

High ranking learning objectives:

I. Scientific Foundations of Medicine (Year I):		
	Basic Neurobiology of Pain pathways	
1. Anatomy and Physiology	1. Anatomy and Physiology	3.15
•	Know that higher level nociceptive processing occurs in both the limbic and the somatosensory regions of the brain, connections to basal ganglia may influence behavior	3.57
2. Neurochemistry	2. Neurochemistry	3.29
II. Pain Intersession (Year I (late)):		
	Pain Core	
1. Epidemiology, public health and multicultural perspectives	1. Epidemiology, public health and multicultural perspectives	3.55
•	Be able to distinguish between acute and chronic pain	3.93
•	Know the basic properties of psychophysical responses to acute pain in populations	3.71
•	Recognize prevalence and know major sources of chronic pain	3.86
•	Recognize the socioeconomic costs of pain	3.57
2. Pain terminology and pain assessment	2. Pain terminology and pain assessment	3.43
•	Know the IASP definition of pain	3.86
•	Know the formal definitions of mechanism-based classifications of pain, e.g., nociceptive	3.86
3. Approach to the patient with pain	3. Approach to the patient with pain	3.45
•	Know how to structure the interaction into assessment, diagnosis and treatment	3.79
•	Know how to construct a pain differential diagnosis and of the relevance of a detailed history to this process	3.86
•	Know of the importance of an exam and diagnostic testing to obtain an accurate diagnosis	3.93
4. Pain Psychophysics and mechanisms	4. Pain Psychophysics and mechanisms	3.31
•	Be aware of some challenges inherent to evaluating a subjective	3.62

phenomenon

5. Behavioral perspectives on pain	5. Behavioral perspectives on pain	3.61
•	Know the non-specific effects of treatment and that it is essential to distinguish response due to improvement by natural history and placebo effects	3.43
•	Be familiar with the prevalence of placebo response, the patient characteristics that influence placebo response and the relevant characteristics of providers	3.43
•	Demonstrate some understanding how placebo effects occur, e.g., learning, decreased anxiety, expectation and endorphin effects	3.43
•	Know that pain typically has significant effects on behavior including sleep	3.79
•	Know that chronic, severe pain has an impact on psychological functioning	3.79
•	Know that psychosocial factors and co-morbid illness influence pain treatment response	3.79
Pharmacology		
1. COX inhibitors	1. COX inhibitors	3.44
•	Know the major uses of non-specific COX1/2 inhibitors (NSAIDs) and know that these agents are not effective for the treatment of neuropathic pain	3.57
•	Know the advantages and disadvantages of COX2 inhibitors	3.57
•	Recognize that acetaminophen is a COX3 inhibitor and has distinct properties i.e. liver toxicity, analgesia and antipyretic without anti-inflammatory properties	3.57
2. Neuromodulating agents	2. Neuromodulating agents	3.63
•	Know that specific anticonvulsants may be effective in certain pain conditions	3.71
•	Know that anticonvulsants play a major role in adjunctive therapy of many chronic pain states but may have dangerous side effects requiring long-term monitoring	3.71
•	Know that tricyclic antidepressants have been demonstrated over several decades to be effective in the treatment of neuropathic	3.71

pain, cardiac side effects predominate

•	Know that local anesthetics and other sodium channel agents can be effective against both acute and chronic pain	3.64
•	Know topical application of various agents may be of use in some circumstances	3.57
3. Opioids	3. Opioids	3.76
•	Know that pure opioid agonists, partial opioid agonists and mixed agonist/antagonists are all in clinical use and be able to recognize common members of each class	3.71
•	Know that the administration of a mixed agonist/antagonist as well as an opioid antagonist can induce withdrawal in someone treated with opioid agonists	3.71
•	Know that the efficacy of certain opioids is limited by metabolism in a proportion of the population and recognize strategies to adjust medications appropriately	3.64
•	Know the dose limiting side effects of the major opiates and recognize appropriate strategies to address those side effects	3.79
•	Know the symptoms of opiate overdose	3.86
•	Be familiar with the classification system for controlled substances and recognize that combination narcotic analgesics have a lower level of control on their use	3.86
4. Applied basic science/drug development	4. Applied basic science/drug development	2.59
Clinical Skills		
1. Interview skills	1. Interview skills	3.69
•	Understand basic concepts of pain measurement especially the NRS	3.57
•	Know the elements of a detailed pain history, recognize that patients may have multiple painful conditions, details are required for each	3.79
•	Understand the difference between spontaneous and evoked pain	3.57
•	Demonstrate the ability to obtain detailed information about a pain condition	3.71
•	Demonstrate the ability to collaborate with the patient in obtaining	3.64

	pain ratings	
•	Exhibit empathetic responses to a patient with pain as a primary complaint	3.86
2. Exam skills	2. Exam skills	3.82
•	Understand the primacy of examining the body part that hurts	3.79
•	Understand the concept of pain behavior	3.79
•	Demonstrate communication with a patient while examining a painful part	3.86
•	Be able to identify the major exam features that typify painful parts, e.g. tumor	3.79
•	Know how to document the examination of a patient with pain	3.86
•	Be aware of basic findings for major pain conditions e.g. radiculopathy, arthritis	3.86
3. Assessment decisions and treatment decisions	3. Assessment decisions and treatment decisions	3.46
•	Know that multidisciplinary care includes medical care, interventions, rehabilitation, and clinical psychology but recognize that communication is essential and referral does not complete a physician's responsibility to the patient	3.69
•	Know that appropriate assessment tools may include electro-diagnostic studies, bloodwork, imaging e.g., MRI, CT, PET and bone scan; Demonstrate sufficient knowledge to describe the basic characteristics of these tests to a patient [SIDE BAR: fMRI]	3.54
•	Know that treatment decisions require knowledge of the disease and the patient.	3.62
4. Team communication	4. Team communication	3.51
•	Know that care of chronic pain patients requires a multi-disciplinary approach	3.69
•	Know the disciplines most often involved in caring for pain patients	3.62
•	Demonstrate effective strategies for written communication with other specialists	3.38
•	Recognize the central importance of documenting pain assessment and re-assessment	3.54
•	Demonstrate awareness of the need to document substance abuse	3.62

	assessment	
5. Counseling pain patients	5. Counseling pain patients	3.52
•	Know the importance of physician counseling and techniques for communicating	3.62
•	Demonstrate the ability to communicate the importance of collaborative management	3.54
•	Demonstrate effective counseling strategies: collaboration, self-management	3.46
•	Recognize that the ability to counsel appropriately requires knowledge and skill	3.46
6. Prescribing skills	6. Prescribing skills	3.79
•	Correctly complete a model prescription including name, date, formulation, dosing instructions, necessary caveats, amount, refills, signature and identifying information	3.79
•	Demonstrate how to counsel about anticipated or potentially dangerous side effects	3.86
•	Demonstrate use of appropriate laxative regimen when initiating or continuing opiates	3.71
Treatment/Management		
1. Medical/Pharmacological	1. Medical/Pharmacological	3.45
•	Recognize that some pain problems are complex and may require poly-pharmacy	3.57
•	Know the relative indications for each of the major classes of analgesic medications	3.57
2. Nerve blocks and stimulation techniques	2. Nerve blocks and stimulation techniques	2.67
3. Surgical management	3. Surgical management	2.79
4. Rehabilitation (including Acupuncture)	4. Rehabilitation (including Acupuncture)	2.93
5. Clinical Psychological	5. Clinical Psychological	3.27
•	Know that chronic pain influences the psychological characteristics of patients	3.69
Specific Pain Diseases		
1. Acute and surgical pain	1. Acute and surgical pain	3.40
•	Know that acute pain is very prevalent	3.75

•	Be familiar with strategies for pain management in treatment of sprains and strains	3.83
•	Be able to distinguish the essential features of superficial cutaneous pain from deep somatic pain, e.g., viscerotomes, myotomes, sclerotomes and dermatomes and recognize that referred pain is perceived at a distance from the effected organ	3.62
3. Spine pain	3. Spine pain	3.61
•	Know that multiple structures in the spine are innervated, e.g., bones, discs, nerves, muscles; and that these can all contribute to spine pain	3.69
•	Know the basic pattern of sensory dermatomes, the rationale for testing reflexes and the basic mechanics of the straight leg raise exam and basic provocative maneuvers for neck pain	3.71
•	Be able to discuss differences and similarities in the spine pain arising from herniated discs, epidural abscess and Guillian-Barre syndrome	3.43
5. Neuropathic pain	5. Neuropathic pain	3.43
•	Know the definition of neuropathic pain, recognize the special pharmacology	3.64
•	Understand that although neuropathic pain can arise from different levels of the nervous system, some areas are more common as pain generators	3.43
•	Know properties of common neuropathic phenomena, e.g. carpal tunnel, sciatica	3.36
6. Oncologic pain	6. Oncologic pain	3.32
•	Be familiar with the WHO pain ladder approach to treatment and recent modifications to that approach advocating entry at a higher step for severe pain	3.64
7. Visceral pain	7. Visceral pain	3.43
•	Know the major structures responsible for visceral pain	3.57
•	Know the primary clinical characteristics of visceral pain and some treatments	3.57
8. Musculoskeletal pain	8. Musculoskeletal pain	3.52
•	Know that osteoarthritis (OA) is the most common cause of chronic	3.64

	pain worldwide	
•	Know that multiple modalities of treatment are appropriate for treating osteoarthritis	3.71
•	Know that pharmacological management can use local and systemic agents	3.79
•	Know that surgical intervention may play a critical role in pain relief in OA	3.25
9. Pain in older adults	9. Pain in older adults	3.43
•	Know the basic prevalence of major causes of pain in the older adult population	3.57
•	Be aware that pain processing and pain communication may change with dementing illness	3.50
•	Know that metabolism of some pain-active medications changes with age	3.50
Pain Challenges		
3. Drug Addiction	3. Drug Addiction	3.55
•	Know the definitions of addiction, tolerance, substance abuse and dependence	3.93
•	Know the fundamental elements of the reward pathways	3.57
•	Be aware of the scope of prescription and non-prescription drug abuse in the U.S.	3.71
•	Be aware of patterns of drug diversion and recent actions by the DEA	3.57
4. Co-morbid illness	4. Co-morbid illness	3.58
•	Know that there is a relationship between pain and depression; and that anxiety syndromes, somatoform disorder and substance abuse impact on pain patients	3.69
•	Know that medical co-morbidities often determine pharmacological treatment of pain	3.67
•	Be aware of the relationship of domestic abuse and chronic pain	3.38
5. Medico-legal, i.e. licensing and documentation	5. Medico-legal, i.e. licensing and documentation	3.38
•	Know the obligations for credentialing and documentation of controlled substances	3.58

•	Know the obligations for treatment of pain and the implications of under-treatment	3.58
•	Recognize appropriate and inappropriate strategies for documenting pain treatment	3.50
6. Pain emergencies	6. Pain emergencies	3.50
•	Be familiar with common pain emergencies in each major organ system	3.67
•	Know the first steps in beginning the evaluation of major pain emergencies including head pain, back pain chest pain, abdominal pain, pelvis pain and limb pain	3.83
7. Cognitively impaired populations	7. Cognitively impaired populations	3.67
•	Know that patients with impaired communication still experience pain	3.83
•	Be familiar with alternative strategies for assessing and treating pain	3.50
8. Complimentary and Alternative Approaches (including acupuncture)	8. Complimentary and Alternative Approaches (including acupuncture)	2.72
9. Ethics of pain treatment and research	9. Ethics of pain treatment and research	3.38
•	Know that experimentation in animals and humans is strictly regulated	3.33
•	Recognize the human right to a reduction of suffering	3.42
III. Clinical Training (Year IV):		
Advanced topics in Pain Medicine		
1. Clinical skills	1. Clinical skills	3.64
•	Be able to perform rapid and comprehensive pain assessment	3.64
2. Clinical reasoning	2. Clinical reasoning	3.61
•	Formulate a pain differential diagnosis	3.71
•	Exercise newly acquired knowledge of pain through case histories and laboratory work	3.50
3. Core knowledge	3. Core knowledge	3.74
•	Show a foundation knowledge of pain anatomy and physiology	3.64
•	Exhibit knowledge of major pharmacological pain treatments and their side effects	3.79
•	Exhibit knowledge of principal non-pharmacological pain treatments	3.79

4. Critical and cutting edge entities	4. Critical and cutting edge entities	3.38
•	Be familiar with diagnosis and initial management of pain complaints with catastrophic potential, e.g. leg pain/DVT, headache/SAH, chest pain/aortic dissection	3.86
•	Be aware of selected pain conditions that represent the extremes of chronic pain, e.g. CRPS, PHN, phantom pain and trigeminal neuralgia	3.43
•	Be aware of literature suggesting that aggressive, early pain management lessens chronic pain	3.50
5. Communication	5. Communication	3.82
•	Demonstrate skills necessary to communicate with patients about pain	3.86
•	Be able to communicate with other healthcare providers about pain	3.79
6. Compassionate care and empathy	6. Compassionate care and empathy	3.93
•	Demonstrate knowledge of and promote compassionate care practices	3.93
•	Display empathetic responses to patients with pain as a primary complaint	3.93

Moderately ranking learning objectives:

I. Scientific Foundations of Medicine (Year I):		
		Basic Neurobiology of Pain pathways
0.5	1. Anatomy and Physiology	1. Anatomy and Physiology
	•	Know some specific features of primary afferent neurons involved in pain signaling
3		3.14
8.5	2. Neurochemistry	2. Neurochemistry
	•	Understand that descending inhibition is mediated by specific neurotransmitters released in response to excitation of neurons in specific supraspinal nuclei
11		3.29
12	•	Recognize that descending facilitation of pain processing occurs via
		3.29

distinct neurotransmitters

12.2	II. Pain Intercession (Year I (late)):		
12.4		Pain Core	
12.5	<i>1. Epidemiology, public health and multicultural perspectives</i>	<i>1. Epidemiology, public health and multicultural perspectives</i>	3.55
17	•	Recognize that different cultures may ascribe different meaning to pain	3.36
19	•	Identify initiatives to educate about pain and prevent chronic pain	3.36
19.5	<i>2. Pain terminology and pain assessment</i>	<i>2. Pain terminology and pain assessment</i>	3.43
24	•	Understand basic concepts of pain measurement	3.64
43.2		Pharmacology	
43.5	<i>1. COX inhibitors</i>	<i>1. COX inhibitors</i>	3.44
44	•	Know the classifications of major analgesics by specificity of COX inhibition	3.57
82.5	<i>4. Team communication</i>	<i>4. Team communication</i>	3.51
86	•	Identify effective strategies for non-written communication with other care providers	3.23
95.2		Treatment/Management	
95.5	<i>1. Medical/Pharmacological</i>	<i>1. Medical/Pharmacological</i>	3.45
97	•	Demonstrate effective strategies for assessing potential drug interactions	3.43
118.5	<i>2. Pediatric pain</i>	<i>2. Pediatric pain</i>	3.17
119	•	Know that the ability to communicate pain is age dependent and be familiar with multiple age appropriate pain assessment strategies	3.46
123	•	Know that sickle cell disease represents an important pain management challenge	3.31
126.5	<i>4. Headache</i>	<i>4. Headache</i>	3.17
127	•	Know the principle distinguishing characteristics of migraine headache, subarachnoid hemorrhage headache, brain tumor associate headache and headache of temporal arteritis	3.43
140.5	<i>8. Musculoskeletal pain</i>	<i>8. Musculoskeletal pain</i>	3.52
145	•	Recognize other common causes of bone pain and arthralgias, i.e. RA,	3.21

Lyme

145.5	9. Pain in older adults	9. Pain in older adults	3.43
150	•	Recognize that some pain treatments elicit specific concerns that increase with aging	3.29
150.2		Pain Challenges	
150.5	1. Difficult patient, Personality d/o	1. Difficult patient, Personality d/o	3.39
151	•	Identify personality characteristics that may be present in difficult patients	3.43
152	•	Identify emotional traits that may characterize difficult patients, e.g. catastrophizing	3.36
153	•	Understand that chronic pain is a very severe stressor	3.43
154	•	Be aware that trait characteristics may change in response to chronic pain	3.36
154.5	2. Employment issues (impairment and litigation)	2. Employment issues (impairment and litigation)	3.15
155	•	Know the definitions of impairment, disability and handicap; know that there are multiple scales for assessing impairment and disability	3.38
157	•	Know that litigation has multiple effects on recovery and response to pain treatments	3.15

Low ranking learning objectives (for medical students, may be more appropriate to more advanced learners):

I. Scientific Foundations of Medicine (Year I):			
Basic Neurobiology of Pain pathways			
0.5	1. Anatomy and Physiology	1. Anatomy and Physiology	3.15
2	•	Know basic properties of multiple classes of primary afferent neurons	3.00
4	•	Know the organization of the spinal cord into Rexed laminae	3.07
5	•	Know the role of the specific dorsal horn laminae in pain signaling	3.00

6	•	Understand that ascending pain transmission occurs by oligo- and poly- synaptic pathways; know key pathway components and that these pathways are under ongoing revision	2.93
8	•	Know the role of major specific nuclei in the brain and brain stem controlling descending inhibition and facilitation of pain signals	3.00
8.5	2. Neurochemistry	2. Neurochemistry	3.29
10	•	Know the principle neurotransmitters and receptors/molecular pathways responsible for nociceptive signaling in the dorsal horn	3.21
12.2	II. Pain Intersession (Year I (late)):		
12.4	Pain Core		
12.5	1. Epidemiology, public health and multicultural perspectives	1. Epidemiology, public health and multicultural perspectives	3.55
16	•	Know the prevalence of pain in various socioeconomic and ethnic groups	3.07
19.5	2. Pain terminology and pain assessment	2. Pain terminology and pain assessment	3.43
22	•	Know the major historical landmarks in the evolution of understanding pain	2.64
23	•	Know of and how to apply pain assessment tools used commonly today	3.43
25	•	Be familiar with a variety of outcome measures used in clinical studies of pain	3.14
26	•	Be familiar with different strategies for communicating about pain for special populations	3.43
26.5	3. Approach to the patient with pain	3. Approach to the patient with pain	3.45
28	•	Know the Pain Alphabet (De Gowan): Q-quality, R-region, S-severity, T-timing	3.29
29	•	Know the expanded Pain Alphabet: U-usually associated with, V-very much better with, W-worse with, X-expect to treat, Y-as in “you be nice” and Z-zebras	2.86
30	•	Be familiar with basic strategies for implementing qualitative scales of pain measurement	3.07
33	•	Know some basic guidelines for pain treatment and monitoring for efficacy, e.g., how to conduct an adequate treatment trial,	3.36

importance of side effect warnings and use of pain diary

33.5	4. Pain Psychophysics and mechanisms	4. Pain Psychophysics and mechanisms	3.31
•			
34		Know that use of the NRS to measure pain intensity results in valid stimulus response curve	2.93
•			
35		Demonstrate insight into the wide variability of individual human experience of pain	3.43
•			
36		Understand that various pain modalities produce distinct subjective sensations best reflected in the words used to describe the quality of the feeling experienced	3.29
43.2		Pharmacology	
43.5	1. COX inhibitors	1. COX inhibitors	3.44
•			
46		Know the metabolism of COX1/2 inhibitors and how this limits their use	3.07
•			
47		Know the major side effects of COX1/2 inhibitors and potential for allergy	3.29
49.5	2. Neuromodulating agents	2. Neuromodulating agents	3.63
•			
53		Know that most newer antidepressants do not relieve pain, but selected agents can	3.43
61.5	4. Applied basic science/drug development	4. Applied basic science/drug development	2.59
•			
62		Know there is a vast research enterprise seeking out novel therapies for pain	2.57
•			
63		Be familiar with a variety of outcome measures used in clinical studies of pain	2.71
•			
64		Know that although specific neurotrophic factors are yet to be successful in clinical trials of pain treatment, interest remains high in neurotrophin signaling and transduction	2.43
•			
65		Know the major classes of neurotrophic factors relevant to pain and the basic features of the signaling pathways for each class	2.64
•			
66		Be aware of recent developments pertaining to cannabinoids, N-type calcium channels and vanilloid-based (capsaicin) treatments	2.57
66.2		Clinical Skills	
78.5	3. Assessment decisions and treatment	3. Assessment decisions and treatment decisions	3.46

	<i>decisions</i>		
82	•	Know some formal models of medical decision-making and recognize that patients often represent a blend of the explicitly modeled characteristics.	3.00
95.2		Treatment/Management	
95.5	1. Medical/Pharmacological	1. Medical/Pharmacological	3.45
99	•	Recognize an appropriate plan to monitor a patient for idiosyncratic side effects	3.21
99.5	2. Nerve blocks and stimulation techniques	2. Nerve blocks and stimulation techniques	2.67
100	•	Know the usual indications for a peripheral nerve block, recognize appropriate agents for injection and outline a strategy to minimize placebo effects [Evidence-based Medicine]	2.79
101	•	Be able to describe the purpose of a sympathetic block and anticipated results	2.79
102	•	Be able to identify important sites where stimulation techniques can be applied	2.43
102.5	3. Surgical management	3. Surgical management	2.79
103	•	Demonstrate knowledge of some selected surgical procedures for the treatment of pain	2.57
104	•	Know that some forms of surgical management may be highly effective for palliative relief of cancer pain but may be less useful for longer term management	3.00
104.5	4. Rehabilitation (including Acupuncture)	4. Rehabilitation (including Acupuncture)	2.93
105	•	Know the principle modalities of treatment used in the rehabilitative treatment of pain	3.07
106	•	Know how to write a request for rehabilitation therapies	2.93
107	•	Recognize appropriate conservative treatments that can be recommended to patients	3.14
108	•	Be familiar with the NIH consensus statement on acupuncture especially regarding efficacy for specific disorders and the biological effects, know that classic acupuncture is based on traditional Chinese medicine principles	2.57
108.5	5. Clinical Psychological	5. Clinical Psychological	3.27

109	•	Know several clinical psychological methods for the treatment of chronic pain	3.08
111	•	Know that specific clinical psychological treatments have established efficacy	3.23
112	•	Identify psychological factors the effect pain tolerance, thresholds and behavior	3.08
112.2		Specific Pain Diseases	
112.5		1. Acute and surgical pain	3.40
116	•	Recognize the neurobiological, endocrine and metabolic responses to pain/injury, especially segmental/supra-segmental reflexes, increases in cortisol and catechols	3.08
117	•	Know that multiple approaches are used for surgical pain and these include oral, i.v., local and epidural administration of analgesic and anti-inflammatory agents	3.08
118	•	Be aware of studies showing that pre-medication and rigorous pain control decrease the incidence of chronic pain and improve functional measures	3.08
118.5		2. Pediatric pain	3.17
120	•	Know several developmental milestones regarding communication of pain	3.08
121	•	Know the scientific evidence for stress response to pain in neonates	2.77
122	•	Know that there are methods for the safe pain management in children and infants	3.23
126.5		4. Headache	3.17
128	•	Know the indications for episodic vs. prophylactic treatment of migraine H/A	2.79
129	•	Know the indications for emergent evaluation of headache with CT, LP or MRI	3.29
129.5		5. Neuropathic pain	3.43
133	•	Be aware of special neuropathic phenomena, e.g., CRPS and trigeminal neuralgia	3.29
133.5		6. Oncologic pain	3.32
135	•	Know the major strategies for cancer pain (by mouth, by the clock, by the ladder)	3.21

136	•	Recognize that alternative strategies for cancer pain management are available	3.14
137	•	Recognize appropriate strategies to monitor for response or excess side effects	3.29
137.5	7. Visceral pain	7. Visceral pain	3.43
140	•	Be able to outline an approach to assessing selected visceral pain emergencies	3.14
145.5	9. Pain in older adults	9. Pain in older adults	3.43
147	•	Be familiar with major changes in pain processing that occur with normal aging	3.29
150.2		Pain Challenges	
154.5	2. Employment issues (impairment and litigation)	2. Employment issues (impairment and litigation)	3.15
156	•	Understand the role of the physician in the disability determination process	2.92
157.5	3. Drug Addiction	3. Drug Addiction	3.55
162	•	Be familiar with strategies for drug testing and drug treatment contracts	3.36
163	•	Know important literature and litigation about pain treatment with regards to addiction	3.14
166.5	5. Medico-legal, i.e. licensing and documentation	5. Medico-legal, i.e. licensing and documentation	3.38
169	•	Be familiar with recent legislative and rule-making actions that impact pain care	2.83
170.5	6. Pain emergencies	6. Pain emergencies	3.50
173	•	Demonstrate knowledge of the most common pain emergencies seen in patients with AIDS	3.00
175.5	8. Complimentary and Alternative Approaches (including acupuncture)	8. Complimentary and Alternative Approaches (including acupuncture)	2.72
176	•	Know some basic information about the major types of CAM including modalities such as acupuncture, meditation, dietary supplements, manipulative methods and others	2.92
177	•	Know that there is literature supporting the efficacy of acupuncture and other CAM approaches, be familiar with some major principles	2.50

for designing these studies

•
178 Be aware of the prevalence of CAM usage and its health economics impact 2.75

180.2 **III. Clinical Training (Year IV):**

180.4 **Advanced topics in Pain Medicine**

186.5 **4. Critical and cutting edge entities 4. Critical and cutting edge entities 3.38**

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188 Be aware of recent genetic insights into selected pain conditions that illuminate pathophysiological mechanisms, e.g., erythromelalgia, congenital insensitivity to pain 2.71