem list based on the history and physical examination.
  - Demonstrate a systematic approach to differential diagnosis.
  - Describe biopsychosocial approaches to diagnosis and limitations of a strictly biomedical approach to patients.

#### 3.6. Provide appropriate evidence or support for clinical decisions:

- Examples of pre-clerkship objectives:
  - None
- Examples of post-clerkship objectives:
  - Describe and demonstrate how the "science" of medicine leads to applying reliable diagnostic standards and predicts the necessary care to be provided.
  - Demonstrate principles of clinical decision making by showing how to articulate the logic behind the process of development and prioritization within the differential diagnosis.
  - Communicate and defend a diagnostic approach based on likelihood of diagnosis.
  - Describe ways in which physicians might effectively utilize the interdisciplinary approach in various practice settings, such as HMOs versus private practice or specialty versus primary care.

#### 3.7. Select and accurately interpret diagnostic tests

- Examples of pre-clerkship objectives:
  - Demonstrate how to calculate heart rate, determine an electrocardiograph axis, measure the PR, QRS, and QT intervals, and a strategy to identify heart rhythm on an EKG.
  - Describe the anatomy of the thorax seen on chest X-ray.
- Examples of post-clerkship objectives:
  - Demonstrate a standardized approach to chest X-ray reading.
  - Describe the EKG findings of myocardial ischemia.
  - Describe the pulmonary function test findings compatible with obstructive and restrictive mechanics of breathing.
  - Identify common pathological findings seen on chest X-ray and describe them accurately.

#### 3.8. Competently perform basic technical procedures

- Examples of pre-clerkship objectives:
  - None
- Examples of post-clerkship objectives:

- None

3.9. Initiate therapeutic and preventive interventions for common acute and chronic conditions and assess the effects of those interventions:

- Examples of pre-clerkship objectives:

- None

- Examples of post-clerkship objectives:

- Describe how the following variables influence patient adherence to treatment plans: demographic characteristics, patient/physician congruence in problem definition, patient concerns, cost, complexity of treatment, duration of treatment, and side effects.
- Describe how the use of drugs should be based on logical assessment of potential etiologies for the illness and cost of medication.
- Describe methods of measuring patient non-adherence: clinician perception, patient self-report, medication measurements, clinical outcomes, direct chemical analysis, medication monitors.
- Describe ways physicians and health care providers of integrative approaches and therapies (CAM) could best work together to discover an integrated approach to patient care.

3.10. Appreciate the multi-dimensional experience of pain, including the physical, cultural and psychological aspects:

- Examples of pre-clerkship objectives:

- None

- Examples of post-clerkship objectives:

- Describe the influence of psychosocial variables (e.g., patient-provider interaction, physician frustration, patient interest in alternative health care, effects of information and education, behavioral/environmental factors, and health beliefs models) on experiences of each.

3.11. Assess severity, cause, and impact of pain and propose appropriate individualized pain management plan:

- Examples of pre-clerkship objectives:

- None

- Examples of post-clerkship objectives:

- Describe advantages of an interdisciplinary approach to care, including realizing the benefits of the biopsychosocial model in comprehensive care.
- Describe specific treatment interventions that can enhance pain management.

## **INTERPERSONAL AND COMMUNICATION SKILLS**

**Each student graduating from BCM will be able to:**

4.1. Demonstrate effective listening skills

- Examples of pre-clerkship objectives:

- Maintain eye contact at appropriate (e.g., culturally appropriate, socially appropriate) intervals throughout the interview.
- Use silence and nonverbal facilitation to encourage the patient's expression of thought and feelings.
- Elicit the patient's view of health problem(s).
- Demonstrate a patient-centered interview that includes eliciting the patient's entire agenda and his/her story without bias, identifying and responding to emotional cues, summarizing and checking for accuracy of content and interpretation.

- Examples of post-clerkship objectives

- Elicit patient requests, concerns, and expectations from a range of patients diverse in age, gender, race/ethnicity, and socioeconomic background.
- Respond to empathic opportunities by naming the emotions or feelings expressed.

#### 4.2. Demonstrate relationship building skills:

- Examples of pre-clerkship objectives:
  - Acknowledge patient concerns through techniques such as paraphrasing or repeating.
  - Maintain a respectful tone.
  - Greet the patient appropriately.
- Examples of post-clerkship objectives:
  - Express willingness to be helpful to the patient in addressing his/her concerns.
  - Demonstrate validation of the patient's feelings.
  - Support the patient's self-efficacy, such as acknowledging and complimenting the patient on a positive behavior.

#### 4.3. Communicate information in a contextually appropriate, culturally competent manner that empowers others to participate in shared decision making:

- Examples of pre-clerkship objectives:
  - Discuss how the health problem(s) affect the patient's life within his/her cultural context.
  - Avoid use of medical jargon.
- Examples of post-clerkship objectives:
  - Reach a common understanding with the patient on a n elementary description of diagnosis, prognosis, and treatment plan.
  - Demonstrate awareness of the cultural context of a clinical issue.
  - Demonstrate the ability to give patient education in a sensitive fashion and at the level of patient's understanding.

#### 4.4. Apply verbal and written medical communication skills to basic medical scenarios:

- Examples of post-clerkship objectives:
  - Apply effective listening skills (4.1), relationship building skills (4.2), communication in appropriate manner empowering shared decision making (4.3) to straight forward clinical situations

#### 4.5. Apply verbal and written medical communication skills to inter-professional communications:

- Examples of pre-clerkship objectives:
  - Complete a full H&P write-up.
  - Give a succinct case presentation.
- Examples of post-clerkship objectives:
  - Demonstrate the ability to make clear and concise presentations about assigned research topics.
  - Describe basic communication skills that promote effective teamwork and conflict resolution.
  - Give a full H&P presentation.

#### 4.6. Apply verbal and written medical communication skills to advanced medical scenarios:

- Examples of post-clerkship objectives:
  - Apply effective listening (4.1), relationship building (4.2), and communication skills empowering shared decision in difficult clinical situation (e.g., abnormal test results, end-of-life, adverse outcomes)

### **PRACTICE-BASED LEARNING AND IMPROVEMENT**

#### **Each student graduating from BCM will be able to:**

#### 5.1. Describe the rationale and importance of practice-based learning and improvement

- Examples of pre-clerkship objectives:
  - Describe strategies for finding and assessing necessary information.

- Demonstrate skills in self-directed learning by developing clinical questions about their patients and using on-line, or just-in-time, medical information systems to find relevant information sources.
- Describe process of interactive hypothesis testing and identifying information pertinent to the care of patients.
- Examples of post-clerkship objectives:
  - Demonstrate clinical problem-solving skills using information resources.
  - Demonstrate the use of Web sites, on-line search engines, PDA-based programs, information services, and journals to locate information related to patients' health needs.
  - Demonstrate proficiency in self-directed learning by developing clinical questions about their patients and using on-line, or just-in-time, medical information systems to find relevant information sources about their patients.

5.2. Use available technology to access medical information resources (including reports of original research) needed to expand personal knowledge and make effective decisions:

- Examples of pre-clerkship objectives:
  - Describe features, strengths, and weaknesses of common by using study designs.
  - Define basic epidemiological terms and concepts.
  - Define basic biostatistical terms and applications.
  - Know what is meant by the term "gold standard."
  - Use numbers needed to treat to choose among potential treatment options.
  - Contrast recommendations for prevention services based on different levels of evidence.
  - Describe levels of evidence relevant to decisions about biomedical, behavioral, and complimentary treatment.
- Examples of post-clerkship objectives:
  - Describe the difference between efficacy and effectiveness.
  - Describe sources of systematic error that can effect study conclusions.
  - Demonstrate process of critical appraisal of clinical studies.

5.3. Critically evaluate medical information resources

- Examples of pre-clerkship objectives:
  - Know when /when not to perform population screening for a disease.
  - Explain the principle of clinical uncertainty in clinical judgments.
- Examples of post-clerkship objectives:
  - Demonstrate the use of essential concepts of epidemiology, sensitivity, specificity, and predictive values of a test including, pre and post test probabilities.
  - Use sensitivity and specificity of test to choose appropriate test for particular clinical situations.

5.4. Apply principles and practices of evidence-based medicine (EBM) in making decisions about prevention, diagnosis, and treatment of disease:

- Examples of pre-clerkship objectives:
  - List types of sources of clinical guidelines.
  - List levels of evidence for guidelines.
  - Cite pertinent practice guidelines to justify diagnostic and treatment recommendations.
- Examples of post-clerkship objectives
  - None

5.5. Identify, critique, and apply relevant practice guidelines for common conditions

**SYSTEMS BASED PRACTICE**

**Each student graduating from BCM will understand:**



6.1. The roles insurance plans, health care providers, underserved, uninsured, and other parties play in the health care system and how they affect providers' and patients' behaviors

- Examples of pre-clerkship objectives:
  - Describe principles of health policy, medical economics, health services financing, access to medical care, and health disparities.
  - Describe the influence of the pharmaceutical industry in the practice of medicine and the need for adherence to associated ethical guidelines.
- Examples of post-clerkship objectives:
  - Describe basic organizational structures and financing streams of the U.S. health care system.
  - Describe how different methods of cost control affect physicians' relationships with their colleagues, their patients, and society.
  - Describe the strengths and shortcomings of the U.S. system for financing and delivering medical care, particularly to those from underserved/minority groups.

6.2. The process for referring and collaborating with other health care professionals and agencies:

- Examples of post-clerkship objectives:
  - Display teamwork skills with other health care professionals.

6.3. The role of quality improvement and clinical pathways in optimizing health outcomes:

- Examples of post-clerkship objectives:
  - Describe principles of health surveillance.

6.4. The rationale for reporting and addressing events that could affect patient safety:

- Examples of pre-clerkship objectives:
  - Describe principles of identifying adverse drug reactions, infectious diseases, occupational hazards, and environmental exposures.
- Examples of post-clerkship objectives:
  - Describe examples of systems to improve patient safety
  - Describe rationale for reporting of diseases to public health officials.

6.5. How the legal system affects the practice of medicine

- Examples of pre-clerkship objectives:
  - Describe principles of medical licensure and regulation.

6.6. Patient confidentiality rules and regulations

- Examples of pre-clerkship objectives:
  - Describe principles of patient privacy/HIPAA rules, medical record keeping, biomedical ethics.

6.7. Community health resources available for patient and family needs

- Examples of pre-clerkship objectives:
  - Describe principles of long-term health care, skilled nursing facilities, home healthcare services, social services, hospice, palliative care, rehabilitation services.

## **LEADERSHIP**

**Building upon the foundation of competence in the other six domains, each student graduating from BCM will be able to:**

7.1. Demonstrate credibility, initiative, integrity and professional competence needed to gain the confidence and respect of others.

7.2. Demonstrate, through reflective practice, an awareness of emotional states within self and others and handle them appropriately so that they do not interfere with the task at hand.

~~7.3. Work within a group to articulate a vision and set goals and then develop and implement appropriate strategies to achieve them.~~

~~7.4. Use knowledge of organizational and individual behavior to identify, prioritize and initiate suitable change(s) to address clinical and/or organizational problems and challenges.~~